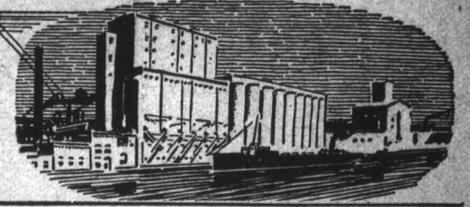


*The Michigan*  
**BUSINESS FARMER**



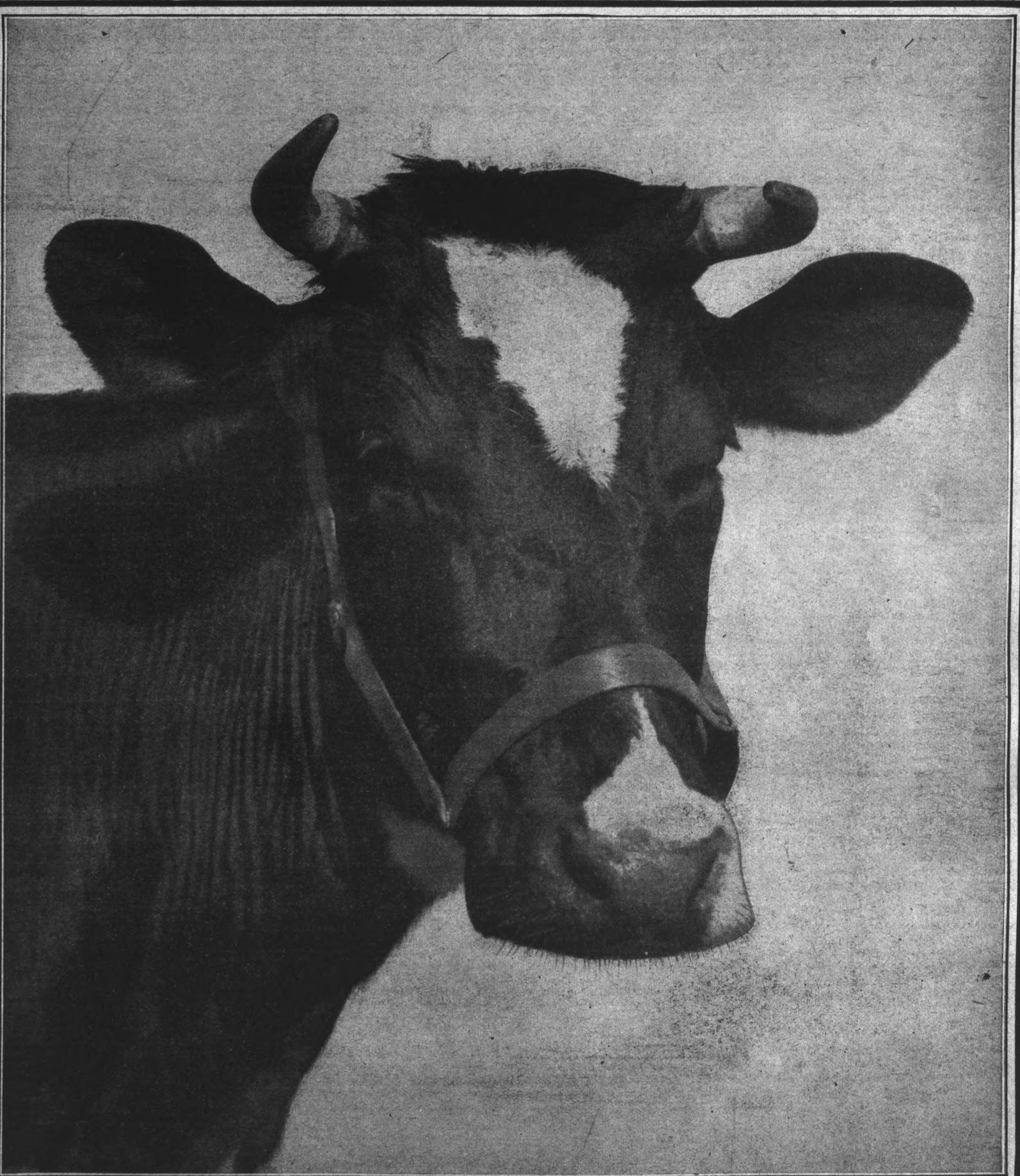
**An Independent  
Farmer's Weekly Owned and  
Edited in Michigan**



Vol. IX, No. 26

MT. CLEMENS, SATURDAY, FEBRUARY 25, 1922

\$1 PER YEAR



*Longing for Green Pastures*

*State will Spend Fourteen Millions on Roads this Year*

NEW SOILS ASS'N ORGANIZED

AN association of farmers and others interested in better methods of handling Michigan soils was formed during the recent Farmers' Week at the M. A. C. The organization will be conducted in the same manner as the other co-operative organizations of the state are now carried on.

Hon. Jason Woodman of Kalamazoo has been elected president for the coming year.

"There are to be no dues for membership in this association" states Dr. M. M. McCool professor of soils at M. A. C. "Every farmer in the state is eligible, the only requirement being that he be interested in soils and their improvement."

"The object of the association will be to stimulate greater interest in permanent, profitable systems of soil management among Michigan farmers. Material bearing on results of co-operative test projects, recent developments in soils methods, etc., will be sent out to the membership."

—By C. J. Johnson, M. A. C. Correspondent.

OPPOSE FOREIGN SEEDS

THE Michigan State Farm Bureau has given its endorsement to the efforts of the agricultural bloc in congress to bar from America the regular flood of unadapted, southern grow French and Italian clover seed. The bloc seeks to keep out such menacing seed by means of certain provisions in the seed tariff schedule which it is advocating.

At its first meeting the new State Farm Bureau Board of Directors, Feb. 14, adopted a resolution favoring the tariff schedule on such seed as advocated by the agricultural bloc. The Farm Bureau said in its resolution that good adapted seed is fundamental to success in agriculture and that cheap ocean freight rates are promising again to make the United States the dumping ground for immense quantities of unadapted, dangerous foreign seed, especially French and Italian clover seed, unless some means is provided for checking that movement. The agricultural bloc would bar such seed by means of a tariff.

Farmers have suffered enormous losses through unknowing use of unadapted foreign clover seed. It often winter kills in our climate, say the records of many county agricultural agents. It is declared that no one can detect unadapted foreign seed when it may come from a car that has been sold and re-sold half a dozen times and mixed with other seed perhaps as many times. The seed proves itself in the field and usually with disastrous results.

A. F. B. F. NEUTRAL ON FEDERAL CROP INSURANCE

CONGRESSMAN Edward J. King of Illinois has introduced a bill into congress calling for the establishment of a farm crop insurance bureau, which would insure growing crops of non-perishable products against loss of damage resulting from adverse weather conditions. This bill somewhat antedates action suggested by the administration's National Agricultural Conference which advocated that a thorough study be made of the feasibility of a federal crop insurance agency and recommended that data be secured upon which to base premium rates, etc. Crop insurance has been written for a few years by a few agencies. A Federal crop insurance agency anticipates the insurance of crops over possibly the entire United States. It is rather generally admitted that there is not sufficient data upon which safely to determine the amount of premiums necessary to insure the success of any crop insurance venture which would extend over a vast area and include a large number of crops.

A. F. B. F. OPPOSES SALES TAX FOR BONUS

THE Republican senators for sometime have been casting about for a way of raising money to pay a soldier bonus and they have had strict instructions from the President that he would consider no bill of this kind that did not also provide a method for raising money. They have been holding caucus on the Capitol Hill with a view to agreement on a method be-

Current Agricultural News

fore the bill is introduced. The latest method devised already is raising a storm of protest. It is estimated that \$350,000,000 a year will be necessary to pay the cash bonus extending over two and one-half years beginning January 1, 1923. Estimates on the amount to be raised through the present plan falls short of this amount about \$34,000,000.

The senators would place a tax on parcel post packages, one cent on each 25 cents; tobacco 2 cents a pound; cigaretttes, 50 cents per 1000; automobiles, 25 cents per horse power; gasoline, 1 cent per gallon; stock and bond transfers, one-tenth of one per cent; real estate transfers, \$5 per thousand; theater tickets, 20 per cent; and two and one-half per cent on undistributed profits of corporations.

The American Farm Bureau Federation objects to the raising a soldier bonus funds by a tax upon parcel post, gasoline, automobiles, tobacco, etc., as proposed by the recent House Ways and Means Committee agreement and would substitute a tax upon the excess profit of manufacturers. H. C. McKenzie of New York, the Federation's tax expert says that of the \$332,000,000 which the committee proposes to raise, \$200,000,000 would fall directly on the people

through increases in parcel post rates, tax on gasoline, automobiles and increased stamp tax. Of the balance, \$22,000,000 would be raised from a tax on undivided profit of corporations, \$60,000,000 increased tax on theater admissions.

"During the war government experts and Congress figured out the best methods that could be devised in raising taxes. The one of these which was most productive, and least burdensome, was the excess profits tax on corporations, which has been repealed by the 1921 tax law. If re-enacted this single source of revenue would produce all the money necessary for the bonus and obviate the friction which would develop by raising the parcel post rates, taxing gasoline and automobiles and by the increased annoyance caused by the stamp taxes; it would not only do this but it would be very much more equitable as to corporations themselves in the present situation," says Mr. McKenzie.

"The last tax bill raised a flat tax on corporations from 10 to 12 1-2 per cent, thus raising a tax on corporations of low income while cutting in half taxes on corporations with large incomes, through the repeal of the excess profits tax. If the excess profit tax were re-enacted no corporation would be effected until it

had net earnings of \$3,000 at 8 per cent and all the money which would be raised by that means would come out of profits in excess of that amount. Surely no corporation would reasonably object to this program which would in a measure adjust the burden of corporations more equitably and at the same time get the money from the most available source."

STATE VETERINARIANS ELECT

THE annual meeting of the Michigan State Veterinary Medical Association was held at the Michigan Agricultural College February 7 and 8. Technical questions and entertainment features formed the principal business of the meeting. President, Dr. J. E. Wurm, Pigeon; first vice-president, Dr. B. J. Killham, State Department of Agriculture; second vice-president, Dr. J. Preston Hoskins, Detroit; third vice-president, Dr. E. J. Cronkite, Saginaw; secretary-treasurer, Dr. R. A. Runnels, M. A. C., East Lansing.—By C. E. Johnson, M. A. C. Correspondent.

AGRICULTURAL CONDITIONS

THE improvement in agricultural conditions is beginning to manifest itself in an orderly liquidation which is reflected in recent repayment to the War Finance Corporation in connection with its export loans, as well as its loans for agricultural and live stock purposes," is the statement of Eugene Meyer, Jr., Mgr.-Director of the War Finance Corporation.

Repayments of export advances total \$7,641,000, of which \$520,000 was repaid by exporters, \$735,000 by co-operative associations, and \$2,694,000 by banking institutions, while \$3,693,000 reflects the liquidations of export loans financed through Edge law bank acceptances.

Repayments on account of agricultural and live stock loans aggregate \$3,671,000. Of this amount, \$2,877,000 was repaid by banking institutions, \$347,000 by live stock loan companies, and \$447,000 by co-operative associations.

All repayments have been voluntary, and a considerable part of the total represents repayments before due dates.

SVELTE FIGURES FOR THE MODERN HOG

HIPS are out of style even in pigs. The pig of the future to be in favor in the kitchens of the fastidious must be less rotund and slender. Instead of being all lard he must be mostly lean. Such is the degree that has gone forth from the packers and such is the august opinion recently handed down by the hog committee of the Detroit Farmers' Club.

"The demand today," reported this committee "centers on the 150 to 200 pound hog instead of the 250 to 300 pounder. Investigation has disclosed that the popular American dish of bacon and eggs is becoming even more popular and that bacon mostly in demand is that with a large streak of lean in it. At the same time, the increased use of lard substitutes has decreased the demand for lard."

Thos. E. Newton, president of the Newton Packing Co., Detroit, said he preferred the smaller sized, smooth finished hog as he has more lean meat than fat and added that for the last two years or more every pound of lard produced by the Newton Company from hog fat has lost money for the company.

WEST ANTRIM COW TESTING ASSOCIATION

THE following is the annual report of the West Antrim Cow Testing Association, giving a summary of the year's work. With the exception of one association, this is the furthest north of the associations in Michigan. It is the first year the association has been in operation. The records show a very good average production per cow for the first year and establishes the fact that there are some good cows in Antrim county. It goes without saying that the 22 members of this association know more about their dairy herds

(Continued on page 16)

---going Henry one better!

When during the war years even Henry Ford nearly doubled the price of his cars and tractor, the subscription price of The Michigan Business Farmer remained the same as the day the first issue went to press.

Now we know just as well as Henry does, that the quickest way to bring back "good times" (and luckily for the farmers they are within sight) is for everyone to give as big a dollar's worth as the farmer has too!

The only way we can better the service we render YOU, our readers, is to increase the number of farm homes which The Business Farmer reaches every week.

You may think that we reach every friend and neighbor of yours, but we don't by a long shot! And the only way we can hope to, is by coming once again to the loyal men and women who have seen from the start what this weekly was to mean to the farmers of Michigan AND ASK FOR YOUR HELP!

You have never failed this weekly!

And now, when conditions seem hardest, is the time you can help us most.

So, we have decided to make you a special inducement to get your friends and neighbors to start taking The Business Farmer. Here is our offer:

We will send The Michigan Business Farmer from now until January, 1923, for FIFTY CENTS (50c) to any new subscriber and we will start it coming with the very next issue.

It is not a big thing for you to do, but when YOU make it a point to tell your friends and neighbors about this offer, you'll be surprised how thankful they are and we'll repay you with a publication so much bigger and so much better, because we'll be able to multiply our departments of service and our strength to fight your battles, by every name you add to our list.

Try and send in one, two or more names by Saturday of next week! You will be doing your friends and yourself no greater favor than you do

YOUR OWN FARM WEEKLY,

The Michigan Business Farmer

Send this Coupon in NOW

Michigan Business Farmer, Mt. Clemens, Mich. Enclosed find..... Send The Michigan Business Farmer until January, 1923 to the new subscribers whose names and addresses are given below: Name..... R. F. D..... Postoffice..... State..... Name..... R. F. D..... Postoffice..... State..... Signed..... Address.....

## Things You Should Know about U.S. Income Tax

Every Farmer who had a Net Income of \$2,000 or More in 1921 Must Make Return to Government

"I am a much interested reader of M. B. F., and am taking the liberty of asking you to explain the meaning of the following: (1) intangible personalty; (2) tangible personalty; (3) excess profits tax; (4) surtax; (5) federal income tax.—F. D., Sheridan, Mich.

**I**N the general sense of the word personal property is movable; real property is not. Horses, cattle, farm implements, etc., are examples of personal property. Land buildings, wind-mills, wood-lots are examples of real property. For purposes of taxation personal property is sometimes divided into two classes, tangible and intangible. Tangible personalty consists of anything movable which is visible and easily located. All of the above named examples of personal property are "tangible personalty." Intangible property is something which has a value but no physical form. Examples are rents, franchises, savings deposits, etc.

The excess profits tax is a tax levied solely against corporations. It is exactly what its name implies, a tax against excess profits. The excess profits tax adopted by the United States government during the war allowed an exemption of all profits up to 8 per cent on capitalization. Higher profits were taxed at a rate which increased progressively as the profits increased. This tax is not longer imposed. It was repealed about the middle of last year and took effect January 1st. There is talk of reviving it to pay the soldiers' bonus.

"Surtax" means an "extra" tax on individual incomes. It is levied only against persons having net incomes over \$6,000. Such persons have to pay a "normal" income tax as well as a "surtax." For instance, an individual having a net income of \$7,000 pays to the government a normal tax of \$240 and a surtax of \$10. A person with an income of \$1,000,000 pays a normal tax of \$79,680 and a surtax of \$470,960, or over one-half of his net income. Incomes over \$1,000,000 pay a normal tax of 8 per cent and a surtax of 50 per cent. This is according to the new law recently adopted. The old law levied surtaxes against incomes over \$1,000,000. When the law was revised the lower house of Congress reduced the maximum rates from 65 to 32 per cent, but the agricultural bloc in the Senate put them back up to 50 per cent.

### THE FEDERAL INCOME TAX

Every unmarried person (male or female, including widows, widowers and persons not living with husband or wife) whose net income for the year 1921 was \$1,000 or more, or whose gross income was \$5,000 or more, and every married person living with husband or wife whose net income was \$2,000 or more, or whose gross income was \$5,000 or more, MUST file an income tax return with the internal revenue officer in whose district such person or persons reside.

This does not mean that every such person will have to pay a tax. Every single person is allowed an exemption of \$1,000, and every married person an exemption of \$2,500. An additional exemption of \$400 is allowed for each child under 18 years of age who is wholly dependent upon the person making the return. Thus, a married man with three children, whose total net income for 1921 was \$4,000 would be entitled to an exemption of \$3,700. On the other \$300 he would pay the government a tax of 4 per cent or \$12. If his income was only \$3,700, he would have no tax to pay. Under the old law the total exemptions allowed to such an individual were only \$2,600.

### DEDUCTIONS ALLOWED FARMERS

All necessary expenses incurred during the year 1921 in the operation of farm as a business enterprise, are deductible items. These include harvesting and marketing of crops and the cost of seed and fertilizer used. Amounts expended for the cost of feed for live stock may be claimed but the value of a farmer's own products used for such purposes is not a deductible item. The farm-

### BUSINESS ERRORS TO AVOID

**A**RE you guilty of any or all of the following everyday business errors as listed by J. S. M., of Fibre, Mich:

1. Neglecting to get receipts when bills are paid in cash.
2. Neglecting to keep receipts where they can be located.
3. Neglecting to check up items in current bills.
4. Inability to keep check-book balanced.
5. Too easy optimism in starting credit accounts.
6. Careless handling of valuable business papers.
7. Signing documents without knowing their contents.
8. Tendency to establish living expenses which would exceed income and eat into savings.
9. Tendency to invest money on dangerous hearsay without proper knowledge of facts.

er may deduct the cost of farm tools used in the course of a year, wages paid to employees (other than domestic servants) and rent paid for farm lands and buildings (other than the dwelling) cost of repairs to fences and to wagons and machinery, also bills paid for horseshoeing, stock powders, rock salt, veterinary service, insurance (except on the dwelling) gasoline for operating power and sundry minor expenses

The cost of farm machinery of a permanent character, such as a threshing machine or tractor and extensive repairs to farm buildings, such as placing new roof on the barn are not deductible expenses. Amounts expended in the development of farms, orchards and ranches prior to the time when the productive state was reached, may be regarded as investments of capital also amounts expended for the purchase of breeding or dairy animals. The purchase price of an automobile, even when wholly used in carrying on farming operations, is not deductible, but is regarded as an investment of capital. The cost of gasoline, repairs and upkeep of an automobile if used wholly in the business of farming is de-

## State Farm Bureau Approves Produce Marketing Plan

**T**HE Michigan State Farm Bureau has officially approved the plans of a produce marketing department, with headquarters at Detroit. This action was taken Tuesday of the current week when a committee consisting of M. L. Noon, vice-president of the State Farm Bureau; Geo. Friday, and E. C. McCarty, state farm bureau directors; Clark Brody, secretary, and Hale Tennant, marketing specialist, met with Mr. Milton Carmichael, one of the fathers of the idea, and created a produce marketing agency to be known as the Produce Sales Department of the Michigan State Farm Bureau.

Mr. Carmichael was named director of organization and he will proceed at once to put his plans into effect. It is expected that the department will be ready to accept shipments from farmers not later than April 1st. The department will handle on commission all kinds of farm produce including fruits, vegetables, eggs, dairy products, dressed meats, etc. The temporary headquarters will be at 401 Buhl block, Detroit. Farmers desiring to avail themselves of the services of the department should communicate with Mr. Carmichael at that address.

As previously stated, if the Detroit unit proves a success other units of the new department will be opened up as rapidly as possible in other leading cities.

ductible as an expense; if used partly for business purposes and partly for the pleasure or convenience of the taxpayer or his family, such cost may be apportioned according to the extent of such use.

Losses incurred in the operation of a farm as a business enterprise are deductible from the gross income. If, however, farm products are held for favorable markets, no deduction is allowed on account of shrinkage in weight or value, for the reason that when such products are sold, the shrinkage will be reflected in the selling price. The total loss by frost, storm, flood or fire of a prospective crop is not deductible. The reason is that unless the crop reaches maturity and is harvested and sold, its value never reached gross income, and therefore an arbitrary deduction of such loss cannot be allowed. The loss of a growing crop simply means that the farmer has so much less gross income to report and therefore would pay a reduced tax, if any tax at all. A loss in the value of animals raised on the farm is not deductible, except as such loss is reflected in an inventory if used. However, if live stock was purchased for any purpose and afterward died from disease, exposure or injury, or was killed by order of the authorities of the state or the United States, the actual purchase price less any depreciation which may have been previously sustained with respect to such stock, and any insurance or indemnity recovered may be deducted as a loss.

Deductions of family or living expenses such as rent for a dwelling, repairs to a dwelling, cost of food and clothing for the family, education of children, servants' wages and similar items are expressly prohibited by the revenue act of 1921. General deductions, such as for taxes, interest on personal indebtedness, losses sustained in transactions entered into for profit aside from the farmer's regular business, losses sustained by fire, storm, or other casualties, bad debts and contributions, are explained in instructions on the form for filing returns. The farmer must include in his return of gross income not only the profits of his farm, but all other income such as interest on bank deposits and profits received from the sale or rent of farm lands. The farmer who lets out a farm on a crop-share basis must include in his income tax return for the year the cash when received. A farmer who lets out a farm as a cash rental basis and is paid in crop must report the exact cash rental agreed upon whether or not the crops are disposed of.

The Bureau of Internal Revenue has had prepared for farmers a special form 1040 F—for recording sales of live stock, produce and miscellaneous receipts. All farm income from any source whatever must be reported in this schedule, which must be attached to the form for making individual returns.

Form 1040A for income of \$5,000 or less and 1040 for individual incomes in excess of \$5,000, may be obtained in the offices of collectors of internal revenue and branch offices. These forms will be mailed to persons who filed similar returns of income for the year 1920. Failure to receive the form, however, does not relieve the person from filing his return and paying the tax within the time prescribed by law. The return must be filed on or before March 15, 1922. The tax this year, as last, may be paid in full at the time of filing the return, or in four equal installments, due on or before March 15, June 15, September 15 and December 15.

Revenue officers are visiting every county in the United States to assist taxpayers in the preparation of their income tax returns for 1921. This advisory service is without cost to the taxpayer. Before seeking such assistance, however, taxpayers should read carefully the instructions on the forms.

# State will Spend 14 Millions on Roads this Year

## Approval of Supervisors Levels Farmer Opposition and Prompts State to Proceed with Plans

By THE EDITOR

### SOME HIGHWAY FACTS

Michigan has approximately 70,000 miles of public wagon roads. Of these approximately 2,100 miles have been improved or are under contract by the state highway department as trunk line and federal aid roads. There are no figures available of the number of roads improved by townships and counties. The roads already improved by the state have cost at the rate of \$22,000 per mile. If the state continues to pay the same proportion of the cost of these roads until its \$50,000,000 bond issue is exhausted, it will have been able to improve approximately 4,000 miles of highways.

The income of the state Highway department from all sources for the year 1921 was approximately \$22,000,000. Of this amount, \$3,135,040.24 represented the state's share of automobile taxes, \$3,019,537 was federal aid money, and \$13,194,878 bond money. The rest of the money was derived from direct taxation.

None of the highway bonds have been retired. The total annual interest on the \$20,000,000 now outstanding is \$1,052,095. The annual interest on the \$30,000,000 soon to be outstanding will be about \$1,400,000. It is not unlikely that the total interest charges on the \$50,000,000 bonds if all are issued will amount to more than the face of the bonds themselves. The retiring of these bonds is bound to be a slow and painful process.

### OUTSTANDING STATE HIGHWAY BONDS

Date	Term	Rate	Issue	Annual Interest
Nov. 1, 1919	15 years	4 1/2%	\$1,581,000.00	\$ 71,145.00
May 1, 1920	5 years	5%	3,000,000.00	150,000.00
June 30, 1920	5 years	5%	419,000.00	20,950.00
Aug. 1, 1920	5 years	5%	500,000.00	25,000.00
Oct. 1, 1920	5 years	5%	500,000.00	25,000.00
Dec. 1, 1920	20 years	5%	1,000,000.00	50,000.00
June 1, 1921	20 years	5 1/2%	3,000,000.00	165,000.00
Sept. 15, 1921	20 years	5 1/2%	3,000,000.00	165,000.00
Nov. 15, 1921	20 years	5%	4,000,000.00	200,000.00
July 15, 1921	1 year	6%	3,000,000.00	180,000.00
			<b>\$20,000,000.00</b>	<b>\$1,052,095.00</b>

RUTHLESSLY pushing to one side the protests of farm organizations and thousands of individual farmers, the state association of supervisors at their annual meeting in Lansing last week voted unanimous approval of the state road building program for 1922 as outlined by State Highway Commissioner Frank F. Rogers, in accordance with the policy laid down by the 1921 legislature.

This program involves the expenditure by the state alone of \$14,000,000, in addition to whatever sums may be expended by the counties and townships. In 1920 the state spent in round numbers for all highway purposes the sum of \$11,000,000. The townships spent another \$11,000,000 and the counties \$6,000,000, or a grand total of \$28,000,000. This was nearly two-thirds as much money as was spent for similar purposes during the entire 13-year period, 1901-13. If the townships and counties spend in the same proportion as the state the current year of 1922, we may expect a grand total expenditure of approximately \$36,000,000.

The 1920 expenditure was equal to a tax rate of \$5 per thousand valuation, but since a part of the money was raised by the issuance of bonds which will not mature for 15 or 20 years, the actual rate levied and paid was probable about \$4 per thousand.

### TAXES BECOME BURDENSOME

It is not to be supposed that so great an increase in highway expenditures could be made without the taxpayer feeling it. And he has felt it very keenly. Simultaneously, of course, taxes for other purposes have also increased enormously, as witness a comparison between the total tax footings for 1901 and 1920. In the former year the total taxes levied in the state of Michigan for all purposes was \$23,350,404.37. In 1920 the total was \$140,438,982.94. The assessed valuation of all property in 1901 was \$1,335,109,918. In 1920, it was \$5,319,702,886. Thus, while expenditures have increased six times in 20 years the assessed valuation has increased but four times. The rate per thousand valuation has increased from \$17.49 to about \$27.

Whenever burdened tax-payers rise up in protest against the imposition of further taxes, there is always some apologist to argue that the proposed extra tax is really very small and won't cut much figure in the final totals, or else that someone else pays the major part of the tax. When the state constabulary fight was the hottest the rural antis were silenced by the argument that the cities paid most of the cost, and on the strength of the argument the State Grange in 1920, reversed its position of a former year and by a narrow margin endorsed the constabulary.

Now come others to convince farmers that good roads don't cost,—much. From the sun-kissed borders of California, Phil T. Colgrove, president of the Michigan State Good Roads Association, wires State Highway Commissioner Rogers as follows:

"Just learned propoganda of Grange to stop building trunk line roads. With federal aid appropriated, surveys made and work progressing, this move is fatal to the best interests of Michigan. Farmers who read their tax receipts will discover that the road taxes are the smallest of all taxes. Michigan's splendid work should not be interrupted,"—even, Mr. Colgrove might have added, if half of the farmers of the state go into bankruptcy in paying them.

### M. B. F. READERS WANTS LET-UP

More than five hundred readers of the Business Farmer have expressed their desire that no more

road bonds be issued. They feel that the time has come when governments as well as individuals should cut expenses. There is no opposition to good roads. Our readers are for the most part believers in better highways, but they feel that the program should be curtailed until farmers and business men get back on their feet financially and able to bear the cost of the roads without so great hardship. They are also quite in agreement that a "pay as you go" policy should be pursued instead of selling bonds and running up enormous interest charges which the present and future generations must help pay. Some of the letters received upon this subject are illuminative of the average rural mind at the present time:

F. J. W., of Sanilac County writes: "I don't believe in a bond issue for 1922 or a bond issue at all. I believe in a direct tax levy and a tax of one cent per gallon on gasoline to be used for road building."

"My opinion is," writes C. W. L., of Leelanau county, "that the state should curtail the bond issue for one or two years. Now is the time when strictest economy should be practised. Never in my recollection has there been such a hard time to raise tax-money and only way out is to cut down on expenses."

"I am not a kicker and I like good roads," says M. V. J., of Genesee County, "but our taxes are getting to be so burdensome we can't pay them. Pay as you go is the best policy. The Covert Act certainly ought to be repealed."

"I have been reading your article in the Business Farmer on the subject of further issuance of road bonds in 1922," writes E. H. of Oceana county. "It

strikes me as being a very pertinent question to a great many farmers, especially those who have been obliged to borrow money to pay 1921 taxes.

"I am a good road advocate and would like to see improvement of country roads. But I can't see any difference between public expenditures and those of the individual. In close times like these the individual as represented by the average farmer must cut expenses even though the investment might return profits after a period of two or three years because the investment must be kept within the capital and credit of the individual in question or bankruptcy will surely follow before the investment matures; and so it is with the State of Michigan.

"While a bond issue of \$50,000,000 of road bonds alone would not cause financial difficulty; it might if coupled with \$30,000,000 of Soldiers Bonus Bonds at the high rate of interest which they draw. And on top of that we will be taxed indirectly for a portion of the National Soldiers Bonus and that is not all as it pertains to this particular section of the state.

"This territory is served by the Pentwater division of the P. M. and when its road bed needs repair it must find the money in its own pocket but the local trucks (motor trucks) have their hands in the taxpayers pocket and their share in the majority of cases are represented by the small license fee paid for state license. Having no other property except the truck which they operate and which is exempt from assessment on the twp. tax roll.

"Here is a man who uses the road for the purpose of making his living from commercial trucking and who has his road way built by the public taking the business from the railroad which must maintain its own right of way and also pay a general tax to the state.

"The railroad in this county is already weak and must necessarily become more so now that it is paralleled its entire length by the West Michigan Pike built at public expense and maintained by the public for the motor truck at a rental that amounts to almost nothing.

"It seems I can hear you say that the farmers have trucks and so they do, but a commercial truck belonging to the man, who drives it himself will use the road as much in a year's time as 10 farmer owned trucks would do but he doesn't pay any more license than the farmer if their trucks are the same size.

"There must be some way to even things up and I think the gasoline tax is the solution of the problem but I am not prepared to say that one cent is the proper amount for it looks rather small and I would rather believe it should be two or three cents and let the money so raised take the place of the bonds for future road building and maintenance.

"Let us not have as elaborate a road building program in 1922 as in 1921 out of sympathy with the condition of the poor man's pocket book and the harm it may do the farmer when the truck has more seriously crippled the railroads."

### A LEGISLATOR SPEAKS

State Representative Frank R. Mosier of Allegan county, speaks right out on the subject, too. He says:

"I see in the last edition of the M. B. F. a coupon asking our opinion on the advisability of floating \$10,000,000 highway bonds. I am absolutely against floating bonds to build highways.

"I believe we should have a gasoline tax and levy a direct tax enough to get the federal money. It is very easy for an individual to vote to spend money but very different to devise a means to raise that money.

"A man voting to bond to build highways is called a constructive man but a man that cannot see a way to raise these taxes, I believe is a destructive man.

"Since the close of the legislature I have talked with several men, some of whom are paying federal income tax, some are drawing large salaries, and some have sold their farms to get rid of paying taxes but all of them are demanding the roads to be kept in good repair during the year.

"Here is the justness of the state income tax and here is where these men can pay their share of the protection and care the government is giving them.

"A greater share of these men are demanding more protection than the farmer who is standing the burden today.

"When an individual is voting a tax that he does not know how to raise, he is striking at the very vitals of an industry that the whole world is depending on. Agriculture."—F. R. Mosier.

### "GO AHEAD," SAYS ANOTHER LEGISLATOR

Representative Jos. E. Warner, of Washtenaw county, takes the opposite view. Out of hundreds of farmers who have written us on the subject, Mr. Warner, and Hr. G. F. DeLaMater, county surveyor of Otsego county, are the only two who take the position that the Rogers program should be continued. As will be noted both these gentlemen give excellent reasons for their position. Mr. Warner writes as follows:

"Shall Michigan curtail her road building program? By all means no. There never was a time in the road building game when roads can be built as cheaply as this year. There never was a time when the young man or young woman of today was needed as badly on farms as they are today and to

## U. S. Bureau of Public Roads Denies Michigan Must Match Federal Funds this Year

IT has been claimed that Michigan must match federal aid money apportioned to this state this year or else lose it altogether. But according to the U. S. Bureau of Public Roads this is not true. Read the Bureau's letter below:

Editor,  
The Michigan Business Farmer,  
Mt. Clemens, Michigan.

Dear Sir:

Your telegram of February 14 has been received, asking what would happen if Michigan should fail to match this year the \$5,000,000 federal aid apportionment to the state.

The Federal Aid apportioned to Michigan for the fiscal year 1922

under the act approved November 9, 1921 amounted to \$2,249,532.43 and the money remains available until two years from June 30, 1922.

While it is important that Michigan provide to absorb this fund during the present year, a balance remaining would not necessarily be lost to the state if provision were made in the following year to absorb not only that balance but also such other apportionment as congress may provide. On the basis of a federal appropriation of \$75,000,000 annually the apportionment of approximately \$2,250,000 should be provided for during each year by the state.

Very truly yours,  
P. W. WILSON, Chief Engineer,  
Bureau of Public Roads, U. S. Department of Agriculture,  
Washington, D. C.

February 17, 1922.

curtail the road building which is doing more than any other one thing to build up rural communities and encourage the boy and girl to stay on the farm and make rural communities a place which is pleasant to live in.

"The highway department two years ago had to go out and beg for bids while today they are getting 30 bids where they got one before, which means more miles of road for less money.

"To curtail the state highway commissioner, Frank F. Rogers, in his road program would be taking a step backward and give the rural sections a severe blow. The farmer must not lose sight of the fact that with the federal government paying 50 per cent, the cities paying 65 per cent, leaves only 35 per cent of one-half of the cost, which makes a very light tax on the farmer.

Let us get behind Mr. Rogers and his road program and make our Michigan the first and best state for a system of good roads and better rural communities of any state in the union."—J. E. Warner,

"Regarding your question as to whether road bonds should be issued in 1922 I have answered "yes" not because I believe that the idea is theoretically perfect but because it seems to me the best and most convenient way out of our present difficulties.

"First: The roads are an asset and I do not believe that the average man wants to see the program halted.

Second: It costs much more to build these roads than it will to maintain them, and it is no more than right that those who will use them during the next ten or twenty years should help to stand this expense.

Third and most important of all: I believe that we should all do what we can to stimulate the circulation of money. Last season our little county of Otsego would have been flat on her back had it not been for the road contracts which were the only enterprises at work; many working men and many farmers teams were furnished a job and it went a long way toward saving the day; I would rather that my taxes amounted to a hundred dollars and that it were possible to earn that hundred, than that they amounted to only ten with no prospect of raising the amount.

As soon as industry is again on its feet I should favor curtailment of bonding; I do not want to see the entire \$50,000,000 floated but I am not averse to seeing half or two thirds of it handled in this manner.

"Regarding the proposed tax on gasoline: I believe that it is the most practical suggestion yet advanced. It is the automobile that tears up our roads and it is the automobile that is demanding our trunk line system; it is the automobile therefore that should pay for the construction and maintenance of that system as far as is practical, and the gasoline tax reaches to the heart of the problem by making him who uses the road the most pay the greatest share of its cost. The only practical objection that I have heard advanced is the argument that many gallons of gasoline are used in driving city streets where there is no highway funds expended. Now is it not possible to arrive at some plan whereby the city would get enough of this tax fund to cover the amount of gasoline consumed in driving its streets? Having arrived at such an arrangement, where is the injustice?

"I drive an automobile an average of 25 miles a day all summer and over all kinds of roads; it is my opinion that I would be money ahead at the end of the season if I paid a 5c gas tax and had surfaced roads to drive over, as compared to driving over unimproved sand and mud roads on tax-free gasoline.

"I believe that we should continue for another season the construction program that went so far toward relieving the hard times of 1921.—G. F. DeLa-Mater, Gaylord, Mich.

#### WOULD REPEAL COVERT ACT

The supervisors unanimously agreed that the Covert act should be repealed, and Commissioner Rogers is equally convinced that the act should be limited in the number of roads they can build in any one period under this act. The cost of building these roads falls upon a comparative few and thousands of farmers assessed for Covert road costs will not be able to pay them. Much complaint is heard by the Business Farmer upon this subject. C. J., of Gladwin county, writes:

"Last fall they gravelled one and a half miles of road running west of Beaverton under the Covert act. The land on either side of the road is taxed for one mile back in forties. First forty, \$52.30, and the next \$40.33 and so on and the rest of the township pays nothing for the road. We farmers along the road have the bulk of the taxes to pay. I have 160 acres, of which 80 runs along the road. My road taxes alone are \$170. My total taxes are \$355 this year. The cost of building this stretch of road was \$75,000 and there is not a neighbor along here who can stand the taxes. What are we to do? We don't see any way to hold our farms and pay such high taxes."

A. S. of Barry county writes: "The Covert road law should be repealed. I am assessed \$1,021.07 on a Covert road and it does not benefit me one dollar. I have no frontage. My road runs parallel to this road."

#### COST PER MILE STILL HIGH

Road building costs have come down some in the last year. But they are still high. State Highway Commissioner Rogers reported to the supervisors that the program for 1922 called for the construction of 673 miles of state trunk line at a total estimated cost of \$8,123,652.90 and 322 miles of federal aid roads at a total estimated cost of \$6,287,073.12, making a total construction program of 995 miles at an approximate cost of \$14,410,726, or an average of about \$15,000 per mile. Part of this cost is borne by the counties and townships and part by the federal government, leaving the state's share at about \$8,500,000.

#### EXTRAVAGANCE CHARGED

Many of the farmers who have written to the Business Farmer on this matter charge extravagance in the building of the roads, the erection of sign posts, etc. One farmer who is 80 years old says he can do more work with his team of oxen than what is being done by the highway department on the road in front of his place at a cost of \$23 per day. Another that four men are employed in each gang to set sign posts when two could do the job as quickly. A Mecosta county farmer says that about as many bosses are em-

ployed on trunk line construction as common laborers, and charges that it costs as much to build one mile of the M 13 trunk line from Morley to Big Rapids as it cost the township of Deerfield to build six miles of just as good road. The Business Farmer cannot vouch for the accuracy of these statements, but it has learned that bond issues encourage extravagance. When an individual's or a firm's or even a state's bank balance is small greater economy is practised than when it is large. And if the balance be both big and borrowed and does not have to be repaid for a long period of time, oh, how easy it is to let it slip through the fingers. So there has undoubtedly been extravagance in the building of our roads.

#### WHAT HIGHWAY COMMISSIONER SAYS:

State Highway Commissioner Rogers gives some interesting information on highway construction. Mr. Rogers is considered to be one of the most able highway chiefs in the country, and his opinions on road building are held in high esteem. He says:

The legislature of 1921 appropriated \$1,250,000 for paying state rewards in each of the two fiscal years ending June 30, 1922, and June 30, 1923, which was as much money as had ever been required in a single year before, but during

#### SUPERVISERS HIT EXPENDITURES

**I**n order to place a proper estimate upon the weight of the highway verdict rendered by the state association of supervisors in session last week it should be remembered that only 153 supervisors from 53 counties out of a possible 1,500 from 83 counties were present. A considerable number of these came from city districts, so that the attitude of the association can hardly be taken as an evidence of rural spirit.

Following their endorsement of the 1922 road program the supervisors adopted a strongly-worded resolution demanding greater economy in all civic business and a reduction in the number of boards, commissions, salaries, etc.

The board approved of a tax on gasoline and urged a universal poll tax.

An attempt was made to put the supervisors on record for capital punishment, but when it was discovered that it would be voted down, the sponsors wisely refrained from putting it to a vote.

the present fiscal year the counties and townships have built upwards of 1,600 miles of road on which more than \$4,250,000 have been earned in rewards. This is about four times as many roads as there were funds to pay rewards with and was largely due to the increased activities under the Covert Act as noted above. Since many of these roads were of a local nature, the State Highway department, acting under the instructions of the Highway Advisory Board, requested the counties to revise their county road outlines so as not to include more roads than would be required to build around each three mile square; in other words, allotting to each county a total mileage which would be determined by multiplying the number of surveyed townships by twenty-four fractional townships counting pro rata, from which both state trunk line and Federal Aid roads are to be deducted.

"The counties have revised their system in accordance with this plan and this restriction will very materially curtail the activities under the Covert Act but probably will not be sufficient to slow down the county road building programs to the extent that may be desired in view of the heavy tax burdens at a time when the country is not overly prosperous.

"In 1920, there were levied for state highway purposes, in addition to the state's share of the money received from the licensing of automobiles, \$2,203,505.15. This caused a state highway tax rate of 49c per thousand dollars of valuation in 1920. In 1921 the state Highway commissioner reported to the legislature that on account of the bond money being available, no special state tax levy for highway purposes would be necessary, because, in his opinion, the state's portion of the money to be received from the licensing of automobiles, which would be about \$3,000,000, would be sufficient to pay the state's portion of trunk line maintenance; state rewards on non-trunk line roads built by the several townships and counties; the state's portion of the cost of the so-called fifty-fifty bridges and for all other departmental expenses not directly chargeable to specific roads under construction.

"The state bonding Act, Act 25, Extra Session, P. A. 1919, provided for the issuance of highway bonds at a rate of \$5,000,000 a year at an interest rate not exceeding 5 per cent but was amended by the 1921 Legislature making the bonds available at the rate of \$10,000,000 a year and raised the interest rate to a maximum of 5 1-2 per cent; and while no money was appropriated for construction purposes, the legis-

lature provided for the spreading of a tax of \$1,200,000 in the fall of 1921 for the purpose of paying interest on state highway bonds and creating a sinking fund for their retirement when due. This being the only state highway tax levied in 1921, the rate per thousand on the new state equalized valuation of \$5,000,000,000 was only 24c per thousand or a little less than one-half of the state highway tax levied in 1920.

"It should be noted that there have been three Federal appropriations. The first federal aid act was passed by congress in July, 1916, making an appropriation of \$75,000,000 of which \$2,174,510.04 was allotted to Michigan. The second federal aid act making an appropriation of \$200,000,000 was passed in February, 1919, and allotted to Michigan \$5,786,785.48. The third and last federal aid act was passed by congress in November, 1921, carrying an appropriation of \$75,000,000 which gave to Michigan \$2,294,532.43. These moneys are apportioned among the several states; one-third according to area; one-third according to post road mileage and one-third according to population, Michigan's share under such division being slightly under 3 per cent. Thus, the total federal aid money made available for Michigan under the three acts will amount to \$10,210,827.95 and since there is still available for placing under contract nearly \$5,000,000 of the federal money, it will require an equal amount of state and county money to match with it in order that it may be secured. This alone would require some \$3,000,000 of the bond money to become available July 1st. Contracts are now outstanding which will require between one and one-half and two millions more of this money so that were all construction to cease during 1922, except enough federal aid contracts to secure our allotment of federal funds and to complete contracts outstanding, it would require approximately \$5,000,000 of the \$10,000,000 referred to."

#### PROGRAM WILL GO FORWARD

Despite the opposition of the farmers the 1922 program will go forward without change, for a mighty lobby has been working in its behalf. Both the governor and the highway commissioner are committed to it, a large number of the members of the legislature are for it, every road building official in the state wants it, and automobile associations, chambers of commerce, engineering societies, contractors, manufacturers of road building equipment, and other large and important interests have been working avidly to put it across.

Nor is the Business Farmer prepared to say that the 1922 program should not be consummated. The 1921 legislature authorized the expenditure outlined by Mr. Rogers and acting under that authority, surveys have been made, plans completed, contracts let, and everything put in readiness to start work with the first days of spring. But the Business Farmer is disappointed and so are a great mass of the farmers that none of those who are so enthusiastic over good roads seem to give any thought to where these enormous expenditures are going to lead us and how they are going to be paid. "Build the roads," is the cry, "and let the future generations pay for them." When we talk of "future generations" we may as well include nearly everybody who is living today under 50 years of age. It is proposed to retire these bonds in 20 years and all our readers who expect to live that much longer will have to help pay for about \$80,000,000 of state road bonds and interest and \$50,000,000 of bonus bonds and interest.

And in the meantime, under the stress of increasing motor traffic these roads will wear out and will have to be repaired or rebuilt at another huge expense. If we are not careful we will leave to our posterity a heritage of debts and taxes which will crush them to the ground and bring their curses down upon our heads. Let it not be thought that what we build today will meet the requirements of tomorrow. Each generation in the past has had its own particular burdens to bear and unborn generations will have enough to do to pay the debts which they contract without having to worry about the debts of their forebears.

Right now, when every property-owner is feeling the burdens of taxation and when the matter of public expenditures is hot under discussion, is the time for the people of this state to arrive at some kind of a policy with reference to future public expenses. Let the state sell another \$10,000,000 in bonds, fill up the gaps in the trunk lines and match the federal aid appropriation this year. But let that be an end to the selling of bonds. Let all state highway moneys from then on be appropriated by the legislature and the amount required spread upon the tax roll. The taxpayers should not wait another year before voicing their protests against further bond issues, for again it may be too late. On the contrary those who believe in a "pay-as-you-go" policy should begin work at once to impress upon the next legislature that they want no more bonds issued.



# Farmers Service Bureau



## SPECIAL ASSESSMENTS FOR BENEFITS

Please tell me if it is legal to assess the same property every year for a special benefit act on account of drain. If not, how often can the property be assessed, and what is the highest percentage it can be assessed for highway improvement in one year?—W. W., Tuscola County, Mich.

In reply to the first question, please be advised that it is legal to spread a special assessment for benefits over a term of years for the construction of a drain, under the terms of the drain laws of the state of Michigan.

In reply to the second inquiry would say that the statute fixes the maximum amount which can be raised in one year for highway improvement to not to exceed 50 cents on each \$100 of assessed valuation according to the assessment roll of the last preceding year, except in townships when the assessed valuation is less than \$500,000 then the tax shall not exceed \$1.00 on each \$1,000 valuation according to the assessment roll of the last preceding year. For reference to the section, I cite you to Section 1 of Chapter 2 of the General Highway Law.—Harry H. Partlow, Legal Advisor, State Highway Department.

## WHERE TO HAVE SPUTUM EXAMINED

Could you tell me where to send my sputum to have it examined for tuberculosis? How should it be sent and what would the charges be?—J. L., Elwell, Mich.

Send a sample of your sputum to the laboratory of the Michigan Department of Health, Lansing, but first write asking them for container in which to ship it. There is no charge connected with this service.—Editor.

## SEEDING ALFALFA IN WHEAT

Will a seeding of alfalfa catch in wheat? If so, do you advise sowing in the spring same as clover?—Reader, Goodells, Mich.

Under proper conditions excellent stands of alfalfa are often secured with wheat, seeding in early spring just as clover is ordinarily seeded. Northern grown alfalfa seed, particularly the Grimm variety, should be used. Seed should be applied broadcast with fiddle seeder at the rate of from ten to twelve pounds per acre, or drilled in, crossing the rows. If seeded broadcast the seeding should be harrowed in with spike tooth harrow with drills slanting slightly backwards, so as not to tear out the wheat. If common northern grown alfalfa is used fifteen pounds per acre should be seeded.

Northern grown seed of Grimm and common alfalfa can be secured from the Michigan State Farm Bureau, Lansing, Mich.

Culture for inoculation may be secured from the Department of Bacteriology, of the Michigan Agricultural College, East Lansing. The price is 25c per bottle and one bottle contains sufficient material to inoculate a bushel of seed.

If your land needs lime as most land does for alfalfa, it would be advisable to apply two tons of finely ground limestone or several cubic yards of marl per acre during the winter or early spring as a top dressing. If red clover catches well on your land liming may not be necessary.—J. F. Cox, Professor of Farm Crops, M. A. C.

## RIGHTS OF TENANT

Suppose a man gave up a land contract because he could not make payments and agreed to rent farm so much a month from Nov. 1st to March 1st, and owner places land in hands of real estate dealer to be sold for immediate possession, would rent be collectable? Suppose land is sold and new owner moves in before March 1st, and you are put to great inconvenience by being forced to move. What can be done? If the renter moved, could he be forced to pay in full to March 1st? Could land owner hold hog crates and chicken coops made from lumber off the farm before contract was given up?—J. E. M., Salem, Mich.

The tenant's lease and possession of the premises would have been good to March 1st, had he not surrendered the possession. He is not liable for the full term of rent but only for the portion of the share

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

if he voluntarily surrendered his possession. If he did not voluntarily surrender possession he would be entitled to damages for breach of contract, and that would lessen the rent. The owner of the premises has no lien upon the personal property of the tenant unless it is so specified in the contract. He could not therefore hold hog crates and chicken coops made from lumber off the farm before the contract was given up.—Legal Editor.

## HUBAM CLOVER ON SAND

Will Hubam clover produce well on sandy soil? Would you advise sowing on this kind of soil?—Subscriber, Michigan.

Hubam is a sweet clover which matures in a single season. It has only been known for a few years and its exact value has not been determined. It is apparently a promising crop to grow for quick hay and pasture. It is known to be one of the best of honey crops.

Hubam clover is apparently adapted to a wide range of soil conditions and instances of excellent growth have been noted by us on light sandy loams.

Hubam clover seed may be secured from the Michigan State Farm Bureau Seed Department of Lansing, Mich., at comparatively low rates.—J. F. Cox, Professor of Farm Crops, M. A. C.

## WHERE TO APPLY FOR TAX EXEMPTION

Will you please tell us how to go about getting exemption from taxes on new land? We have bought 40 acres of cut-over land.—Reader.

You should apply to the supervisor for exemption at the time assessment is made. He will refer it to the board of review who will make an exemption if the law has been complied with.—Editor.

## JEWISH HOLIDAYS

Will you please tell me if there are any Jewish holidays in February or not, or when are the Jewish holidays during the year? Thank you.—F. G., Caro, Mich.

The Jewish holidays are celebrated in accordance with a lunar calendar, and hence they fall each year on different dates of the solar calendar. This lunar calendar is used for the purpose of celebrating the religious festivals at the traditional times of the year, and the tradition relates to the lunar, and not the solar year.

The principal Jewish holidays fall during the year 1921-1922 as follows: New Year (Rosh Hashanah) Oct. 3-4, 1921; Day of Atonement (Yom Kippur) Oct. 12, 1921; Tabernacles (Sukkoth) Oct. 17-24, 1921; Feast of Dedication (Chanukah)

Dec. 26, 1921; Feast of Esther (Purim) March 14, 1922; Passover (Pesach) April 13, 1922; (The Feast of Passover is celebrated by Reform Jews from April 13th to 19th inclusive, and by Orthodox Jews from April 13th to 20th inclusive.) Pentecost (Shevuoth) June 2, 1922; New Year (as above) Sept. 23-24, 1922. The New Year is celebrated by Reform Jews one day, and by Orthodox Jews two days as indicated. The day is considered as being from sundown to sundown, and hence, each holiday begins on the evening before the day indicated. Philip F. Waterman, Rabbi, Kalamazoo, Mich.

## MUST PAY FOR DAMAGE TO TELEPHONE WIRES

About two weeks ago I moved a small house from our little town and coming through town one of the telephone wires caught and was broken. The manager of this telephone company came to where we were getting ready to move and asked if there were any wires in the way. The man who moved my house told him he didn't think there was, but one was caught and broken. Now he wants me and the man who moved this house to pay damages. Can he collect it or is there any law that the telephone wire has to be up a certain height? I am not trying to get out of paying the damage but I first want to know if I have to. Through the M. B. F. let me know what you think. It seems to me when we are in trouble we all turn to the M. B. F. just like a little child when hurt, turns to its mother.—P. C., Sanilac County, Mich.

Telephone companies have a lawful right to the streets and public places for the stringing of telephone wires; and the use of the streets for the moving of buildings is an unusual use of the highway. If the public authorities grant permission to move a building in the public highway the telephone company is entitled to reasonable notice of the intention to move the building and a reasonable time in which they may protect and care for the wires. The expense of any injury to the telephone wires and the safeguarding them should be borne by the person who is to move the building in the streets, it being an unusual use of the highway.—Legal Editor.

## RENTING ON SHARES

What would be considered a fair share for both owner and renter where owner furnishes land, team, tools and seed and renter does work?—G. W. A., Scottville, Mich.

The customary rental where the owner furnishes land, teams, tools and seed and the renter does the work is two-thirds to the owner and one-third to the renter. This seems to be a fairly equitable division.—Howard M. Eliot, Professor of Farm Management, M. A. C.

## FUR DEPARTMENT

Edited by A. E. HARDING, America's Foremost Author and Trapper

### QUESTIONS INVITED

#### LACE LEATHER TANNING

Recently you told how to tan hides with the hair on. Would you tell how to tan them to make lacing? We pay 5 cents a foot for a 1-2 inch wide string. One hide will buy only four or five strings. You are a great help to the farmer. I would like to give you your dinner some day.—L. R., Hastings, Mich.

For making buckskin, lacing, etc., the hair is removed before tanning. The most common soak to remove hair or fur is made in the following proportion: Water, 5 gallons; slack lime, 4 quart's; hardwood ashes, 4 quart's.

The skins are left in this one to six days or until the hair or fur starts readily. A more rapid acting application is made of water, 1 quart; red arsenic, 1 pound; un-slacked lime, 1 pound.

Boil the water and arsenic, let it cool and add the lime. Paint this on the flesh side of the skin, fold together and let lie 12 or 15 hours, when the hair will probably be ready to scrape off.

Tan as given in recipes some weeks ago or as follows: Alum, 2 1-2 pounds; salt, 1 pound; oatmeal (or flour), 1 pound.

The above is for proportions only. If tanning a good many hides you will need several times the above quantities. Finely powder and dissolve in enough sour milk or butter-milk to the consistency of cream. Coat the flesh side.

Another recipe is as follows: water, 1 gallon; alum, 2 1-2 pounds; salt, 1 pound.

Heat the water to dissolve, and when cool brush on the flesh side of the dampened skin. Lay the skins flesh sides together in pairs or if a single skin, double it up flesh in and leave in a cool place, but not freezing. Repeat this dressing of paste or liquid, (whichever recipe is followed) once or twice a day for two or three days, the point being to keep it damp with the paste or chemicals until they penetrate.

## TO TEMPER A CHISEL

Would you please tell me through your service department how to re-temper a cold chisel for cutting rivets and other soft metals?—J. B., Marion, Mich.

The tempering of steel tools consists of two processes: First, hardening by heating, then suddenly chilling; and, second, "drawing the temper" or softening from the chilled state to the degree of hardness desired. In the case of the chisel which we are considering, we need to have only one end—the edge—hardened. To accomplish this, heat the whole chisel to a dark or cherry red color, and holding it perpendicularly over the water, dip the end in an inch or more and keep it moving up and down for a few seconds, or until the edge is cool enough so that the water will not dry on it for the space of two seconds when it is drawn out. Now polish one side quickly with a piece of brick so that the colors denoting the degree of heat may be seen. These colors will form a band which will be seen to move towards the edge or cooler part of the tool. First will be seen a pale yellow or straw color; then darker yellow, which changes to brown; then purple, then blue.

A cold chisel needs to be quite soft, so we will wait until the blue gets to the edge; then quickly dip the edge into the water again and hold it there until the remainder of the tool is cool enough so that we may dip the whole without fear of hardening it. Tools for woodwork, such as carpenter's chisels and plane irons, are tempered to a straw color, as they require a very hard edge in order to be kept sharp.—Professor of Farm Mechanics, M. A. C.

## COLLECTING WAR TAX

A number of young people here would like to give a play next summer. Admission will be 25 cents each ticket. To whom should the war tax be sent and how much tax would it be necessary to collect on each 25 cent admission?—"Happy", Weidman, Mich.

Where the proceeds from any affair held, do not inure exclusively to the benefit of either a religious, educational or charitable organization or institution, the law provides that a tax at the rate of one cent for each ten cents or fraction thereof charged must be collected on each and every admission ticket sold. The ticket must show separately the admission charge, the tax on same, and the total of both. The war tax must be collected at the time the ticket is sold and must be returned to the government even though the ticket is not used. The tax cannot be based upon the gross receipts.

Returns must be made on form 729, which can be secured of the office. This form together with the amount of tax collected must be received at this office on or before the last day of the month following that in which the affair is held. Merely mailing a remittance does not constitute payment of tax unless received within the prescribed time. Unless the above instructions are complied with the person or persons responsible will make themselves liable for the penalties provided by law.

Make all remittances payable to the Collector of Internal Revenue, Detroit, Mich. If exemption is claimed, application should be made on form 755 supplied by this office.—Fred L. Woodworth, Collector Internal Revenue, Detroit, Mich.

## FIRST FARM BUREAU

Would you please publish when and where the first farm bureau was established, also by whom organized?—C. A. M., Goodrich, Mich.

The first farm bureau was organized in Broome county, New York. It was founded in the fall of 1913 under the name of Farm Improvement Association of Broome County but in 1914 the name was changed to Broome County Farm Bureau. Mr. Byers H. Gitchell, at the time president of the Chamber of Commerce, Binghamton, Broome county, was the man who inaugurated the movement.—Editor.



*These illustrations drawn from actual photographs show the difference limestone makes in the growth of alfalfa. The large picture is of a field in which two tons of Solvay Pulverized Limestone to an acre have been used. The circular insert shows an unlimed strip in the same field.*

# Dare You Do Without Limestone?

Do you realize that the use of limestone is the one subject on which all agricultural authorities agree?

Try to think of another method or feature of farm operation which all authorities agree in supporting.

The necessity for the use of limestone in securing profitable yields is admitted and urged by the agricultural colleges, by county agents, experimental stations, farm papers, lecturers—in fact, by every reliable source of farming information.

Have you ever thought of the subject of limestone in that light before?

Have you ever considered the fact that, in delaying the application of limestone, you are going against the opinion not of one authority or group of authorities, but against the unanimous opinion of all authorities?

In short, do you dare—can you afford to run the risk of going through the coming season of low prices and small profits without taking advantage of the help limestone will be to you in increasing your yields?

## Alfalfa Must Have Lime

In the present great campaign of the Michigan Agricultural College on alfalfa, it is stated definitely that lime must be used on the largest percentage of Michigan land in order to get satisfactory yields.

If you are planning to get the unquestioned benefits and profits from growing alfalfa, you must begin by liming your land.

## Clover Must Have Lime

Clover has always been a part of the short rotation of crops on most Michigan farms. It is impossible to raise clover on

many Michigan farms today, while other farms are getting larger yields than ever before. The only difference is limestone.

Don't think of these facts as merely advertising statements of a concern trying to sell you limestone. They are facts stated by your own agricultural college, by your own farm bureaus, and county agents. Ask them.

## Solvay Costs Less—Does More

Of course, there are several forms in which lime may be applied. But by far the largest percentage of all Michigan farmers using lime agree that Solvay Pulverized Limestone is the cheapest and best form in the long run.

It is dry. This saves freight and haulage—the largest items of expense in limestone use.

It is the most finely pulverized form of limestone known. All of it is thus readily absorbed by the soil. No need to wait for its benefits. Smaller quantities are necessary.

And it is produced by a company known and respected by Michigan farmers—a concern that can be absolutely relied upon for the purity of its product and fair dealing with its customers.

Solvay Pulverized Limestone is one of the few if not the only commodity bought by farmers on which the price was never raised throughout the entire high-price area we have been passing through. It is offered today at the same price asked before the war.

Send For Free Book On Limestone

*Write today for free copy of 32-page text-book telling all about its uses and benefits—how, where, and when it should be applied, and the actual results of scores of limestone tests.*

# SOLVAY

## PULVERIZED AGRICULTURAL LIMESTONE

Wing & Evans, Inc., Sales Agent For  
625 BOOK BLDG., DETROIT

The Solvay Process Co.

# 15 Year Guaranteed SLATE SURFACED Roofing

Red or Green Best Quality You Can Buy Anywhere \$2.20 PER ROLL

APPROVED: Fire Underwriters' Laboratories... OUR regular Red Brand... Made of heavy roofing felt saturated and coated with Asphalt. Surfaced with crushed slate in natural red or green colors. Colors are permanent and non-fading. Require no painting or staining and such rain washes it fresh and clean.

Buy Your Roofing Now! Order direct from this ad... Shipped from Chicago, Kansas City and St. Paul, or from warehouses at York, Pa., and St. Louis, Mo. (NOTICE: Prices in Kansas City and St. Paul territories...)

Montgomery Ward & Co. Chicago Kansas City St. Paul

## Stop Hatching Weak Chicks

Chicks that hatch a few days mean out weak and wobbly, and live but nothing to you but trouble and loss.

## Queen Incubators

produce large hatches of strong, vigorous chicks that live and grow. The Queen is accurately regulated—taking care automatically without attention of a variation in temperature of 70 degrees without danger to the eggs. It is built of genuine Redwood—very scarce in these days of imitation. Redwood does not absorb the odor from hatching chicks. Cheaper woods and strawboard or composition lining in iron or tin machines, retain the odors, to weaken and kill the chicks of later hatches.

Queen Incubators and Brooders are sold by dealers everywhere. Send for Free Book. (42) QUEEN INCUBATOR CO. Lincoln, Nebraska

## BLUE BIRD BRAND SEEDS

THE BEST THAT GROW! Certified Grim Alfalfa and Hubam Clover, Michigan and Idaho-grown Red Clover, Alsike and Sweet Clover. Choice of other Northern grown Field and Garden Seeds. A post card will bring full information.

The C-E-DEPUY Co. SEEDSMEN PONTIAC MICH.

## PENDERGAST Fence Prices Are Absolutely The Lowest

Yes Sir! You can save REAL money now on Pendergast guaranteed quality Fence and at absolutely the lowest price—but you must hurry. We Pay Freight Delivered to your station. We ship promptly. Get our new reduced prices and folder showing styles. Write today to our nearest factory.

PENDERGAST FENCE CO. 330 Main St. 231 Eden St. 432 Division St. Stillwater, Minn. Fort Madison, Ia. Elkhart, Indiana

## SEED---HAY---STRAW

I have 45 tons of nice June clover hay, all nice. Almost 15 tons of oats and barley straw, 3 tons of millet straw, 5 tons of June clover straw, 100 bushel of millet seed, 500 bushel of old oat seed, 500 bushel of new oat seed. Write for prices or come and see. Cash must accompany all orders. For reference, Rosebush State Bank. B. C. LARRANCE R. 2 Rosebush, Mich.

Strawberry Plants History and illustrated about most vigorous true to nature productive stock now grown. Book Free. MAYERS PLANT NURSERY, Merrill, Michigan

STRAWBERRY AND RASPBERRY PLANTS HARDY SHRUBS, ROSES, ETC. Catalog Free. GEO. H. SCHENCK, ELSIE, MICH.

# What the Neighbors Say

## RURAL EDUCATION

I HAVE read the article written by a "taxpayer" in Genesee county, in Dec. 3 issue, on the consolidated school question, and he has my views exactly. I cannot see for the life of me what has caused these highly educated people who are clamoring for consolidated schools, to have so much sympathy all at once for the farmers' children. They have always tried to make the farmer an under dog, now why so much fuss over his offspring? And what are they going to do with the farmers after they have driven them off the farm by taxation? It takes a mighty good farm and a mighty good farmer to make a go of it now. It will be a consolidated poor house that will be needed in a few years, if I am any judge. Around Perry and Morrice, where they have consolidated schools their taxes run from \$27 to \$33 per \$1,000. But what does Mr. Johnson know or care, about that. He gets his salary paid whether the farmer lives or not. That is just the trouble with this country; there are too many of these would-be bosses, trying to show the farmer how to spend his money, whether he has got it to spend or not.

But to come back to the "Am I My Brother's Keeper" part. I was educated in a village high school, having been reared in a village, and I know what it means to the children to enter school, who cannot dress properly or appear properly. Now they are trying to rake up these poor ragged kids from all the by-roads and absolutely make them go to town to school, whether they want to go or not, and whether their people can afford to dress them in a manner that will not make them a laughing stock, or not. How much rather would these children, who are unfortunate in worldly goods, stay in their own districts than to be poked fun at by the town smarties. It seems to me that each district is doing its bit in paying a larger part of the tuition for high school training, when the children are finished at "the little red school house," and if they can not take advantage of such a means to get their education, it seems to me it would be something like Pres. Sperry, of Albion College used to say: "Putting a \$1,000 education on a 10c boy."

Then to the idea of conveyance. The way the Genesee taxpayer described it was sure food for thought. How much better for a child to walk along the country road in the pure fresh air (that the city folks rave so much about) than to be packed like sardines in those "busses" along with children who are not taught to cough or blow their noses properly, to say nothing about keeping clean. I had much rather know that a child was walking home on a country road than to be hanging around town waiting for the older ones to get out and the bus to start. If temptations ever reach the young mind, it is when they are hanging around with nothing to do.

To make a long story short, I can not see why, if the rural districts can afford to hire a competent teacher, keep up their school houses and educate their children to the eighth grade, then pay their tuition to high school, they can not be allowed to do so without so much howling. If the local school boards could have the privilege of running their districts unhampered by these salaried guys, there would not be so much discontent; and no clear minded farmer would want consolidated schools. But the commissioner comes around and tells the teacher in the rural school, to tease the school board for everything she can think of, then tells the board to get along with just as little as they can (even to try to get along with one toilet) as we are soon to have consolidated schools and it won't pay to incur any expenses.

It is O. K. for the guy in the easy chair to tell the farmer "At a boy" stick to the plow and grub out that tax money" so that he can hold down his job or get a better one; but put him behind the plow for one season and I'll bet you dollars to doughnuts

that he'll be singing "How Dear to My Heart is the Little Red School House" and he'll forget it's "out of date," too.

There is nothing that will drive the children from the farm any quicker than this burden of taxation. While the young man and woman are trying to make a living on the farm, let's give them a chance to make a life, and not always keep their nose on the grind stone, and a laughing stock for their dependents. —L. Z. S., Shiawassee County.

## FOR BETTER SCHOOLS

JUST a few interesting statistics quoted from editorial page of the February Pictorial Review magazine, with Dr. Thomas D. Wood Teachers' College, Columbia University as authority for the figures and all to show:

Is rural education on par with urban? Statistics say: No. The rural child does not have as good a chance as the city child for development and preparation for a useful and happy life.

Of 30,000,000 children in the United States, about 18,000,000 live in rural districts. The percentage of illiteracy in the country is twice that of the city. The average school term is 140 days in the country and 180 days in the city and the average attendance is only 69 per cent in the country and 80 per cent in the city.

In some states it is found that actual number of days missed by boys and girls on account of farm work (and here is the question of child labor too) by far exceeds absence for any other cause.

In Michigan it is found that nearly 30 per cent of the children were retarded and that 86 per cent of 15-year-old children in rural schools were retarded.

Eight million children are in one and two room schools in America and there are over 200,000 such buildings, many of which are in a deplorable condition.

We expend for the city school children \$40 per capita, for the rural child but \$24.

The rural child has from four to eight weeks less of school term than the city child. Meaning, in other words the city children have eight years of elementary schooling, while their rural cousins, with less capable teachers and poorer equipment receive but six years.

Twenty-nine per cent of city children complete the high school course while only 5 per cent of rural children reach that goal and 90 per cent never even go beyond the rural school.

In matters of health it is a sorry fact that country children suffer by far the more from ear defects, eye defects, breathing defects and malnutrition, 16 per cent of country children are improperly fed and undernourished which all tends to lowering the morals.

In "God's great out of doors" where health should abound we find these awful facts because of home and school conditions.

Give us better schools for our farm child so he can compete with the city child. Better schools mean better homes.

Certainly the one room rural school is not answering the purpose, statistics say, and figures never lie. Yours for advancement. A rural mother and a has-been pupil and teacher in both city and rural schools, Pontiac, Mich.

## THE TRIALS OF AN EDITOR

I THOUGHT I would write you and ask why you are getting nervous on beans. Are they getting too high for you? For you said when beans would sell for \$8 or \$10 a pound in the city the farmer would get 6 cents a pound. Well I was in Bay City two weeks before Christmas and I went in a store and they were selling for 3 cents a pound and we were getting \$3.75 a hundred pounds for our beans. How about the five dollar beans what you predicted before the first of the year and now it is the 6th of February and no five dollar beans yet, and now when beans have been advanc-

ing just a little now you say you can see no reason for it and how about the Russian relief buying millions of bushels of beans and beans were a short crop all around us.

I think that beans ought to be much higher for the hard work that we had weeding, cultivating and harvesting and last of all sit by the bean picker all winter picking them so they wouldn't skin us up entirely picking over beans about three times what they ought to when beans pick about 30 pounds how much will we have left at the present price? Are you really working to help the farmer or are you helping the big fellows? Well, my husband started this letter but I thought I had to say something too, as I had to work so hard in the beans last summer and I know just what it is to raise them as a farmer cannot afford to hire a man at from 2 to 3 dollars a day at the low prices of grain and I could not look this on any longer so I thought I would express my thoughts too. The city people were going by in their big cars laughing to see a woman in the field but they didn't think how hard a farmer has to work. Could tell you lots more but am going to leave a little space for my husband yet.

Well I have no beans to sell now but I wish every farmer would get a good price for his beans, who have any left, which are very few, for if beans were five dollars a bushel then it would pay him to plant some. I think there is something wrong. —Mr. and Mrs. Henry H., Arenac County.

My dear folks, is it really necessary that we should explain over and over again our position on the bean market? "Are they getting too high for us?" makes us feel badly. No, they're not getting too high. We'd much prefer to pay 20 cents a pound for beans instead of 10, if the farmer were getting the same increase in proportion. It is the aim of the Business Farmer to give its readers FACTS about the markets and to interpret these markets as best we can. We have made mistakes, it is true, but we have been right many more times than we have been wrong. When the Detroit market shows a particularly active tendency for a long period of time which is not followed by other markets, it immediately becomes clear that artificial forces are at work. Perhaps manipulation. Perhaps a studied effort on the part of jobbers to keep up the price at a time when farmers are getting ready for another planting. Who knows? We can't exactly put our finger on the cause, and so it makes us nervous. Can't be you have read the Business Farmer very long or you wouldn't have written quite like you did.—Editor.

## ESSENTIALS OF CITIZENSHIP

AT this present day, when worthy citizenship is at a premium, this because of the prevailing harmful results arising from the too intense pursuit of material possessions, causes the earnest inquiry to be made and a careful search for the essentials, so absolutely necessary for the development of thrifty citizenship.

It is the firm conviction of the writer that there are three most essential of possessions if worthy citizenship is to result and these essentials are—Ability, Integrity and Activity.

Most certain it is, if any one of these three essentials is absent, a faulty character is the result. The man possessing ability and activity, without integrity, is sure to go wrong. A goodly number of this class are now in the prisons of the state.

Also will be a failure who possesses ability and integrity, yet lacking activity, is but a cumberer of space. Again, the possession of integrity and activity will not be able to accomplish worthy because of lacking the element so essential for the accomplishment of worthy results.

There is, today, an imperative demand for true men, men who, like our lamented Theodore Roosevelt, are fearless of opposition because of being in the Right and in the path of Duty. And may the number of such men be largely increased.

It is truly, a very sad condition, in our citizenship, that so many of our people seek after personal and political preferment instead of striving for that jewel—a pure,



mobile manhood, that which money cannot buy nor patronage influence for all. A noted writer states the need of the hour in words as follows—"God give us men. The times demand strong minds, great hearts, true faith and willing hands. Men whom the lust of office does not kill. Men, whom the spoils of office cannot buy. Men who possess opinions and a will. Men who have honor, who will not live above the fog, in public duty and in private thinking."

The question as to whether the world is growing better at this present day, is being considered and with a differing of views upon this important matter and while there is evidence to sustain a favorable view, of this important question, it is to be regretted that there is much, in present conditions, to sustain the view that evil is in the ascendency.

Well! Dear reader! Surely you and I can do our part in the bettering the conditions surrounding us and it is no less than our positive duty to do all that is within our power to help make secure such conditions as will advance the highest interests of our fellow men.

It is well to remember that "To whom much is given, much will be required" and we, Americans, living in this Land of Freedom and in this age of marvelous physical advancement have, thereby, laid upon us a responsibility for the aiding of all that is truly worthy and which duty does not rest upon those not in possession of the advantages that are ours.

Finally: may it be our good fortune to possess and make full and effective use of the three essentials referred to above—Ability, Integrity and Activity.—J. T. Daniells, Shiawassee County, Mich.

You have omitted the most important of all the requirements for the highest type of citizenship,—unselfishness. The most able and honest man may be the most selfish whose every private and public act may be for the benefit of self at the expense of humanity. Most of the woes of the world can be traced to selfishness. He who would measure up to the full stature of manhood must erase self and substitute selflessness. As men waken to the realization that service to God and to man is at once the most pleasurable, the most satisfying, yes, and the most profitable ideal to follow, so will we have better government, better homes, better people.—Editor.

**THE WAY WOMEN DRESS**

In reference to the letter by Uncle Rube Spinach, published in your paper of Feb. 11, I think it a ridiculous shame for any man or woman to uphold the young women of today in the styles or fashions they are wearing. Although there are some innocent girls who wear such clothes. Such undue exposure as seen on the streets today will arouse the passions of any live young man. The result is the girls are going wrong and becoming mothers before they are married. Some get married to save themselves from disgrace, and a good many of these are divorced in a short time.

Divorce is wrecking thousands of homes every year, and every year it is getting worse.

Any woman can dress modestly and sensibly and still be comfortable. In fact there can't be any comfort in some of the modern fashions.

We need some reformers to cry out against the wickedness of this nation, for unless there is a general turning back to God and the old time religion this country will slowly fall.

Tell Uncle Rube to wake up and look around at the way things are going. Read the accounts in the newspapers, it's alarming the things that are taking place today.

I am not a reformer nor a preacher, but just a simple farmer, but to publish anything like that arouses my indignation.—L. W. Fiedler, Ingham County, Mich.

The physical culturists would say that you have a carnal mind, so I must be careful and not seem to agree with you or I'll have one, too. The modern theory is that evil exists only in the mind. If your mind be pure you will think no evil, do no evil, see no evil. Fine theory, isn't it? Wonder if one per cent of our population could actually qualify? Oh, yes, lots of people THINK they can. Hands, up, all you folks, whose every thought is as pure as the driven snow! Don't think that Uncle Rube is defending immodesty in dress. And don't make the mistake of classing all forms of modern dress as immodest. Two women may wear the same dress. One will appear modest, the other immodest. We don't

want woman to go back to the floor-sweeping dress, neither do we wish to see them exposing their knee-joints to the elements. It invites rheumatics. But what stumps the reformers is to know the exact spot 'twixt knee and ankle where the dress should end.—Editor.

**HONEST PERIODICALS**

ROGER BABSON, whose forecast-ring of business has general acceptance, says that within ten years a fourth of American farmers will be bankrupt. The Secretary of Agriculture says that under present conditions farming can not endure. Very generally, farms are kept going by money made away from the farm; the old man and his team work on automobile roads; his daughter teaches school.

In the cities, not in Europe only but now in America, people starve. Millions of American men, women and children now suffer from lack of food; every investigation proves it. To get the food, they would have to pay more than they can earn; it is not the farmer that gets such prices, that gives so little for their money. Most farmers are destroying food in one way and another because it will not pay the expense of marketing.

If farmers controlled the government, there would be a "truth in fabric" law; they do not control. Railroad workers and coal miners can testify that wage earners do not control the government. Farmers and wage earners have an easy majority; the others are few. If the few control, if there is a dictatorship by a minority, that is Bolshevism; that is what Bolshevism is.

The means by which a minority controls in America has been demonstrated again and again. Periodicals, for example, require the larger investment, and periodicals obey their masters. Not all periodicals are controlled, or this article would not be printed. When a reader finds an honest periodical, he has found what he may not easily find again. It is for misinformation and misleading counsel that the mass of Americans now pay.

The Michigan Business Farmer has told the truth about taxation. The excess profits tax and the surtax are not paid directly or indirectly by anybody who can not afford to pay. It is because these taxes fall upon the rich that the campaign against them is so well financed. The Michigan Business Farmer might have added something to its resources. If it was offered nothing, that was a high compliment.

This matter of taxation is not a theoretic thing that a farmer may overlook or leave to politicians. What is at stake is, who pays for the war? If farmers and wage earners can be made to pay that tidy sum, they will not live long enough to get their noses off the grindstone. The way to make them pay it is to misinform them and mislead them.

Regularly, a paper that opposes the excess profits tax wants labor deflated. Farmers are urged to oppose the railroad workers in order that transportation may be cheaper. The Michigan Business Farmer has not taken that position. Lowering the cost of transportation need not be at the sole expense of workmen. Henry Ford has proved this in practice as others have by figures. A bill was introduced in congress to limit the salaries of railroad officials to the generous maximum of \$15,000; but that proposal received little publicity.

There is a direct relation between wages and the returns from farming. This also, though demonstrated and known, is little emphasized in propaganda aimed at either wage earners or farmers. When wages are high, farming is profitable; when unemployment is general, farming does not pay. When farming prospers, it competes powerfully for labor by offering a choice between good wages and emancipation from wages. When farming loses, it sends men to cities to compete for jobs.

"Labor needs capital and capital needs labor. The farmer needs capital and capital needs the farmer." Capital is everybody's friend. The wage earner is told that he wants lower cost of living; he does. The farmer must be deflated; he

(Continued on page 16)

**SAVE MONEY**

By Renewing ALL of your Reading Matter through M.B.F.

WE give here a splendid list of papers and magazines at low rates if taken with the M. B. F. All prices shown include One Year's (new or renewal) subscription to The Michigan Business Farmer. For a longer subscription add \$1 for 3 years, or \$2 for 5 years. If more than one paper is desired with the M. B. F., deduct \$1—The M. B. F. price—from the rate quoted opposite the other paper desired and add the difference to the combination already selected. For example—the combination to include the M. B. F. and the Detroit Journal is \$4.25. If you desire the New York Tri-Weekly World, deduct \$1.00 from \$1.65 quoted opposite "New York World" and add the difference, 65c to \$4.25 which makes the price for M. B. F., Detroit Journal and New York World, \$4.90. In this way as many papers and magazines as desired can be ordered, provided they are for the same family and ordered at the same time.

Rates for dailies are R. F. D. or State editions only and are made only for subscribers living where they cannot be served by news dealers, or in towns where the paper has no dealer.

Write us for rates on other publications not included in this list.

(We are not responsible for increases in rates made by other publications.)

DAILIES		
Names of other papers	With The M. B. F. Each One Year	
Detroit Free Press	\$4.50	
Detroit Journal	4.50	
Detroit Times	4.50	
Grand Rapids Press	4.50	
Grand Rapids Herald	5.50	
Grand Rapids News	4.50	
Toledo Blade	4.50	
Toledo News-Bees	4.50	
Toledo Times	4.50	
Chicago Herald-Examiner	5.25	
Chicago Drivers' Journal	6.00	
Jackson Citizens' Patriot	5.50	
Jackson News	5.50	
Battle Creek Enquirer-News	4.50	
Battle Creek Moon-Journal	4.50	
Saginaw News Courier	5.50	
Lansing State Journal	5.50	
Kalamazoo Gazette	5.50	
Flint Journal	5.50	
Big Rapids Pioneer	4.50	
Port Huron Times-Herald	5.50	
Ypsilanti Ypsilantian Press	3.50	

WEEKLIES		
Names of other papers	With The M. B. F. Each One Year	
Allegan News	\$2.00	
Kansas City Weekly Journal	1.25	
Toledo Blade, weekly	1.40	
Wheeling Register, weekly	2.25	

TRI-WEEKLIES		
Names of other papers	With The M. B. F. Each One Year	
Atlanta Constitution	\$2.25	
New York World	1.65	

MISCELLANEOUS		
Names of other papers	With The M. B. F. Each One Year	
American Bee Journal	\$2.00	
American Fruit Grower	1.50	
American Poultry Advocate	1.55	
American Sheep Breeder	1.75	
American Swineherd	1.75	
American Thresherman and Farm Power	1.65	
Better Fruit	1.65	
Breeder's Gazette	2.00	
Chester White Journal	1.70	
Everybody's Poultry Magazine	1.40	
Fruit Belt	1.35	
Gleanings in Bee Culture	1.95	
Guernsey Breeder's Journal	2.75	
Holstein-Friesian Register	1.85	
Hoard's Dairyman	1.75	
Horse Review	6.70	
Horseman	3.50	
Hunter-Trader-Trapper	2.40	
Jersey Bulletin	2.60	
Market Grower's Journal	2.15	
O. K. Poultry Journal	1.30	
Poultry Breeder	1.25	
Poultry Item	1.65	
Poultry Keeper	1.35	
Poultry Success	1.70	
Poultry Tribune	1.70	
Rabbit Journal	1.35	
Reliable Poultry Journal	1.60	
Southern Fruit Grower	1.35	
Swine Breeder's Journal	1.35	
Tractor & Gas Engine Review	1.75	
Trotter and Pacer	3.50	

MAGAZINES		
Names of other papers	With The M. B. F. Each One Year	
Adventure	6.00	
Ainslee's	2.70	

All Out Doors		
Names of other papers	With The M. B. F. Each One Year	
Argosy (All Story Weekly)	3.00	
American Boy	4.85	
American Cookery	2.15	
American Magazine	3.00	
American Woman	1.35	
Boy's Magazine	1.75	
Boy's Life	2.50	
Boy's World	1.65	
Century Magazine	5.00	
Christian Endeavor World	3.35	
Christian Herald	2.25	
Commoner	1.70	
Children's Magazine	1.70	
Collier's Weekly	2.75	
Current Opinion	4.00	
Delincaator	3.00	
Designer & Woman's Magazine	2.60	
Detective Story Magazine	6.40	
Etude	2.50	
Everybody's Magazine	3.25	
Every Child's Magazine	2.00	
Forest and Stream	3.70	
Garden Magazine	3.50	
Gardening	2.85	
Gentlewoman	1.10	
Girl's Companion	1.45	
Good Stories	1.15	
Guide to Nature	2.10	
Harpen's Magazine	4.50	
Household Journal	1.25	
Illustrated World	3.50	
Independent	4.50	
Junior Instructor Magazine	2.75	
Judge's Weekly	6.50	
Leslie's Weekly	6.50	
Literary Digest	4.85	
Little Folks	2.25	
McCall's	1.50	
McClure's Magazine	2.25	
Modern Priscilla	2.25	
Mother's Magazine	1.30	
Motion Picture Magazine	2.75	
Motion Picture Classic	3.60	
National Sportsman	1.90	
Needlecraft	1.35	
Outlook	5.50	
Outdoor Life	3.00	
Outing	4.25	
Pathfinder	1.80	
People's Favorite	2.70	
People's Home Journal	1.90	
People's Popular Monthly	1.20	
Physical Culture	3.40	
Pictorial Review	2.50	
Picture Play Magazine	2.70	
Popular Magazine	4.50	
Popular Science Monthly	3.50	
Presbyterian Banner	3.15	
Sunset Magazine	3.00	
Science and Invention	3.00	
Scientific American	6.00	
Scribner's Magazine	4.50	
Short Stories	3.50	
Smith's Magazine	2.70	
Student's Art Magazine	1.65	
Sunday School Times	2.60	
Today's Housewife	1.50	
Top Notch Magazine	4.50	
Travel	4.25	
Violinist	2.50	
United Presbyterian	3.35	
Western Story Magazine	6.40	
Woman's Home Companion	2.50	
Woman's World	1.30	
World's Work	4.00	
Young People's Weekly	1.60	
Youth's Companion	3.00	

THE MICHIGAN BUSINESS FARMER, Circulation Department, MT. CLEMENS, MICH

**CLUBBING OFFER ORDER BLANK**

The Michigan Business Farmer, Mt. Clemens, Mich.,

Enclosed find \$..... in check, money-order or draft for which

renew my subscription to your paper for..... years and send me the following periodicals for ONE YEAR each:

(Mark those you are renewing with an (R))

.....

.....

.....

To .....

P. O. .... State .....

# WHY SUFFER LOSS FROM SICK COWS!

### Easy Home Treatment Keeps Cows Healthy and Profitable

Cows are pretty hardy animals. Practically the only diseases they suffer from are those which result from weakened vitality of genital or digestive organs. These, of course, are serious because they immediately reduce the milk-flow—and milk is money. We get scores of letters weekly like this one from W. H. Lawson, Petrolia, Ont., a dealer who sells Kow-Kare:

"We handle a lot of 'cow tonics', 'regulators', etc., but when it is up to us to sell something we can guarantee, we sell Kow-Kare. Only last month, we saved a valuable Registered Durham cow valued at \$250 with Kow-Kare. The cow retained the afterbirth and after ten days' doctoring the veterinary said to kill the cow. The owner happened in when we were recommending your Kow-Kare, and told us his trouble. We donated a box of your Kow-Kare and he came back in five days for another box and paid for both."

As a sample of the endorsements we get from cow owners themselves, read this letter from C. E. Dodge, DeWittville, N. Y.:

"Since I have been on the County Farm, I have been using Kow-Kare in the dairy for the last ten years. I have 52 cows. My experience is that a few dollars worth of Kow-Kare saves us a great many dollars worth of veterinary bills, and also every cow in the dairy that I feed it to produces more all the year thru because of the Kow-Kare. I have no sick cows or trouble, when I begin feeding Kow-Kare, from the first of January until I turn them out in the Spring."

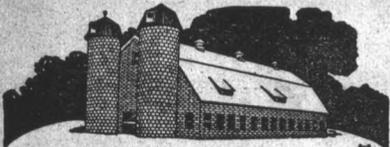
You, too, can be free of such cow ailments as Barrenness, Abortion, Retained Afterbirth, Scouring, Bunches, Milk Fever, Loss of Appetite, etc., by using this reliable cow medicine. General stores, feed dealers and druggists sell it at the new reduced prices—55c and \$1.25.

DAIRY ASSOCIATION CO., INC., Lyndonville, Vt.

Write today for this valuable book on diseases of cows.



FREE BOOK



## NATCO BARN COST LESS per YEAR

The permanent, glazed, fire-safe walls of Natco Hollow Tile require less time, labor and mortar to construct and never decay, need painting or repairs. The air spaces in the tile along with the exclusive double-shell construction eliminate through mortar joints and prevent heat, cold and moisture from penetrating through the walls.

Write today for your copy of the "Natco on the Farm" book. Illustrates and describes practical and economical hollow tile farm buildings of every type and size.

NATCO DOUBLE SHELL TILE NATIONAL-FIRE-PROOFING-COMPANY 1518 FULTON BUILDING PITTSBURGH, Pa.

## WIN \$500. Everybody Try!

14 Other Big Cash Prizes

Send today for my New Puzzle Picture. I am going to give \$1,000 away and I want you to send for your free copy—an interesting pastime and pays big returns to winners.

Luella Stewart Won \$1,000 She lives at Wyoming, Minn., and won the major prize of \$1,000 recently. So if you want to enter in for this wonderful opportunity write today to

L. S. Mayer, Pres. MAYER CO., Minneapolis, Minn.

### CLOVER AT WHOLESALE

We save you money. Buy now before advance. Crop short. We expect higher prices. Don't miss. We specialize on Guaranteed Quality. Tested Clover, Timothy, Alfalfa, Sweet Clover, and Alsike; sold subject to your approval & government test. Do not fail to secure our Samples and Big Seed Guide all FREE. Write today. American Mutual Seed Co., Dept. 127 Chicago, Ill.

# Nomads of the North

A STORY OF THE GREAT OUTDOORS

By JAMES OLIVER CURWOOD

Michigan's Own and America's Foremost Author of Wild Life Romance

(Continued from last week)

FOR several minutes after that Miki lay still while the blood made its way slowly through his numbed and half-frozen limbs. At last he staggered to his feet, and then it was that Le Beau chuckled jubilantly and turned back to the cabin.

And now followed many days that were days of hell and torment for him—an unequal struggle between the power of The Brute and the spirit of the Dog.

"I must break you—Ow! by the Christ! I will break you!"—Le Beau would say time and again when he came with the club and the whip. "I will make you crawl to me—ouh, and when I say fight you will fight!"

It was a small cage, so small that Miki could not get away from the reach of the club and the whip. They maddened him—for a time and Le Beau's ugly soul was filled with joy as Miki launched himself again and again at the sapling bars, tearing at them with his teeth and frothing blood like a wolf gone mad.

For twenty years Le Beau had trained fighting dogs, and this was his way. So he had done with Netah until The Killer was mastered, and at his call crept to him on his belly.

Three times, from a window in the cabin, Nanette looked forth on these horrible struggles between the man and the dog, and the third time she buried her face in her arms and sobbed; and when Le Beau came in and found her crying he dragged her to the window and made her look out again at Miki, who lay bleeding and half dead in the cage. It was a morning on which he started the round of his traps, and he was always gone until late the following day. And never was he more than well out of sight than Nanette would run out and go to the cage.

It was then that Miki forgot The Brute. At times so beaten and blinded that he could scarcely stand or see, he would crawl to the bars of the cage and caress the soft hands that Nanette held in fearlessly to him. And then, after a little, Nanette began to bring the baby out with her, bundled up like a little Eskimo, and in his joy Miki whimpered and wagged his tail and grovelled in his worship before these two.

It was in the second week of his captivity that the wonderful thing happened. Le Beau was gone, and there was a raging blizzard outside to which Nanette dared not expose the baby. So she went to the cage, and with a heart that beat wildly, she unbarred the door—and brought Miki into the cabin! If Le Beau should ever discover what she had done—!

The thought made her shiver.

After this first time she brought him into the cabin again and again. Once her heart stood still when Le Beau saw blood on the floor, and his eyes shot at her suspiciously. Then she lied.

"I cut my finger she said," and a moment later, with her back to him, she did cut it, and when Jacques looked at her hand he saw a cloth about the finger, with blood-stain on it.

After that Nanette always watched the floor carefully.

More and more this cabin, with the woman and the baby in it, became a paradise for Miki. Then came the time when Nanette dared to keep him in the cabin with her all night, and lying close to the precious cradle Miki never once took his eyes from her. It was late when she prepared for bed. She changed into a long, soft robe, and then, sitting near Miki, with her bare little feet in the fireglow, she took down her wonderful hair and began brushing it. It was the first time Miki had seen this new and marvellous garment about her. It fell over her shoulders and breast and almost to the floor in a shimmering glory, and

the scent of it was so sweet that Miki crept a few inches nearer, and whimpered softly. After she had done brushing it Miki watched her as her slim fingers plaited it into two braids; and then, before she put the light out, a still more curious thing happened. She went to her bed, made of saplings, against the wall, and from its hiding place under the blankets drew forth tenderly a little ivory crucifix. With this in her hands she knelt upon the log floor, and Miki listened to her prayer. He did not know, but she was asking God to be good to her baby—the little Nanette in the crib.

After that she cuddled the baby up in her arms, and put out the light, and went to bed; and through all the hours of the night Miki made no sound that would awaken them.

In the morning, when Nanette opened her eyes, she found Miki with his head resting on the edge of the bed, close to the baby that was nestled against her bosom.

That morning as she built the fire, something strange and stirring in Nanette's breast made her sing. Le Beau would be away until dark that night, and she would never dare to tell him what she and the baby and the dog were going to do. It was her birthday. Twenty-six; and it seemed to her that she had lived the time of two lives! And eight of those years with The Brute! But today they would celebrate, they three. All the morning the cabin was filled with a new spirit—a new happiness.

Years ago, before she had met Le Beau, the Indians away back on the Waterfound had called Nanette "Tanta Penashe" ("the Little Bird") because of the marvellous sweetness of her voice. And this morning she sang as she prepared the birthday feast; the sun flooded through the windows, and Miki whimpered happily and thumped his tail, and the baby cackled and crowed, and The Brute was forgotten. In that forgetfulness Nanette was a girl again, sweet and beautiful as in those days when old Jackpine, the Cree—who was now dead—had told her that she was born of the flowers. The wonderful dinner was ready at last, and to the baby's delight Nanette induced Miki to sit on a chair at the table. He felt foolish there, and he looked so foolish that Nanette laughed until her long dark lashes were damp with tears; and then, when Miki slunk down from the chair, feeling his shame horribly, she ran to him and put her arms around him and pleaded with him until he took his place at the table again.

So the day passed until mid-afternoon, when Nanette cleared away all signs of the celebration and locked Miki in his cage. It was fortunate she was ahead of time, for scarcely was she done when Le Beau came into the edge of the clearing, and with his was Durant, his acquaintance and rival from the edge of the Barrens farther north. Durant had sent his outfit on to Port O' God by an Indian, and had struck south and west with two dogs and a sledge to visit a cousin for a day or two. He was on his way to the Post when he came upon Le Beau on his trapline.

Thus much Le Beau told Nanette, and Nanette looked at Durant with startled eyes. They were a good pair, Jacques and his guest, only that Durant was older. She had become somewhat accustomed to the brutality in Le Beau's face, but she thought that Durant was a monster. He made her afraid, and she was glad when they went from the cabin.

"Now I will show you the bete that is going to kill your poos as easily as your lead-whelp killed the rabbit today, m'sieu," exulted Jacques. "I have told you but you have not seen!"

And he took with him the club and the whip.

Like a tiger fresh out of the jun-

gles Miki responded to the club and the whip today, until Durant himself stood aghast, and exclaimed "Mon Dieu! he is a devil!"

From the window Nanette saw what was happening, and out of her rose a cry of anguish. Sudden as a burst of fire there arose in her — triumphant at last and unafraid — that thing which for years The Brute had crushed back: her womanhood resurrected! Her soul broken free of its shackles! Her faith, her strength, her courage! She turned from the window and ran to the door, and out over the snow to the cage; and for the first time in her life she struck at Le Beau, and beat fiercely at the arm that was wielding the club.

"You beast!" she cried. "I tell you, you shall not! Do you hear? You shall not!"

Paralyzed with amazement, The Brute stood still. Was this Nanette, his slave? This wonderful creature with eyes that were glowing fire and defiance, and a look in her face that he had never seen in any woman's face before? Now—impossible! Hot rage rose in him, and with a single sweep of his powerful arm he flung her back so that she fell to the earth. With a wild curse he lifted the bar of the cage door.

"I will kill him, now; I will kill him!" he almost shrieked. "And it is you—YOU—you she-devil! who shall eat his heart alive! I will force it down your throat: I will—"

He was dragging Miki forth by the chain. The club rose as Miki's head came through. In another instant it would have beaten his head to a pulp—but Nanette was between it and the dog like a flash, and the blow went wild. It was with his fist that Le Beau struck out now, and the blow caught Nanette on the shoulder and sent her frail body down with a crash. The Brute sprang upon her. His fingers gripped in her thick, soft hair.

And then—

From Durant came a warning cry. It was too late. A lean gray streak of vengeance and retribution, Miki was at the end of his chain and at Le Beau's throat. Nanette heard! Through dazed eyes she saw! She reached out gropingly and struggled to her feet, and looked just once down upon the snow. Then, with a terrible cry, she staggered toward the cabin.

When Durant gathered courage to drag Le Beau out of Miki's reach Miki made no movement to harm him. Again, perhaps, it was the Beneficent Spirit that told him his duty was done. He went back into his cage, and lying there on his belly looked forth at Durant.

And Durant, looking at the blood-stained snow and the dead body of The Brute, whispered to himself again:

"Mon Dieu! he is a devil!"

In the cabin, Nanette was upon her knees before the crucifix.

### CHAPTER EIGHTEEN

THERE are times when death is a shock, but not a grief. And so it was with Nanette Le Beau. With her own eyes she had looked upon the terrible fate of her husband, and it was not in her gentle soul to weep or wish him alive again. At last there had overtaken him what Le Beau had intended him to receive some day: justice. And for the baby's sake more than her own Nanette was not sorry. Durant, whose soul was only a little less wicked than the dead man's, had not even waited for a prayer—had not asked her what to do. He had chopped a hole in the frozen earth and had buried Le Beau almost before his body was cold. And Nanette was not sorry for that. He would never strike her again. And because of the baby she offered up a prayer of gratitude to God.

In his prison-cage of sapling bars Miki cringed on his belly at the end of his chain. He had scarcely moved since those terrible moments in which he had torn the life out of the man-brute's throat. He had not even growled at Durant when he dragged the body away. Upon him had fallen a fearful and overwhelming oppression. He was not thinking of his own brutal beatings, or of the death which Le Beau had been about to inflict upon him with the club; he did not feel the pres-

ence of pain in his bruised and battered body, nor in his bleeding jaws and whip-lashed eyes. He was thinking of Nanette, the woman. Why had she run away with that terrible cry when he killed the man-beast? Was it not the man-beast who had struck her down, and whose hands were at her white throat when he sprang the length of his chain and tore out his jugular? Then why was it that she ran away, and did not come back?

He whimpered softly. The afternoon was almost gone, and the early gloom of mid-winter night in the Northland was settling thickly over the forests. In that gloom the dark face of Durant appeared at the bars of Miki's prison. Instinctively Miki had hated this fox-hunter from the edge of the Barrens, just as he had hated Le Beau, for in their brutish faces as well as in their hearts they were like brothers. Yet he did not growl at Durant as he peered through. He did not even move.

"Ugh! le diable!" shuddered Durant. Then he laughed. It was a low, terrible laugh, half smothered in his coarse beard, and it sent an odd chill through Miki.

He turned after that and went into the cabin.

Nanette rose to meet him, her great dark eyes glowing in a face dead white. She had not yet risen above the shock of Le Beau's tragic death, and yet in those eyes there was already something re-born. It had not been there when Durant came to the cabin with Le Beau that afternoon. He looked at her strangely as she stood with the baby in her arms. She was another Nanette. He felt uneasy. Why was it that a few hours ago he had laughed boldly when her husband had cursed her and said vile things in her presence—and now he could not meet the steady gaze of her eyes? Dieu! he had never before observed how lovely she was! He drew himself together, and stated the business in his mind.

"You will not want the dog," he said. "I will take him away."

Nanette did not answer. She seemed scarcely to be breathing as she looked at him. It seemed to him that she was waiting for him to explain; and then the inspiration to lie leapt into his mind.

"You know, there was to be the big fight between his dog and mine at Post Fort O' God at the New Year carnival," he went on, shuffling his heavy feet. "For that, Jacques—your husband—was training the wild dog. And when I saw that ochun—that wolf devil—tearing at the bars of the cage I knew he would kill my dog as a fox kills a rabbit. So we struck a bargain, and for the two cross foxes and the ten red which I have outside I bought him." (The vraisemblance of his lie gave him courage. It sounded like truth, and Jacques, the dead man, was not there to repudiate his claim.) "So he is mine," he finished a little exultantly, "and I will take him to the Post, and will fight him against any dog or wolf in all the North. Shall I bring in the skins, madame?"

"He is not for sale," said Nanette, the glow in her eyes deepening. "He

is my dog—mine and the baby's. Do you understand, Henri Durant? He is not for sale!"

"Oui," gasped Durant, amazed. "And when you reach Post Fort O' God, m'sieu, you will tell le Facteur that Jacques is dead, and how he died, and say that some one must be sent for the baby and me. We will stay here until then."

He had never seen her like that. He wondered how Jacques Le Beau could swear at her, and strike her. For himself, he was afraid. Standing there with those wonderful eyes and white face, with the baby in her arms, and her shining hair over her breasts, she made him think of a picture he had once seen of the Blessed Lady.

He went out through the door and back to the sapling cage where Miki lay. Softly he spoke through the bars.

"Ow, bete," he called; "she will not sell you. She keeps you because you fought for her, and killed mon ami, Jacques Le Beau. And so I must take you my own way. In a little while the moon will be up, and then I will slip a noose over your head at the end of a pole, and will choke you so quickly she will not hear a sound. And who will know where you are gone, if the cage door is left open? And you will fight for me at Post O' God. Mon Dieu! how you will fight! I swear it will do the ghost of Jacques Le Beau good to see what happens there."

He went away, to where he had left his light sledge and two dogs in the edge of the timber, and waited for the moon to rise.

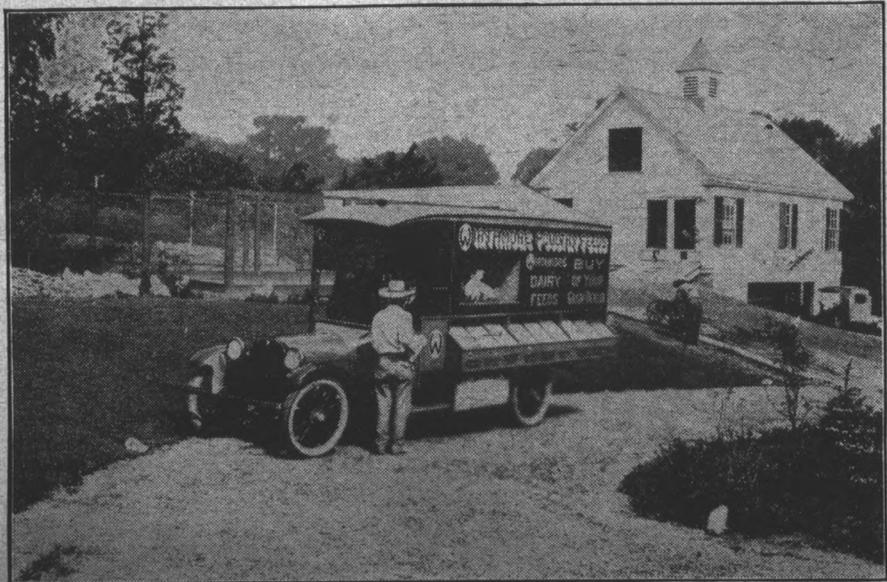
Still Miki did not move. A light had appeared in the window of the cabin, and his eyes were fixed on it yearningly as the low whine gathered in his throat again. His world no longer lay beyond that window. The woman and the baby had obliterated in him all desire but to be with them.

In the cabin Nanette was thinking of him—and of Durant. The man's words came to her again, vividly, significantly: "You will not want the dog." Yes, all the forest people would say that same thing—even le Facteur himself, when he heard. She would not want the dog! And why not? Because he had killed Jacques Le Beau, her husband, in defence of her? Because he had freed her from the bondage of the Brute? Because God has sent him to the end of his chain in that terrible moment that the baby Nanette might grow up with laughter on her lips instead of sob? In her there rose suddenly a thought that fanned the new flame in her heart. It must have been le bone Dieu! Others might doubt, but she—never. She recalled all that Le Beau had told her about the wild dog—how for many days he had robbed the traps, and the terrific fight he had made when at last he was caught. And of all that The Brute had said there stood out most the words he had spoken one day.

"He is a devil, but he was not born of wolf. Non, some time, a long time ago, he was a white man's dog."

A white man's dog!

(Continued next week)



—Courtesy Dodge Bros. Another example of how the City is being brought to the Farmer

## You Know How KROP-KING Will Grow Before You Buy!

**OUR TEST**

Seed

Brand

Approx. Purity

Approx. Ger.

Date Ger.

Year Grown

Where Grown

Identification No.

NAME AND NUMBER OF NOXIOUS WEED SEEDS

NAME AND PER CENT. OTHER WEED SEEDS

CHARACTER AND PER CENT. OTHER MATTER

Noxious Weed Seeds present in greater numbers than 1 to 5000.

(a) No one of more of which is in greater numbers in the aggregate than 1 to 1000 of such farm seed.

(b) No one of more of which is in greater numbers in the aggregate than 1 to 200 of such farm seed.

MILWAUKEE SEED CO.

### Protects Your Enormous Investment

Why chance your enormous investment in labor, machinery and land by planting questionable seed? Why chance the reaping of only a scant reward? Plant **KROP-KING** this year! Plant it because its high purity helps to safeguard against noxious weeds—because its high germination insures greatest returns per dollar—because it comes from hardy, drought-resisting stocks—because it is produced with the utmost care and cleaned by the most modern machinery known to science—because it retains the biggest rate of interest on your enormous investment in labor, land and machinery.

If your dealer cannot supply you, write us and we will tell you who can

**MILWAUKEE SEED CO.**  
110 W. Water St. Milwaukee, Wis.



Write for your FREE copy of this Remarkable New Booklet on how to Raise Bigger Crops. Printed in colors—36 pages in all, with 32 illustrations and drawings.

## SMASH GO PRICES

on FENCE GATES, POSTS, ROOFING-PAINTS



Right now I'm making another SLASH in my prices—a slash that will open your eyes. I've cut my usual low prices way down to enable my farmer friends everywhere to replace their fences, gates, and paint buildings that have long been neglected because of war-time prices. Write today for 88-page cut price catalog giving my low **FREIGHT PREPAID** prices. Everything slashed way down—Fencing, Barb Wire, Steel Posts, Gates, Roofing and Paints at real bargain prices. Everything guaranteed. Write for catalog today. **Jim Brown BROWN FENCE & WIRE CO. Dept. 12720, Cleveland, Ohio**

**JIM BROWN'S CUT PRICE CATALOG**

## FREE!

Just send me your name and address and I will mail you my new Gate Book Free, postpaid.

### "Cant-Sag" GATES

Never sag, drag, warp or twist out of shape. No nails used. Every board double bolted between 8 angle steel uprights. Won't injure stock—easily repaired. Factory built at less than home made prices. Write for Catalog.

Alvin V. Rowe, Pres. **ROWE MANUFACTURING CO. 2502 Adams Street, Galesburg, Ill.**

Cost Less than All Wood. Last 5 Times as Long.

## \$15.00

is all we charge for Tanning and Making you a **FUR COAT OR ROBE**

Where you furnish the Hide

The Blissfield make is the BEST on the Market today. We can SAVE you MONEY. Our Catalogue is FREE.

**THE BLISSFIELD TANNERY**  
W. G. White Co., Inc.,

## Don't Wear a Truss

**BROOKS' APPLIANCE**, the modern scientific invention, the wonderful new discovery that relieves rupture will be sent on trial. No obnoxious springs or pads. Has automatic Air Cushions. Binds and draws the broken parts together as you would a broken limb. No salves, No Oils. Durable, cheap. Sent on trial to prove it. Protected by U. S. patents. Catalogue and measure blanks mailed free. Send name and address today.

**C. E. BROOKS, 463F State Street, Marshall, Mich.**

## FREE BOOK on CONTAGIOUS ABORTION

Describes cause, effects and treatment; tells how farmers in all parts of U. S. are stopping the ravages of this costly malady.

Write for free copy today.

**ABORNO LABORATORY**  
42 Jeff Street, Lancaster, Wis.

# The Michigan BUSINESS FARMER

An Independent Farmer's Weekly Owned and Edited in Michigan

SATURDAY, FEBRUARY 25th, 1922

Published every Saturday by  
THE RURAL PUBLISHING COMPANY, Inc.

Mt. Clemens, Michigan

Represented in New York, Chicago, St. Louis and Minneapolis by  
the Associated Farm Papers, Incorporated

GEORGE M. SLOCUM ..... PUBLISHER  
FORREST A. LORD ..... EDITOR

## ASSOCIATES:

Frank R. Schalek ..... Assistant Business Manager  
E. E. Walker ..... Circulation Manager  
M. D. Lamb ..... Auditor  
Henry F. Hopkins ..... Plant Superintendent  
Milton Grinnell ..... Managing Editor  
Grace Nellis Jenney ..... Farm Home Editor  
H. H. Mack ..... Market and Live Stock Editor  
William E. Brown ..... Legal Editor  
W. Austin Ewalt ..... Veterinary Editor

ONE YEAR (52 Issues) \$7; TWO YRS (104 Issues) \$15.00  
THREE YRS. (156 Issues) \$21; FIVE YRS. (260 Issues) \$30.00  
The date following your name on the address label shows when your subscription expires. In renewing kindly send this label to avoid mistakes. Remit by check, draft, money-order or registered letter; stamps and currency are at your risk. We acknowledge by first-class mail every dollar received.

Advertising Rates: Forty-five cents per agate line. 14 lines to the column inch. 772 lines to the page. Flat rates.  
Live Stock and Auction Sale Advertising: We offer special low rates to reputable breeders of live stock and poultry; write us.



## RELIABLE ADVERTISERS

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.

## How Exports Affect Prices

THERE has been a good deal of discussion in these columns over the effect of export trade in farm products upon domestic prices. Some readers profess to believe that inasmuch as the farmer gets only a comparatively small portion of the export price, export business might just as well be done away with altogether. The Business Farmer has taken the position that the indirect effect of export trade upon all domestic prices is far more important than any direct pecuniary benefit the farmer might receive from such transactions. At the same time the Business Farmer believes that everything possible should be done to put the farmer in control of the export end of his business that he may receive a greater direct benefit from the same than he does under the present system. The Agricultural Commission which was appointed some months ago to find out what's wrong with agriculture, has made an interesting report upon the influence of export business on domestic prices. From that report is taken this striking statement:

"In assessing the importance of exports as a factor in determining the price of the domestic product, it must be remembered that agricultural products for the most part are produced in surplus quantities and that a relatively inconsiderable increase or decrease in exports has a more than correspondingly great influence upon prices. The great economist, Gregory King, has estimated that a deficiency of one-tenth will increase the price three-tenths and that a deficiency of two-tenths will increase the price eight-tenths. The same can apply to surpluses. Excess production, therefore, unless absorbed by exports tends to depress the price in much the same ratio."

## Raising the Bonus

RAISING the bonus promises to be as hard a job as raising an ornery bull, and the "neighbors" are about as free with their advice on how it should be done. Wall Street and the President suggest a sales tax and Congress might flirt with the suggestion were it not for the fact that a congressional election is not many moons away. But the democrats are getting gaunt and hungry and the adoption of a sales tax by a Republican congress would make the finest kind of political provender. So congress puts the temptation aside and flounders helplessly around hoping the world will come to an end or something else will happen to justify their putting the vexatious bonus question over to the next session. But the soldiers want their bonus now when they need it. And there are so many of them. And they all have a vote. Poor Congress!

All the farm organizations, including the American Farm Bureau Federation, have come out definitely opposed to a sales tax, and recommending that the excess profits tax be

taken from its grave where it was laid to rest on January 1st and given a new lease of life. But the corporations do not take kindly to the suggestion because, as you remember, the excess profits tax is passed on to the consumer and the corporations don't like to pose as martyrs to the bonus cause when it is really the poor devil of a consumer who is footing the bill. The corporations got away with that gag last year, but it is doubtful if they can do it again. Of all the suggestions that have been advanced to raise the bonus money the most feasible is the excess profits tax. And that will likely be the means which congress will adopt.

## Poor But Happy

THE M. B. F. folks who read the daily newspapers are probably more or less familiar with the series of cartoons by Briggs, "How to Start the Day Wrong", showing how a very little occurrence can transform a perfectly glorious day into a perfectly miserable one for any human being. Picture the editor setting forth for his office in the morning with a light heart and a whistle on his lips. The morning sun turns the awakening earth into a thing of wondrous beauty. All is well with the world. He reaches his office. The mail comes. There are stacks of it; always is at this time of the year. A hundred letters perhaps to read and to answer. He digs in with a will. It is a real pleasure to hear from the farm folks, to share their burdens, to help them when he can. First letter, "taxes too high". Right you are, old friend. Second letter, "farm prices too low". Betcha boots, we know it. Third letter, "can't pay my interest on the mortgage, banker threatens to foreclose". Too bad, too bad. Fine little family, too; all have worked hard to save the home; deserve better things. Fourth letter, "robbed by a crooked stock salesman". And so forth and so on. Letter after letter pouring out tales of woe, asking for advice and information on every subject known to mortal man, pleading for assistance. As we read we catch the heartaches of you folks whom we love and serve. The sun goes behind a cloud and the day is utterly ruined.

But once in awhile there shines forth from that stack of letters a gem which radiates hope and optimism. Take, for instance, that letter of Mrs. Palmer's which came last week from Good Hart, a little village in Emmet county, overlooking Lake Michigan. She writes:

We are subscribers to the M. B. F. and like it very much. We are but small farmers, but manage to make a little more than enough to make both ends meet for which we are thankful. The men folks do the chores and cut wood in the winter and on nice days husk out a little more corn which they didn't have time to do last fall. I do enjoy letting them sleep a little later these mornings until I get the children attended to and our little girl off to school, for then I can get their breakfast without being bothered. Oh, the winter time is so pleasurable here even if we do live quite a ways from neighbors and have only a footpath when we go visiting. The hills are so large and so many and the snow drifts so much that we cannot keep a road broken all winter long."

Far from neighbors, snow-bound part of the time, farming in a small way, not very much to do with, but happy! Has this woman learned the secret of true contentment?

## Where Were the Farmers?

ALL that was lacking to make the annual meeting of the Michigan Allied Dairy Association a glorious success were the farmers. The exhibits were fine; the program was excellent. The milk distributors were there, and the manufactureres of ice cream, condensed milk and all the other dairy products mingled jovially with the makers of dairy machinery and utensils. Every branch of the industry was represented but the most vital of all. The farmer wasn't there. He was home milking the cows.

What is the Michigan Allied Dairy Association anyway? It is a federation of associations and individuals connected in some way or other with the dairy industry. The bulk of its membership is made up of persons who

manufacture and deal in dairy products and machinery. Officially the farmers are represented by the Michigan Milk Producers' Ass'n and the State Farm Bureau, both of which contribute financially to the Association. Last year the State Farm Bureau paid the Association \$300.

The objects of the organization are somewhat obscure. They are partly educational, partly commercial, and partly diplomatic. The farmer is encouraged to produce better quality of milk; the public is taught the food value of milk. The annual convention affords the manufacturers of dairy goods a chance to display their wares and book orders. And every effort is made to convince the visiting farmer that the present methods of marketing milk and its products are the most efficient and economical that can be devised.

With all of these objects, except the last, the Business Farmer is in perfect accord. We all ought to know each other better, and then we would understand each other better. The farmer is still a long way from attaining perfection in his products, and the public is woefully ignorant of what milk really is and can do for the human body. And we have no objection to the manufacturers showing their wares. Farmers are always interested in these things. But we do object most strenuously to what is perhaps the principal motive of these conventions, to quiet the farmers' dissatisfaction over existing marketing methods and convince him that he can't do any better.

Farmers have every excuse to question the spread 'twixt producer and consumer. It is too large. And in the majority of cases farmers' associations, properly organized and adequately financed, can do a better and cheaper job of manufacturing and distributing than existing corporations. We are not, therefore in sympathy with the subtle aims of those who comprise the Michigan Allied Dairy Association. And judging from the attendance at the last convention neither are the farmers.

## The Sliding Scale

IN discussing the difficulties that lie in the way of an early agreement between beet growers and manufacturers with respect to the coming season's crop, "Facts About Sugar," suggests that the "sliding scale contract is the most equitable of all," but remarks that a principal reason why it has not been more universally adopted is a "preference on the part of the grower himself for an arrangement under which he will receive a fixed price for his beets."

This is hardly a fair statement of the facts. Some farmers prefer the fixed minimum. Others a sliding scale from zero upwards. The principal objection to the kind of a sliding scale with which we are familiar in Michigan is not that it carries no assurance of guarantee, but that it does not slide equally for both parties to the contract. The manufacturers' notion of fair play is admirably illustrated in the sliding scale contract in vogue in this state. For every increase of one cent per pound in the price of sugar the manufacturers give the farmers \$1 a ton more for their beets. They keep for themselves \$1.40.

Give the farmers an even split in the profits of the beet sugar industry and they'll go an even split in the losses.

The Business Farmer's market editor is preparing an interesting little treatise entitled, "I told you so."

For the most of us the war ended three years ago, but the soldier bonus discussion suggests that for congress it has just begun.

President Burton of the U. of M. I am a Republican, but I don't think the League of Nations had anything to do with the outcome of the last election."

According to press reports the Detroit Creamery Co. had a "very satisfactory year" in 1921. This concern earned 17% net in 1920 and even more in 1921. The market value of its stock has increased from \$21 a share to \$27 a share in the last ninety days. Still there are those who say the farmer ought not to go into the marketing game.

# FRUIT and ORCHARD

EDITED BY FRANK D. WELLS

## PREVENTING PEACH LEAF CURL

**O**F the many diseases to which the peach is subject there is none more common than the leaf-curl and perhaps none that causes greater loss. While it does not kill the trees, like the yellows and little peach, it interferes seriously with the yield of fruit and the growth. Yet it can easily be controlled.

The disease is often apparent when the leaves are still small and if the conditions are favorable it develops rapidly. Four or five days are sufficient to turn the foliage from a healthy green to a beautiful orange, followed by crinkling. As the disease progresses the leaves become red and drop off.

Spores form and when ripe are distributed to the wind in other leaves. Those forming last in the season pass the winter on leaves or on the branches of the tree.

As soon as the buds swell in the spring the spores come to life. If they find a way between the scales that cover the bud they get into the leaf. After this no amount of spraying can prevent mischief. A leaf once inoculated is doomed.

The life history of the disease suggests the remedy. Spraying should be done early, before the buds have begun to swell. After the leaves are off in the fall is really the safest time. If the work is left till spring the weather is frequently unfavorable or the ground is too soft, so the spraying is delayed too long for the best results. An application of a fungicide in the fall will clean the trees of the winter spores as well as thought applied in the spring and usually the conditions for spraying are as favorable or more so.

If there are any scale insects it is of course advisable to spray with lime-sulphur, using it at the rate of one gallon of the commercial solution to seven gallons of water, or of a corresponding strength, if the dry lime-sulphur is used. But if there is no scale one-fourth of this strength is sufficient.

For a fungicide alone copper sulphate solution has the first place. If it is applied to trees having no foliage it is used at the rate of a pound to 50 gallons. No lime should be used. This will kill the spores of funge, though having no effect on scale or any form of insect life.

It should be kept in mind that sprays of the strength mentioned are for dormant trees alone. They would not be safe to apply after the peach leaves are out. The foliage of the each is tender. Neither lime-sulphur nor copper sulphate should be used. Bordeaux mixture cannot be used with safety. If the weather conditions are just right a tree may escape injury, but the chances are against it. Probably it will lose its leaves.

Where there are only a few trees and no sprayer at hand good results can be obtained by sprinkling with an old broom. This is a crude method, but if by that means the leaves can be kept from disease it is worth all the trouble. Without healthy foliage there will be little or no fruit and few or no fruit buds another year.

## CRANBERRY AND HUCKLEBERRY PLANTS

Can you tell me where I can buy cranberry and huckleberry plants to set on a plot of muck land? Do you know of a marsh where I could get plants? How long would it be before I should look for results?—A. A. S., Laingsburg, Mich.

Few nurserymen are selling this kind of stock. C. R. Burr, Manchester, Connecticut; Hicks Brothers, Westbury, N. Y.; Glen Brothers, Rochester, N. Y.; Storrs & Harrison, Painsville, Ohio, are as likely to have the plants as anybody.

Interest in these fruits is increasing. Will readers of M. B. F. kindly send us the names of cranberry or huckleberry growers?

## APPLE TREE DISEASED

I have some apple trees that are diseased. The bark dries up, beginning at the tips of the branches and working down. I am sending some small branches. The trees are on very poor ground. They have been set two and three years, but

should be twice as large as they are. Is lime good to apply around trees and work into soil? I would like to get them started if I can.—R. P., Harrisville, Mich.

The twigs are apparently winter-killed, but the primary cause of the trouble is probably starvation. An underfed tree, like an animal cannot stand a cold climate.

Lime is essential to plant growth, but is of little use on soils lacking in other elements. The soil should be supplied with plant food by some means.

Of course if barnyard manure is to be had the answer is easy. Give the ground a good top dressing in the spring and work it thoroughly into the soil.

Apply about half a pound of sulphate of ammonia to each tree scattering it around about as far as the branches go and working it into the soil. Do this as early in the spring as the weather will permit. This will give the trees a start before the manure is available.

Cultivate the tree till the middle of July, but not later, then sow a cover crop, using whatever legume does best in your locality. Do not

cultivate in late summer or fall, as the late growth is liable to be killed by the winter. The cover crop checks the growth of the tree and forces it to ripen the new wood.

If manure is not available it will be necessary to build up the soil by means of legumes and cover crops that will supply humus without which commercial fertilizers are of little account. This is a slow process, meanwhile the trees must wait.

The importance of having the land in good condition before the trees are planted is evident. Better to wait a year or two than plant trees when they must starve.

## HORSESHOE PITCHING

### PLAYS AGAINST CHAMPION

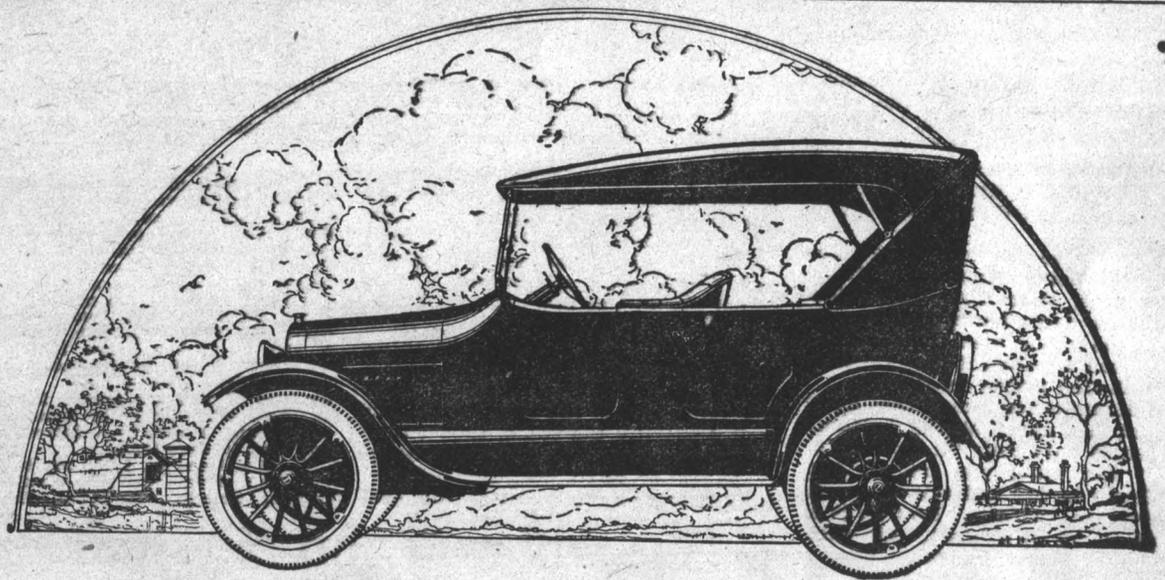
In reading the Business Farmer I noticed an item about horseshoe pitching which I have been quite interested in. I had not pitched a game for 6 years until last August. At that time I was visiting in Welland county, Ontario, Canada, my former home, and I happened to be at a family reunion where they were engaged in pitching horseshoes. They asked me to join in a four-handed game. My partner and I won two games out of three and then a young man stepped up to me and wanted me to pitch a series with him. We pitched three games and I won two out of three. I was told later that he was the champion horseshoe pitcher and that he had pitched in every state in the Union. I remained there for two months

and during that time we pitched quite often but remained about tie.

What are your rules in horseshoe pitching? How many points to a game? What do you count a ringer and a hubber? About what weight should the shoes be to pitch forty feet? Would like to meet some of your best players but age is against me as I have just passed my 63rd birthday.—Benjamin Willick, Oceana County, Mich.

After you pitched the way you did last summer then you say you are too old to meet some of the players in this state. "Young man", I am ashamed of you. Why I'll bet there are several "young men" of your age or even older that would be pleased to match their skill against yours. And some of them county champions too. Yes, and I'll wager my shirt that you can beat a large percentage of the men in this state who are only about one half as old as you are.

I am going to answer your questions in the order that you ask them. Our book of national rules contains all the information needed to play a championship game. A regulation game consists of 21 points. To be a ringer the shoe must encircle the stake far enough to allow a straight rule to touch both calks and clear the stake. There is no special count for a hubber or leaner. If it is nearer than your opponent's shoe it counts 1 point. The shoes should not exceed 2 pounds, 8 ounces each.



## You Can Expect Unusual Economy

The complete equipment of the new Superior Chevrolet is an evidence of the real economy you can rightly expect from this car. Not an extra dollar to spend. The Chevrolet is complete and modern to the minute.

Economy after the purchase price is assured. The new Superior Chevrolet gives far more than the unusual mileage from gasoline, oil and tires, and requires fewer parts replacements.

*Twenty to thirty miles to the gallon of gasoline*

# \$ 525 f.o.b. Flint.

Ask your Chevrolet dealer to explain the new features of the Superior Chevrolet—or write Dept. 125 for catalog and other information.

## CHEVROLET MOTOR COMPANY

Division of General Motors Corporation

DETROIT, MICHIGAN

*More than 4,000 Chevrolet Dealers, Retail Stores and Service Stations in the United States and Canada*

# CHEVROLET

For Economical

Transportation



**MEN ON THE MOON?**

FROM time to time we have had revivals of the question: "Are there men on Mars?" But now Professor Pickering, of Harvard University, U. S. A., declares that the moon is not dead.

He believes that life is possible on the "silvery orb," and that recent observations have revealed actual areas of vegetation.

According to the professor, two crops of this vegetation grow every day on the moon. A "moon day" consists of fourteen of our days, and all that time the sun is shining on the moon without any period of darkness.

The much discussed craters of the moon hold supplies of water, says Professor Pickering, and by the aid of a large telescope he has actually observed steam issuing from them.

When the moon emerges from its period of darkness, he believes the sun's rays quickly heat the surface of the moon, and start fungus-like growths.

The professor argues that life exists on the planet. It is probably unlike anything on our own planet. Nevertheless, we get a set-back to our conceit when we realize that we are "not the only pebbles on the beach!"—London Answers.

**WHO IS THE PAGAN?**

WELL, I will try and express my feelings in a poor way. Your paper sure is a dandy. Would not think of getting along without it. Sorry did not hear of it before. When it arrives I just stop and read it. You get every lady's opinion, weigh them all over and find we are all liable to guess wrong at times. Even our Mr. Foster. Also our market predictions are a little in error.

Have read the "Broken Wing" debate, the cousins troubles, Uncle Rube's ideas, your Ohio girl's side who put on dad's boots and hauled in corn, the young man that was always slicked up—say, it is equal to a Free Methodist prayer meeting.

Now along comes a man that honestly put his name at the bottom. Most people puts their "Z. O." or "A. Friend" but mind you he put his John Henry in full and call the most of the women heathen. Now he is a man after my own heart. He said what he honestly thought. Say, I read it, called wife in and got my specks on and read it to her. The redeemed (or church) doesn't care what the other people do. Now if the church does not care, who does? I notice they take everybody's money. He did not say the men were pagans, just the women.

Now, I think the hand that rocks the cradle should help make the laws. They surely have helped a great deal and so has the church but not the redeemed according to Thos. H.'s opinion. I think there is a mistake some place. He either misunderstood your stand or I got him wrong. Christ came to save the pagan. The redeemed did not need him, they were safe. When I read anything so radical I think of the old verse, "There is so much good in the worst of us and so much bad in the best of us that it stands ill for any of us to speak bad of the rest of us." Most stones bound back.

My dad preached 25 years, my uncle, grandfather, also my only sister's husband are all men of the broadcloth. They surely would not have left us at home for weeks going out to preach and pray for the sinners, if the church does not care. Now we have a Roosevelt family. We know that youngsters must have amusements. If the church will not interest them who does? Some of ours dance. Some would enjoy Sunday school, but mind you, they think Miss \_\_\_\_\_ has better and nicer clothes. One of the boys goes regular. One of the girls says she would like to but it is too far. So the drawing line is a little weak.

Don't think that the brother can get many converts by throwing his vinegar around. That word "Pagan" is a bad one to use.

Now in regard to politics and religion. I don't think they will mix. Do you ever expect to vote for a redeemed president, either male or female? I don't. If the opportunity ever arrives it will not be the sex that I will look at or their religion, but their platform.

Tell Brother Sherman to come



again. If interested me at least. You know an honest confession is good for the soul. I don't live up to my early teaching but I don't think I am a pagan. I know lots of crooked

pot your plants and I am sure you will have no further trouble.

Winter bulbs may be dried and then put in a basket and hung in a dark, dry place, where they will be cool but not freeze. In the fall they can be brought out and started in earth or water.

**AROUND THE CORNER**

By Charles Hanson Towne

AROUND the corner I have a friend, In this great city that has no end; Yet days go by and weeks rush on, And before I know it a year has gone, And I never see my old friend's face; For life is a swift and terrible race. He knows I like him just as well As in the days when I rang his bell And he rang mine. We were younger then And now we are busy, tired men— Tired with playing a foolish game; Tired with trying to make a name. "Tomorrow," I say "I will call on Jim, Just to show that I'm thinking of him." But tomorrow comes—and tomorrow goes; And the distance between us grows and grows.

Around the corner!—yet miles away, "Here's a telegram, sir." "Jim died today!" And that's what we get—and deserve in the end— Around the corner, a vanished friend.

preachers, also church-going people who wear dandy gold watches close to their waistline, or a pair of nose glasses with a chain over their ear, or maybe a suit of latest clothes that they seem to think more of than the "Good Book". Now they honestly worship those things. Are they redeemed or pagan? What is your hobby, Tom? Your team, registered cow, or what? If so who is the pagan?—Walter S. Covert, Kalamazoo County, Mich.

**CORRESPONDENTS' COLUMN**

The editor wishes to thank Mrs. Bartow for the pattern for refootings.

This pattern looks good, it comes higher on the foot than the one sent out by the pattern company. If any or our readers want to try it send an addressed and stamped envelope and I will send a few out. It is called the slipper foot.

Mrs. W. A. W.—The only thing you can do for those white worms in the soil of your plants is to take the plants out of the pots wash them well especially the roots, then either take new soil which has been thoroughly baked or bake well the old soil thus destroying all animal life—re-

I have before me the address of an art goods company who buys work, done by ladies at home. I believe they are reliable and I will give the address to anyone sending a stamped and addressed envelope.

**Canning Frozen Meat**

I just wish to say to the question in today's paper, yes frozen meat can be successfully canned. First saw into medium chunks then put on to boil in cold water. Boil until bones can be removed, then fill your cans with the meat and broth, put on rubbers and screw up lid, not tight and boil the meat in the cans three hours. Have enough water to cover the cans one inch over the lid; if you let it boil below lids your cans will not be full as the broth will boil down to the water line. Do not be alarmed if you see grease in the water as there will always be some that boils out of can. I have used different methods and find it does that.

To Mrs. Irene A., I will say take a child into your home and see whether things do not change. A little fellow would

take your mind and you both would begin to live. I know this to be the case in many homes. You are homesick and you don't realize what ails you and so you borrow too much trouble and that has ruined your health too. I know from actual experience whereof I speak.—An interested reader.

**Home Made Crackers**

Noticing in the home department of the Business Farmer an inquiry for a recipe for home made crackers, I send mine that I have used for many years. As much depends on the baking as the making.

1-4 cups of sifted flour, 3 cups of water or milk, cold; 1 cup of cold shortening packed; 1 level teaspoon soda; 2 level teaspoons cream of tartar. A liberal supply of salt if desired. A quick, hot fire in baking. Mix thoroughly after sifting the cream tartar and soda with the flour, then turn a pan over the dough and let stand 2 or 3 hours. Break off small bits the size you wish the crackers to be, mold into shape, then roll and bake. They are very nice for children and I find many adults enjoy them, though I would advise the housewife to begin with half the recipe, if her time is limited, as it is something of a task on her if she is not strong.—A. H. A., Milan, Mich.

**Coffee Cake With Bread Dough**

Take 4 cups (2 pounds) bread dough, when ready to shape in loaves, cream together and add 2 tablespoons sugar, one tablespoon butter and 2 eggs, then add enough flour to make a soft dough, let rise until light then place in a shallow pan, wash top with melted butter and sprinkle with granulated sugar and cinnamon. Let rise until light, bake about 25 minutes in a moderate oven. Serve either warm or cold. Should one-half inch thick.

You can send 35c to the Brethern Publishing House, Elgin, Ill., for Kingdom Songs, No. 2. On page 58 you will find the song entitled (with music) "If Your Heart Keeps Right."—Miss B. S.

**Canning Meat, Not Cold Pack**

Having read requests for recipes for canning meat, I wish to give mine. The cold pack method seems to me a lot of work.

First I put my cans on the warming closet, then put the meat in the oven; salt it like any roast. When done cut the meat just so the pieces go nicely in the can, pack tightly and pour the hot drippings over the meat in the cans. Fill the cans. I take a knife and pack the meat down so all the spaces are filled. Screw tight. This meat is the very finest, it kept all summer. When you wish to use a can put in a warm place and it will come out easily. The gravy is fine. I used pork, but think any meat could be canned this way if there is fat enough.—A Subscriber.

**To Clean Rug**

I have a Roxbury axminster rug in my living room and where my stove stands it has become soiled from coal dust and ashes. Can any reader advise me what to use on my rug to remove this dirt. Any advice will be appreciated.—Mrs. A. R. H.

Your rug could be cleaned by using H. & H. soap. Directions come with the soap.

**Canning Corn**

I very seldom answer any subscriber's query in any magazine and this summer when someone asked for a recipe for canning corn I let "George" (or shall I say "Katie") do it, as usual. But when I saw but one answer, tho I might have missed some, I felt sorry I hadn't sent in my recipe. The one I saw printed used "Mrs. Price's Canning Powder" but you can put up corn without it—so why use it—and the corn keeps too, and is dandy. I know for I have been putting it up this way for 10 years. Here it is: 9 cups raw corn (cut off of cob), 1 cup sugar (granulated), 1-2 cup salt (coarse is best), 1 pint water. Boil 1-2 hour after it comes to the boiling point. Put in sterilized glass cans and seal at once. Before using pour off juice and freshen about two hours.

This year in addition to this method we cold-packed corn and this kept fine and surpassed any corn we have ever tasted done up in home cans or in factories. It was simply the best ever. We use the Golden Bantam mostly and Evergreen corn.—H. H. Manning.

**Making Soap**

We take the M. B. F. and like it very much, as anybody finds lots of help in it. But now I come to ask for a help. Has any one of you had any trouble in making soap, cold process? I made some but it spoiled. I have followed directions given on lye box. The lye settled down and grease was on top when cooling. Have any of you ever had this trouble? What can I do with it? Can I make it so it would be better or can I take up the grease on top and use it for other soap? My mother makes a nice soap. I got a recipe from her known as the "boiling process." It is as follows: 5 1-2 quarts soft water, 1 can lye, 5 pounds grease. I made that but had the same results as with the above, cold process. This soap should be boiling until thick, but it never got thick, only settled on the bottom of pan after boiling about 2 1-2 hours. Can any of you help me? I would be obliged for any help. I will give a recipe for Meat scrap cookies.

One bowl meat scraps (it should be about 1 quart) run through meat chopper. Add 1 cup sugar, 1 teaspoonful salt, 3 teaspoonful cloves, 1 teaspoonful cinnamon and one of ginger, 1 cup milk. Add flour to roll and for each cup of flour put 1 teaspoon baking powder. They are good and cheap too, when one has his own meat scraps.—Mrs. S. D.

**Dye in Linen**

Will some reader of the home department for women please tell how to take dye out of white linen tablecloths? Would greatly appreciate the favor.—A Subscriber, Minden City, Mich.

**AIDS TO GOOD DRESSING**

For Simplicity, Service and Style

New Spring and Summer Catalogs, 15c—Patterns, 12c.

If you have not ordered the new catalog send for it soon for it is lovely. Every lady who comes to my house picks it up, becomes fascinated and wants one herself. The M. B. F. is doing you a real favor in enabling you to have such a selection of modern styles at so reasonable a price. Our pattern department has improved its mailing system and I have almost no complaints on account of delayed orders. However order your patterns a week at least before you wish to use them and we will attend to your orders just as quickly as possible so that you will have the patterns when you are ready for them.

These are charming styles for children. One would not find anything prettier in the New York stores.



**A Popular Romper Suit**  
3885. Children usually look happiest when dressed for play, and surely the bloomer suit has the right lines for comfort and convenience. This model has a pretty pocket and is easy to develop. The rompers may be worn without the smock. Pongee with stitchery is here shown. One could have chambray, or pin checked gingham. The sleeve may be finished in wrist or elbow length. The pattern is cut in 4 sizes: 2, 4, 6 and 8 years. A 4 year size requires 2 7-8 yards of 32-inch material.

**A Practical Style for School Wear**

3884. Here is a blouse with a very practical and pleasing closing. The Russian effect is up-to-date. The sleeve is a new feature. The straight plaited skirt, ever popular with girls of school age. One may have plaid or check suiting for the skirt, and crepe, poplin or Indian head for the blouse. A pretty development would be red serge for the blouse, and black and white check woolen for the skirt. The pattern is cut in 4 sizes: 6, 8, 10 and 12 years. A 12 year size requires 3 yards of 44-inch material.



**A Unique Design**  
3887. Fashion has given most graceful lines to this pretty dress, and made it simple too, so that its development will not cause confusion. The slender as well as the plump girl will look well in this frock. Pongee, taffeta, serge, velvet or jersey could be used. It is also nice for wash fabrics. The pattern is cut in 4 sizes: 8, 10, 12 and 14 years. A 12 year size requires 4 1-4 yards of 32-inch material.

**A Good Garment for Playtime**

3874. Trim and neat, and altogether practical is the model portrayed here. The boy who likes to romp and run will welcome a play suit of this kind, with its spacious pockets, and comfortable lines. The style is good for wash fabrics, for serge and pongee. The pattern is cut in 4 sizes: 2, 3, 4 and 5 years. A 4 year size requires 1 3-8 yards of 27-inch material.



# HUEM

*This Spring*

Exceptionally low prices on lots for soil rebuilding. Guaranteed against impurities until safe in your hands.

Certified Pedigreed Northern-grown

Write to-day for quotations

Cooperate with MICHIGAN STATE FARM BUREAU Seed Department BOX H-4 Lansing, Michigan



## 3 Silo Bargains That Mean Big Saving



**\$235 For 10x30 SILO**

The best silo, in construction, material, improvements, the best for service and satisfaction are what Champion, New-Ross and In-Structure Metal Silos shown above are famous for.

Now, we come along with the lowest prices ever made. Lower than any other. Earliest terms, biggest early order discounts. Write us for full information, state size wanted and get our surprise offer—get catalogs and complete information, then compare these silos with any others on construction and improvement, compare prices and you'll wonder how we can give so much value for so little money.

**\$139 NOW BUYS ENSILAGE CUTTER**

The leader among ensilage cutters, 22 years reputation built into them. Some after 50 years service still in use. Thousands of owners will testify that Ross Cutters are 25 per cent cheaper to operate, make 25 per cent better ensilage. Have larger capacity, more improvements, less upkeep. Now sell at much lower prices than any other. Bigger discount for early orders, easier terms. Get catalog showing four sizes, construction terms and prices to prove owning a Ross Cutter now is cheaper and better than buying your silo filled.

THE E. W. ROSS CO. Dept. 272 Springfield, O.

## CLOVER AND TIMOTHY BARGAIN

**\$4.50 Per bu.**

Red Clover and Timothy mixed—the standard grasses cannot be surpassed for hay and pasture. Contains good per cent clover, just right to sow. Thoroughly cleaned and sold on approval, subject to government test. Ask for this mixed seed if you want our greatest bargain. Have Pure Clover, Sweet Clover, Timothy, and Field and Grass Seeds. Buy now—prices bedrock—higher later. Samples and 1922 catalog FREE.

A. A. Berry Seed Co., Box 627, Clarinda, Iowa

## 130 Egg Incubator and Brooder

Both ordered together. Freight Paid east of the Rockies. Hot water—copper tanks—double walls—dead air space—double glass doors—shipped complete, all set up ready to use.

180 Egg Incubator and Brooder - \$22.00  
250 Egg Incubator and Brooder - \$30.00

Made of California Redwood—last a lifetime. Positively the best value on the market today. Order the size you want direct from this ad. 30 days trial—money back if not pleased. If not ready to order now, don't buy until you get our 1922 catalog.

WISCONSIN INCUBATOR CO. Dept. 116 Racine, Wis.

# The Children's Hour

DEAR CHILDREN: I feel happier this week because the one dear to me who was very ill last week is now out of danger and on the road to recovery. We all love our people but when they enjoy good health continually we often become so absorbed in our work that we neglect to show our love for them. But when they become ill and are near death then we think how we love them and how we have neglected to show it. I sometimes think God takes this way, many times, to awaken us.

Nellie Inman, whose letter is printed on this page this week, makes some very good suggestions about writing interesting letters. At the same time she sets a fine example. I hope I may receive more such letters as this one. She asks about sending pictures to the Children's Hour. I shall be pleased to receive as many pictures of yourselves, your pets and your homes as you care to send but I cannot promise that they will be published because we have so little space (not even a full page for the Children's Hour) but I should like to receive them to keep. It seems that I know you better when I have seen a picture of you. Will you not send me some?

What do you suppose? I received 3 valentines. And they were all so nice that I can not say which is the prettiest. There is the one I mentioned last week from Edna McIntyre, Kawkawlin, one from Master Dick Hewlett, Alanson, and one from Myrtle Bearss, Owendale. Please accept my thanks for remembering me. And now just a word to Master Dick: I like the valentine you sent me, Dick, even better than the card I received from you on my birthday because you made the valentine yourself and I realize the time and care you took to make it. Dick writes often to me. Why do not others of you write more than once? Your letters are a ways welcome.—UNCLE NED.

### OUR BOYS AND GIRLS

Dear Uncle Ned and Cousins—Why don't you older boys and girls show some spirit and write? Why can't we make this page a lively one? Write and tell about all your parties, sleigh rides and describe your home or make suggestions on how to make it more beautiful. Maybe if we ask Uncle Ned real politely he will let us send some pictures of ourselves, homes or our pets, or any good picture. Don't you think that would be fun? It would make it more interesting to run races and see who could send the best pictures of their coits, calves, pigs etc.

The young folks have been having skating parties on Devil Lake, right across from our place. We have grand times, with fires on both ends of the lake. The boys make a train and when they switch they go so fast and those on the end are thrown so hard sometimes that it makes us girls hold our breaths but it looks as if it would be fun.

My home is right beside the woods. Just a lane between them and the house and an apple orchard on the other side. It is cool in the summer and the woods break the wind in the winter.

How many of you girls like to work on the farm? I do. I can plow, drag, cultivate or do anything a boy can. I plowed about 2 or 3 acres with the walking plow and a five-acre field with the riding plow. I would rather work outside than in the house, although I do all the heavy work about the house because my mother is not able to do it. I am 15 but will be 16 the 9th of March. Have I a twin? If any of you have taken long trips write and tell about them. Hoping to hear from you, Your friend—Nellie Inman, R. 2, Box 112, Fremont, Mich.

Dear Uncle Ned—My father takes the M. B. F. and I've just been reading the childrens letters and I thought that if they all did as I have done there wouldn't be any letters to read, so have decided to write. I am a girl 10 years old and am in the fifth and sixth grades at school. Our school is about one-fourth mile away and is on our own farm. I have one brother, Kenneth, eight years old and no sisters. We go to the Minnontite Sunday school. We spent one year in the south and I attended a school in Florence, Ala. We like the south the best and are going back to stay some day. We were in New Orleans a week and it was very interesting there. We have a 125-acre farm here. We children have lots of tame rabbits, 3 pet cats and a little dog named Sandy. We had quite a scare this morning. My papa started hogs last night and when we went out this morning we couldn't find Sandy anywhere, but we finally found him shut in the granary. We thought sure he had followed the truck as he is just a puppy. Good-bye to Uncle Ned and all of my cousins. Your loving friend—Eleta Burch, R. 2, Dryden, Mich.

Dear Uncle Ned—May I join your merry circle? I am 12 years old and in the seventh grade at school. My birthday is the first day of August. I like my teacher very well. She has taught here about eight years. I live a half mile from school. I have no brother or sister. We live on an 80-acre farm. We have 8 cows, only 6 are milking. I milk 2 of them every evening when I am well and it is not too cold. We have some geese and some ducks. We have 30 Ancona chickens and would like to hear from some one that has the silverlaced or speckled Wyandottes. I have 4 cats, 2 of them are pets. As soon as I sit down on a chair they are on my lap and want to play. I like to go sliding on the ice but that is hard on shoes. We have a small patch of ice in our field and the children from our school come here to skate noons. I have not had a sleigh ride yet this winter as we have not had much snow. The autos are on the road every day.

I live almost half way between Bad Axe and Harbor Beach, which you can find on the map. I have never seen a letter in the M. B. F. from here, while there has not been many from Huron county at all.—Ottelia Strauer, Harbor Beach, R. 1, Mich.

Dear Uncle Ned—I am a farmer's boy. I am seven years old and in the second grade at school. I am very much interested in the Children's Hour so I thought I would write too. I like to read about the other children's pets. For pets I have two dogs, three cats, three pigeons, five guineas, five rabbits. I have a sled and an auto wheel coaster-wagon. I sometimes hitch my dog to the wagon. I have a tool chest full of tools. I made a cart and a little road scraper. I scrape the paths with the scraper. I can skate. I like to skate and slide down hill. I think I will be a farmer when I get big. We have a 90-acre farm. We have lots of little lambs now.—Ralph Arthur Kennedy, R. 1, St. Clair, Mich.

Dear Uncle Ned—I am a girl 12 years old. I am not going to school. We just received our first M. B. F. and I read the Children's Hour and I want to join your circle. My birthday is April 6th. Have I a twin? My sister Ruth and I go to Sunday school every Sunday. We have not missed a Sunday for two years and a half. One year we received a book each and the next year we received a cup and saucer each. Our minister gave them to us. I have five brothers and one sister. One of my brothers and my sister and myself belong to the Willing Workers class in our Sunday school. We meet every two weeks and have very good times although there are only six of us. We have a birthday dinner every month and our class bought some cups to use at the dinners. We have a very good teacher and we like her very much.

My oldest brother is taking up telegraphy at Ferris Institute. My sister is ten years old and in the sixth grade. I have started reading "Nomads of the North." I also have a cousin going to the Ferris Institute. He is an ex-service man. He lost his left arm and was wounded in his right hand. His brother was killed in the war. I remain, your loving niece—Grace Weidenhamer, Traverse City, R. 6, Mich.

Dear Uncle Ned—I have been reading the Children's Hour and I like it so well that I thought I would write. I am 12 years old and in the sixth grade at school. I have dark brown hair, dark gray eyes. I am four feet, nine and one-half inches tall. I have been reading "Nomads of the North" and I like the story very much. I live on an 80-acre farm. We have 16 head of cattle and three horses. I was born in Michigan and when I was three months old we moved to California. We lived there seven and one-half years and then came back to Michigan again. I was only seven years old when we were out there but I can remember quite a lot of things. I wish some of the boys and girls would write to me. I would try and answer all letters. What is it that comes with an auto, goes with an auto, is no use to an auto and yet the auto cannot run without it? Wishing success to the M. B. F. and Uncle Ned.—Pearl Campbell, Hesperia, R. 5, Mich.

Dear Uncle Ned—I would like to become one of your circle of happy friends. I do not agree with Marion Weeks that we should write more of our lives. This is a farm circle of friends and we wish to know of each other. I am not a farm girl but I live in a small town and my father has a farm out of town a short distance. In town we keep a few horses and a cow. My father's farm is of about 180 acres. We have about 15 head of cattle, 10 horses, 15 pigs, 70 sheep and 40 chickens. In town I have a little pony named Queens that I would not part with for anything. My birthday is the 4th of August. I am 13 years old and in the seventh grade. Have I a twin? Will close with love to cousins and Uncle Ned.—Marion Fuller, Farwell, Mich.

OTHER LETTERS RECEIVED

Winifred Carson, R. 2, East Jordan; Irene Jarvis, R. 1, Rodney; Carroll Culbert, Jonesville; Lulu A. Finch, R. 3, Milan; Alice Gill, Kalkaska; Velma E. Haas, Ithaca, care of Mrs. C. Boyd; Albertena Bratanus, R. 1 Summit City; Ilone Storms, Jonesville; Edna McIntyre, R. 1, Kawkawlin; Zella Wilson, Gladwin, R. 4; H. Schulz, Romeo; Louie Gorenson, Ludington; Lillian Oliver, Houghton Lake; Neola Bachman, Milan; Donna D. DeBack, R. 1, Climax; Treva McLean, R. 6, Ithaca; Leona Kozlovsk, Kawkawlin; Doris E. Trimble, Charlevoix; Harold L. Catlin, Webberville; Lloyd Peterson, LeRoy; Margaret Remnant, Chelsta; Ruth Kleinheksel, Holland, Michigan.

Genuine



# Aspirin

Always say "Bayer"

Unless you see the name "Bayer" on tablets, you are not getting genuine Aspirin prescribed by physicians for 12 years and proved safe by millions. Directions in package. Aspirin is the trade mark of Bayer Manufacture of Monoaceticacidester of Salicylicacid

## Wall Paper Sample Book FREE



Contains Samples of Over 100 Patterns Shows Samples of Borders with Sidewalls

Send today for this big free book containing actual samples of the new wall papers for 1922; shows samples of borders as well as sidewalls. Big variety to choose from—over 100 patterns in all—popular styles and colors. Many correct designs for every room.

Lowest Prices Since Before the War ONLY 8c Per Double Roll (96c for Room 10x12x8 ft.)

We have slashed prices on all grades of wall paper. Same quality that last year sold for \$1.50 per double roll now reduced to 75c per double roll. Remember our prices are for double rolls, 16 yds. long (not 8-yd. single rolls by which wall paper is usually sold). Our 8c per double roll means really 4c per single roll. At our new prices, as little as 86c will paper an entire room, 10x12x8 ft., sidewall, border and ceiling included.

Be sure to get a copy of this new sample book before you buy. See our new styles, see our low prices -- it will pay you to send for this FREE book today. Write our house nearest you. Address Dept. 811

Montgomery Ward & Co. Chicago Kansas City St. Paul

## MALNUTRITION

often results from a diet deficient in vitamins.

# SCOTT'S EMULSION

affords a pleasant and efficient way to add body-strength; it is food rich in vitamins.

AT ALL DRUG STORES  
PRICE, \$1.20 and 60c.  
Scott & Bowne, Bloomfield, N. J. 21-9s

## \$24.95 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.

## 200 Strawberry Plants \$2

100 Everbearers—100 Senator Dunlop

Both postpaid anywhere at proper planting time. Send Now. We have 50 other varieties of strawberries; also small fruits, shrubs, trees, evergreens, etc. Free Catalog of everything to plant. Our Reduced Prices will pay you to answer this ad. Write today to The Allegan Nursery, Box 44, Allegan, Mich.

# BUSINESS FARMERS' EXCHANGE

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

## FARMS & LANDS

**120-ACRE MICHIGAN FARM, TEAM, POULTRY,** 9 cows and calves, hogs, vehicles, tools, gas engine, cream separator, season's crops included; in prosperous district, on improved road; all advantages handy; \$5 acres easily worked tillage, brook-watered pasture, woodland, orchard; good house, tenant house, 50-ft. barn, stable, poultry house; other interests for sale \$6300 part cash, easy terms. Details page 70 illus. Catalog 1100 Bargains. FREE. STROUT FARM AGENCY, 814 B E Ford Bldg., Detroit, Mich.

**120 ACRES BEST FARMING LAND ABOUT** 90 acres cleared, 1-4 mile trunk line gravel road. Young orchard, good well, \$4000 of buildings, \$2000 personal property for cash value of land. For prices and terms address owner J. W. FREVOST, Prescott, Mich., R. 2.

**EIGHTY-ACRE FARM, ALL CLEARED,** good soil, fine buildings, good location, easy terms. CHAS. WUBBENA, Standish, Michigan, Box 954.

**FARM BARGAINS, NO. ONE 240 ACRE** farm on cement road. Four miles to Fort Huron. Write BOX 244, Croswell, Mich.

**7 ACRES WATERED AND DRAINED,** much celery land. Particulars write L BOX 94, East Jordan, Mich.

**60 ACRES CLAY LOAM SOIL, 50 IMPROVED,** good house, barn, other buildings, with stock, tools, plenty of hay and grain, all for \$5000.00. Inquire owner RALPH LATHROP, Le Roy, Mich., R. 8.

**120 ACRES, BEST OF SOIL, LOTS OF** standing timber, easily cleared. Market 3 miles. \$20 per acre. EDW. ERLANDSON, South Boardman, Michigan.

**FOR SALE: 80 ACRES, DAIRY FARM** with stock and tools; feed; \$8500; in Kent county. Weekly income of \$40 from dairy. For particulars write BOX M. G., care Business Farmer, Mt. Clemens, Mich.

**FOR SALE, 114 ACRES 2 MILES FROM** town, good buildings, plenty water, fruit, berries. Good roads. Good location, easy terms. CHAS. UPLIGGER, Rhodes, Mich.

**FOR SALE OR TRADE, FINE 160 ACRE** farm, fine buildings. On main gravelled road, well located near markets and schools. BOX A, Michigan Business Farmer, Mt. Clemens, Mich.

**79-ACR. FARM FOR SALE, GOOD SOIL,** good buildings, plenty wood, well watered. Timber for building purposes. Stock and tools. Write or see A. BRANT, Central Lake, Mich.

**FARM FOR SALE, 160 ACRES OF LEVEL** land, good buildings and good soil near R. R. town. Co. seat. Write J. M. OSWALT, Harshey, Michigan.

**BIG BARGAIN: 80 ACRES, GOOD BUILDINGS,** on state road and nice lake, only \$2000. DeCOUDRES, Bloomingdale, Mich.

**FOR SALE, 60 ACRE FARM, 5 ACRES** timber, black loam soil, two flowing wells; 7 room house and cellar; barn, cow stable, hog house, corn crib, garage and hen house. 1 1/2 miles from cement road, 20 miles from Detroit. ED. THIERRY, R. 3, Plymouth, Mich.

**FOR SALE: 160 ACRES, STOCK FARM;** drained, two springs of water, orchard, windmill, gravel pit. Fences, fair buildings. Address BOX 6, Otisville, Mich.

**FOR SALE, EIGHTY ACRE FARM ONE** mile north of Coral, Montcalm County, all cleared, tile drained; hay level; orchard; new buildings. Chay loam. Stock and tools. Terms THOS. PICKEN, Howard City, Mich.

**114 ACRES FOR SALE 1/2 MILE EAST** and 1/4 mile south of Gagetown. Good land, good gravel road and buildings. Near school and town. Easy terms. Write JASPER DURES, Cass City, Mich.

**ELMWOOD FARM, 40 ACRES, VERY PRO-** ductive. Stock and tools, good buildings, fine location. Close to town. Write me for particulars. JOHN RYAN, Prescott, Mich.

**90 ACRE FARM IN FRUIT BELT, SMALL** orchard, house, barn, silo and outbuildings in No. 1 condition. Well drained, clay loam soil, 1/2 mile from Mich. pike, 6 miles from good market. Easy terms. Write ROBERT WITTE, R. 1, Lindington, Mich.

**FOR SALE, 40 A. IMPROVED LAND, FINE** location. For particulars write O. J. LAMB, Frankfort, Mich.

**FOR SALE OR TRADE FOR SMALLER** farm, 120 acres 2 1/2 mi. from market. Excellent buildings, soil and roads. Care BOX L, Michigan Business Farmer, Mt. Clemens, Mich.

**88 ACRE FARM FOR SALE, MOSTLY ALL** cleared. Frame house, new barn built last year, \$2400; frame granary 14x20, good well 350 feet deep; well drained, good ditches and fences; clay and black loam land; good road, small route, schools and churches. Located in Bay county, Garfield township. Section six. With horses, cattle and implements if wanted. MARTIN SMITH, R. 1, Rhodes, Mich.

## MISCELLANEOUS

**TOBACCO, HIGH GRADE, HOME GROWN.** Chewing 10 lbs. \$8.00; Smoking 10 lbs. \$2.50; 50 lbs. \$4.00. PRODUCERS EXCHANGE, Mayfield, Ky.

**KENTUCKY LEAF TOBACCO, 3 YEARS** old, nature cured. Don't send a penny, pay for tobacco and postage on arrival. Extra fine quality chewing or smoking, 10 lbs. \$3.90; medium quality smoking, 10 lbs. \$1.25. FARMERS' UNION, D67, Hawesville, Ky.

**TOBACCO: KENTUCKY'S PRIDE, HIGH** mellow chewing or smoking 10 lbs. \$8.00. Mild smoking 10 lbs. \$2.00; 20 lbs. \$3.50. FARMERS CLUB, Mayfield, Ky.

**LEAF TOBACCO, 3 YEARS OLD, PAY FOR** tobacco and postage when received. Chewing 5 lbs. \$1.50; Smoking 6 lbs. \$1.00. FARMERS' GRANGE, No. 94, Hawesville, Ky.

**FOR SALE: FINE QUALITY, RECLEANED** To San Soy Beans at Farmers' prices. Order at once. G. P. PHILLIPS, Bellevue, Mich.

**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.

## NURSERY STOCK AND SEED

**NO AGENTS TO PAY LETS US UNDER-** sell on Concord Grapes, Strawberries, Raspberries, Hardy Hedge, Flowers, Shrubs, Trees. GOBLEVILLE, MICH., NURSERIES.

**NORTHERN GROWN WHITE BLOSSOM** Sweet Clover Seed, recleaned, \$6.00 per bushel, Vetch 12c lb. Samples mailed. CLAUDE SALISBURY, Hale, Mich.

## STRAWBERRY PLANTS

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

**STRAWBERRY PLANTS: SENATOR DUN-** lap and Wardfield at \$4 per thousand and Guaranteed strictly first class or money refunded. Our 16 years experience costs you nothing. Our get it with every purchase you make of us. Our free catalogue illustrates and describes ten best varieties, including the three best everbearers. A valuable book for the grower. HAMPTON & SONS, R. 20, Bangor, Mich.

## FILM DEVELOPING

**KODAK FILMS DEVELOPED AND SIX** prints, 25c. MODERN PHOTO WORKS, Box M. B. F., La Crosse, Wis.

**KODAK FINISHING! NOT THE CHEAP** way, but the neat, at a reasonable price. Mail us a trial order and prove to yourself that it is not only what you pay but what you get for what you pay. Our aim always has been and always will be, "the very best prints from every negative." MOEN PHOTO SERVICE, Quality Kodak Finishing, Box M. B. F., La Crosse, Wis.

## HONEY

**HONEY, DIRECT FROM THE PRODUCER,** delivered by parcel post anywhere in Michigan at \$1.25 per 5 lb. pail. E. J. DELAMARTER, Cheboygan, Mich.

**HONEY, 60 POUNDS \$8.10, LAKE REGION** HONEY CO., Eau Claire, Wis.

**BEE HIVES, SECTIONS, COMB FOUNDATION,** smokers, etc. Complete outfits for beginners with or without bees. Agents for A. L. Root Co. goods in Michigan. Send for catalog. Beeswax wanted. M. H. HUNT & SON, 508 N. Cedar St., Lansing, Mich.

**PURE CLOVER HONEY, 10 lbs. \$2.00; 60** lbs. \$10.00, prepaid by mail or express. BLOOMFIELD APRIARIES, Ed Stewart, Port Hope, Michigan.

## GENERAL

**WANTED POSITION, ON DAIRY FARM BY** young man with wife and two children. Thoroughly familiar with up-to-date methods and able to furnish best of references. Address BOX X, Michigan Business Farmer, Mt. Clemens, Michigan.

**WANTED TO BUY MEDIUM SIZE CHAMP-** ion evaporator, one to take care of 400 trees. State size and price in first letter. J. X. SULLIVAN, Cedar, Mich.

**HAY FOR SALE, BUY HAY IN CAR LOTS.** Write for prices, stating kind wanted, to FARWELL MILLS, Farwell, Mich.

**(FOR SALE) FIVE SHARES IN GLEANER** Clearing House. Will make discount for cash. Good investment. Address BOX 102, Gladwin, Michigan.

**ALL MEN, WOMEN, BOYS, GIRLS OVER** 17, willing to accept Government Positions \$135. (stationary or traveling) write Mr. Oment, Dept. 355, St. Louis, Mo., immediately.

**WE PAY \$200 MONTHLY SALARY, FUR-** nish rig and expenses to introduce our guaranteed poultry and stock powders. BIGLER COMPANY, X682, Springfield, Illinois.

**LEATHER FOR REPAIR WORK, HARNESS** or sole 30c per pound. Hides tanned for farmers. COCHRAN TANNING CO., Greenville, Mich.

**12x30 USED SAGINAW SILO WITH ROOF** F. O. B. Car here at \$125.00. ROY S. FINCH, Fife Lake, Mich.

**CEDAR POSTS FOR SALE IN CAR LOTS.** C. A. YOWELLS, Alger, Mich.

**BUY FENCE POSTS DIRECT FROM FOR-** est. All kinds. Delivered prices. Address M. M. care Michigan Business Farmer, Mt. Clemens, Mich.

## IS YOUR FARM FOR SALE?

Write out a plain description and figure 10c for each word, initial or group of figures for three insertions. There is no cheaper or better way of selling a farm in Michigan and you deal direct with the buyer. No agents or commissions. If you want to sell or trade your farm, send in your ad. today. Don't just talk about it. Our Business Farmers' Exchange gets results.

Address the Michigan Business Farmer, Adv. Dept., Mt. Clemens.

**WANT TO SELL POULTRY? AN AD IN M. B. F. WILL DO IT**

## STARTING THE CALVES RIGHT

By O. E. Reed, Professor of Dairy Husbandry, M. A. C.

(Continued from last week)  
The most common disease of the young calf is indigestion, or scours. Naturally the digestive system of the young calf is weak and is very easily upset. The old adage, "An ounce of prevention is worth a pound of cure," is very applicable here.

There are two kinds of scours that commonly affect the young calf—white scours, sometimes called calf cholera, and common scours, caused from indigestion. The white scours is a contagious form, and if the calf becomes affected at all it is within a few days after birth. The germs gain entrance to the body through the umbilical cord soon after birth. The remedy for this disease is a preventive one, and the best way to insure against it is to keep the stalls and pens cleaned. Stalls used for calving purposes should be cleansed and disinfected after each calf is born. Additional precaution should be taken by tying a string around the navel cord of the young calf immediately after it is born, and applying some good disinfectant to the exposed parts.

The common scours, or indigestion, may usually be traced to faulty methods in feeding the young calf. The principal causes are as follows: overfeeding, feeding cold milk, irregular feeding, feeding alfalfa or other highly nitrogenous hay to the young calf, using dirty pails, and dirty stables.

The first sign of indigestion or scours among calves is usually the characteristic foul-smelling dung. When a calf shows the first signs of scours the milk should be reduced one-half or more, and then gradually increased again as the calf improves. This method of treatment is usually sufficient to check a mild case. There have been many remedies suggested for treatment of the scours, and all are used with more or less success. The feeding of dried blood to calves has proved very effective. This may be fed by adding a teaspoonful of soluble dried blood to the milk and stirring it up well. Dried blood not only acts as a tonic, but often is fed along with milk at each feed on account of its feeding value as well as its value as preventive treatment against the scours. A fresh egg given the calf when the scours is first noticed often checks the attack. Castor oil is also used with good results. Two tablespoonfuls is sufficient for a dose. This may be given as a drench mixed with milk.

## HONEST PERIODICALS

(Continued from page 9)

is. Then the wage earner finds to his surprise that his fortunes have not improved, though some fortunes have. Next, the farmer is told that he wants cheap transportation; he does. Labor must be deflated. The fact is that every gain made by labor is a gain for farming; benefit to the farmer from lowering a wage scale can not last if it comes at all.

When the farmer might have cheap hired men, he and his family can not make money enough to pay them. The farmer does not pay wages to the farm family; the taxes are more than the year's farming will make. Labor deflates the farmer, and the farmer takes the laborer's job. The farmer receives wages that he has helped to deflate. In big dollars, the farmer and the wage earner pay back the little dollars that the rich gave for their bonds.

In past history, such systems have worked until there were explosions. Europe has seen some explosions, and others seem not far away. America's hope is honest printers'

ink; there should be more of it. The Michigan Business Farmer sells that kind.—John Field, (Michigan)

That's a high compliment you have paid us. It's terribly easy for a newspaper to shut its eyes to the truth and print only such things as are pleasing in the sight of all. The love of truth and justice has often forced us to print facts and follow a policy which was bound to make us enemies. But knowing that "truth is mighty and will prevail" we have felt that our readers would some day understand and vindicate our course. There is nothing unusual, nothing startling, nothing destructively radical about our program. Like Teddy Roosevelt we believe in the "square deal." Not a square deal for a favored few but a square deal for every man, woman and child who breathes God's air. No republic can live with one-half of its people prosperous and happy and the other half poor and discontented. There must be an evening up process. There must be fewer hundred-thousand-dollar salaries and more \$10 wages. There must be fewer profiteering middlemen and more prosperous farmers. There is wealth enough and to spare in this country to give every one a decent living. Human values must go up and money values must come down. The leveling process is largely a matter of education and just laws. Not all men are selfish. Many great employers are returning a large part of their profits to their employees. We are making progress along these lines, slowly, but surely. There are still too many who love their dollars more than they do life itself. But some day they will die off and human justice will reign supreme.—Editor.

## WEST ANTRIM COW TESTING ASSOCIATION

(Continued from page 2)

than a year ago and it speaks for the progressiveness of the dairymen of Antrim county when they are willing to make the considerable effort necessary to operate an association under their conditions, their herds being small and far apart. They realize the necessity for knowing the productive ability of the individual cow in their herds before they can expect to dairy profitably. Many agreeable surprises and some not so agreeable have been experienced by the members during the year that the production of their cows was set down in black and white from month to month. The association with the help of County Agent L. L. Drake has reorganized for another year and will continue with practically the same members under the supervision of E. W. Fox:

Number of members in association...	22
Average No. of cows in test during year .....	170
Total pounds milk produced.....	910,744
Average per cent of fat.....	4.65
Total pounds of butter fat produced .....	42384.2
Total cost of feed.....	\$8,984.00
Average pounds of milk per cow.....	5357.3
Average pounds of fat per cow.....	249.3
Average cost of feed per cow.....	\$52.85
Average feed cost per 100 pounds milk	93c
Average feed cost per 1 pound of fat	21c
Average receipts for 100 lbs. milk	\$1.77
Average receipts for 1 pound of fat	38c
Average income per cow above cost of feed .....	\$41.80
No. of cows producing over 250 lbs. fat	75
No. of cows producing over 300 lbs. fat	26
No. of cows producing over 350 lbs. fat	15
No. of cows producing over 400 lbs. fat	3
Highest cow in milk production, grade Holstein, 8571 lbs. milk, 4.28 per cent. 866.7 lbs. fat. Owned by Miss Lulu Roberts.	
Highest cow in fat production, grade Jersey, 7170 lbs. milk, 6.15 per cent, 440.7 lbs. fat. Owned by Lewis T. Hickin.	
Cow with cheapest production of milk (on test full year) grade Holstein, feed cost 51c per cwt. Owned by Gust. Schuler.	
Cows with cheapest production of fat (on test full year) grade Holstein, feed cost 12c per pound. Owned by Gust. Schuler.	
Cow with largest income above cost. \$95.85. Owned by Chas. W. Fox.	
No. of herds averaging over 300 lbs. fat per cow, 10.	
No. of herds averaging over 250 lbs. fat per cow, 5.	
Owner of herd with largest average production of fat, \$21.6 lbs. fat, W. J. Hooper.	
Owner of herd with largest average production of milk per cow, 7079 pounds, Owned by Miss Lulu Roberts.	
Owner of herd with largest average income above cost of feed per cow, \$53.24, Chas. W. Fox.	
No. of pure bred bulls in association, 7.	
No. of grade bulls in association, 5.	
No. of pure bred cows in association, 14.	
No. of cows with value of product less than cost, 3.	
The following chart gives cows that produced over 350 lbs. fat during year:	

Owner	Breed	Age	When fresh	Lbs. of Milk	Per cent Fat	Lbs. Fat
L. T. Hickin.....	Grade Jersey.....	4	Jan. 10-21	7170	6.15	440.7
C. W. Fox.....	Grade Guernsey.....	3	Sept. 15-21	6810	6.21	423.3
C. W. Fox.....	Grade Guernsey.....	11	Apr. 30-21	8521	5.10	418.6
W. J. Hooper.....	Grade Guernsey.....	3	Nov. 15-21	7455	4.78	353.6
L. T. Hickin.....	Grade Guernsey.....	3	March 1-21	7622	5.48	383.6
C. W. Fox.....	Grade Guernsey.....	5	May 11-21	8053	4.73	381.2
C. W. Fox.....	Grade Guernsey.....	8	April 18-21	7743	4.81	372.7
J. D. Hubbell.....	Grade Jersey.....	7	Nov. 16-21	7495	5.01	371.3
Lulu Roberts.....	Grade Holstein.....	8	Oct. 2-21	8571	4.28	366.7
Geo. E. Fox.....	Grade Guernsey.....	3	Oct. 2-21	6915	6.08	364.3
L. T. Hickin.....	Grade Jersey.....	4	Nov. 6-21	6427	5.62	361.1
Lulu Roberts.....	Grade Jersey.....	4	March 27-21	8223	5.79	360.7
C. W. Fox.....	Grade Guernsey.....	10	Nov. 19-21	7123	5.05	360.2
Geo. E. Fox.....	Grade Guernsey.....	3	Dec. 19-21	6121	5.83	360.2
Aug. Kaiser.....	Grade Guernsey.....	7	Nov. 5-21	7379	4.75	350.4

E. W. FOX, Tester, Kewadin, Michigan





**POULTRY**

**CONCRETE HEN HOUSE**

I want to build a hen house large enough for 100 hens. I would like to build it of concrete but some tell me it would be too damp. Is this true?—J. M., Carsonville, Mich.

It has not been our practice to advocate the use of concrete in the building of hen houses. It is possible however, to make a cement floor which will be dry provided it is properly constructed. Proper construction means that there must be something between the cement and the moist ground to prevent water from coming in contact with the cement. This is usually done by placing several inches of gravel under the cement or by putting a layer of tar paper between the first and second layers of the cement. Poultry houses having the walls of cement are very much inclined to be cold and damp, and since cement has the characteristic of allowing water to pass through it easily it is not considered advisable to use it in the construction of poultry houses.—Geo. F. Davis, Assistant in Poultry Husbandry, M. A. C.

**HENS BECOME LAME**

We are having trouble with our hens. They are fat and seem to be in good health when all of a sudden one of them will become lame in one leg. They gradually get worse, lose weight and die. What do you think about it?—H. W., Clio, Mich.

You might be suspicious of tuberculosis. These clinical symptoms coincide exactly with those of tuberculosis. However a postmortem is necessary to be absolutely sure of the trouble. If the liver, gall bladder and intestines show the typical lesions or tuberculosis nodules which are whitish in color with a yellowish center. If this condition prevails it is a positive indication of the presence of tuberculosis. The treatment will depend on the severity of the trouble. If the mortality is high indicating a general infection the quickest possible way to eliminate it is by disposing of all the stock. The healthy appearing birds can be marketed and all that are light or under-weight should be killed and either burned or buried in quicklime. The house should be thoroughly disinfected, provided with an abundance of ventilation. The ground should be thoroughly covered with lime and poultry should not be returned on the premises for two or three months. The young stock should be reared on new soil away from any possible chance of infection. If sanitary measures prevail and good vigorous healthy stock are secured one does not need to worry a great deal about tuberculosis or any other poultry disease.—E. C. Foreman, Assoc. Prof. of Poultry Husbandry, M. A. C.

**CROP REPORTS**

**GENESSEE**—Winter wheat suffering as there is no snow and the strong wind has broken it off where it had a good growth. Lots of it was just thru the ground when it froze and looks as though the winter, without snow will be too hard for it.—A. R. Graham, Feb. 17.

**SHIAWASSEE**—Cold weather, no snow, not very favorable crop weather. Farmers not very busy. A good attendance at all meetings concerning agricultural trend of thought. Namely co-operative shipping ass'n, Grange, farmers' clubs and community meetings. The 36th annual state supervisors 3-day meet at Lansing brought into discussion many helpful suggestions to lessen tax problems. If such resolutions could be adopted into laws by as honest unselfish representation it would be the gain for all.—V. G. W., Feb. 18.

**MIDLAND**—After several days of mild weather it has again turned colder. The "backbone" of winter does not appear to be broken by any means—it seems we are doomed to any amount of zero weather. There are a few stray auctions, but it is almost too cold to do anything but read the magazines. The roads are in good conditions.—B. L. H., Feb. 16.

**ALPENA**—We are having colder weather. Snowed last Sunday. Quite a lot of wind. Farmers are cutting and hauling legs and ice. One case of diphtheria. Primary and election being talked a little. The stock has been around to some places. Hay is only about \$3 or \$3 per ton. It is hard to get that much even. Some teams and shevellers were laid off last night. The farm house of Chas. English burned to the ground Tuesday night.—O. H. R., Feb. 17.

**KENT**—Weather very cold. Roads good. Farmers getting up wood and doing chores. Some grain and beans coming in since the price raised. Too cold

to draw potatoes. Spring auctions have started. Bidding very slow.—G. A., Feb. 17.

**ST. JOSEPH**—Weather continues cold, with snow flurries. Buzz piles looming up all over. Sales are quite numerous, while some have changed their minds about a sale as they think things are selling too cheap. A neighbor had a bad accident when he tried to kick a belt from gas engine pulley, injuring his limb severely. Everybody looking forward to spring.—Mrs. H. C. Holtz, Feb. 16.

**SAGINAW**—Temperature 2 below zero to 20 above. Mostly clear with some wind. Roads fine. The winter wheat is having a hard pull by lack of snow. Rye prospects are not the best but farmers are optimistic about it. Only small amount of live stock was marketed this week. The corn shecks have all been hauled from the fields. Farmers are cutting and hauling wood.—C. C. DeW., Feb. 18.

**LIVINGSTON (E.)**—Cheer up good farmers, the first sign of spring has come; early potatoes have started to sprout. Better times are on the way now as tax time is about over. The prices of farm produce are advancing to cheer up the farmer so he will dig in for another summer. The ground is well frozen and a light covering of snow is a great benefit to the winter grain in this section of the country.—J. W. C., Feb. 17.

**WEXFORD**—Lots of snow, and still coming. Plenty of cold weather. Farmers are not doing much only keeping their stock and themselves thawed. Feb. 2nd Mr. Jno. Schutte, Sr. died at the age of 77 years. He resided in this county over 50 years. Feed is moving some now. Farmers are planning on seeding a good acreage this spring.—Wm. A. Jenkins, Feb. 16.

**ARENA**—At this writing the ground is covered with snow and more winter-like than at times. It has been a very hard winter on grains as the freezing will surely heave it out in the spring. Beans sure did advance some and at this writing are around \$4.60 per cwt. at the Farmers' Elevator at Omer, Mich., fifteen cents higher than most anywhere else in the county. Farmers busy getting up wood, cutting ice, drawing in a few beans and the like but as a rule are sitting tight for higher prices. Some farms changing hands, few auctions.—M. B. Russell, Feb. 14.

**CHEBOYGAN**—Weather extremely cold in this section. Thermometer around zero all week. Not much produce going to market. Many farmers getting short on feed and compelled to buy hay at from \$20 to \$24 a ton. Cold spell has halted shipping of potatoes, 1,700 bushels received for shipment at Cheboygan one week ago, two carloads shipped out from Wolverine to Pittsburg. M. A. C. expert gave land clearing lecture through this county last week.—M. G. F., Feb. 17.

**KALKASKA**—Farmers are not doing much except chores; a few are putting up ice and a few are working in the lumber camps. We had hard winds last week and the weather was very cold and stormy. We have about 23 inches of snow and the roads are not very good. Farm sales have been few this winter and not but a few auction sales. Feed is getting scarce with some and has to be bought. There is a little straw being sold at about \$16 per ton baled. Taxes are being paid and some have to borrow the money to pay them with. Some cows and horses are offered for sale but not many are changing hands. A mild winter so far, good for all fall wheat and rye.—W. A. B., Feb. 17.

**LIVINGSTON**—Have had good winter weather with but little snow; not enough to make covering for fall crops which have been injured more or less by the ice that covers a great part of the fields. Have not had but little sleighing this winter and the wheeling has not been the best for either auto or horse. Roads are very icy in many places at this writing. Stock all looks good with some sheep and lambs being marketed.—Geo. Coleman, Feb. 15.

**ST. CLAIR**—Farmers are preparing for their spring work with more pep and cheer than for some time past; instead of the sober downcast look it is a broad smile you see, since wheat, beans and hogs have made such encouraging advances. Fall sown grains look bad with the worst yet to come. The general opinion is wheat will not be a good crop this year. The weather is steady with now and then a cold snap but no snow to speak of. The soil is frozen solid and quite deep with not enough moisture. Live stock is looking well and business is looking better in this section.—I. J., Feb. 18.

**NEW LAMP BURNS 94% AIR**

**BEATS ELECTRICITY OR GAS**

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94 per cent air and 6 per cent common kerosene (coal-oil).

The inventor, A. R. Johnson, 609 W. Lake St., Chicago, Ill., is offering to send a lamp on 10 days' FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him today for full particulars. Also ask him to explain how you can get the agency and without experience or money, make \$250 to \$500 per month. (Adv.)

**"The Easiest Draft—The Best Buy"**

"For twelve years I have operated a 13-inch Papec. I have filled the tallest silos in the 'Thumb' of Michigan and have never clogged the blower when the 600 R.P.M. was maintained. I consider it the easiest draft, and the best buy."—Jos. Ward, Richmond, Mich.

**The Powerful PAPEC Ensilage Cutter**

is designed and built to live up to its guarantee—the broadest and most positive guarantee given any ensilage cutter. There are thousands of satisfied owners.

**Farmers' Record and Account Book—FREE**  
The farmer who finds and stops the leaks in his business is the one who makes a profit. This 60-page book is so conveniently arranged that a few entries a day will enable you to determine your exact financial standing. Write us giving the size of your silo and your dealer's name and address, and the book will be mailed promptly. It's worth a dollar to any farmer.

Also ask for free Catalog describing the four sizes of Papec Cutters. It shows why a Papec will pay for itself in two seasons. Write today.

**PAPEC MACHINE COMPANY**  
157 Main St. Shortsville New York  
36 Distributing Houses Enable Papec Dealers to Give Prompt Service.

**THROWS AND BLOWS**

"It never clogged the blower"



**Cut Spraying Costs**

Hardie Sprayers cost less to buy; cost less to own; cost less to operate; give highest pressure, biggest capacity, and best results.

Write for the complete Hardie catalogue



Made in twenty sizes, both power and hand, and used by the experienced growers everywhere.

**HARDIE MANUFACTURING CO., HUDSON, MICH.**  
Branches at: Portland, Ore., Los Angeles, Calif., Kansas City, Mo., Hagerstown, Md., Brockport, N. Y., Petrolia, Ont.

**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.

A year's supply of oil is sent with every Aermotor



Aermotor Towers are Towers of Strength

**AERMOTOR CO.** Chicago Des Moines  
Kansas City Minneapolis Oakland

**IS GARDEN SEED BELL BRAND**

Write for Isbell's 1922 Catalog

Isbell's Michigan-grown Garden Seeds assure a big-yielding, profitable garden, for they are thoroughbred stock—the result of 43 years of development and selection. Send today, for Isbell's 1922 Seed Annual, giving valuable information on quality seeds and quoting direct-from-grower prices.

**S. M. ISBELL & COMPANY**, 563 Mechanic St. (30) Jackson, Mich.

**FOR FARMERS ONLY CAN YOU BEAT IT?**

**GRAND RAPIDS HEALTH & ACCIDENT CO.** will pay you \$10.00 a week or as that rate for every day that you are totally disabled from either accident or disease.

\$5.00 a week for partial disability. \$5.00 a week hospital benefit. \$100.00 for accidental death, for only \$5.00 a year plus \$3.00 policy fee the first year.

Will pay you more if wanted. **AGENTS WANTED.**

Address: **W. I. BEACE, Gen. Agent, Owosso, Mich.**

**BARRELS OF DISHES**

Slightly imperfect crockery, Hotel China. Mixed designs. **GREAT BARGAIN.** Write for particulars. **RALYEA, INC.** 303 Washington St., Buffalo, N. Y.

**OATS "BURT'S HEAVYWEIGHT"** Test 35 lbs. per bu. Also Early SEED CORN. Get our low price, samples and catalogue. **THEO. R. BURT & SONS, Melrose, Ohio.**

**Can You Sell Subscriptions to this Paper?**

We have a position for you in your county which **Will Pay You from \$15 to \$50 per Week**

**IN CASH**, during the months when you are not engaged in farming work. We want ambitious men and women who can **SELL** the best farm weekly in Michigan and we are willing to pay a generous commission and when you have made good, if you wish to give this work your entire-time we will make you a regular salaried agent. Age does not count—we have successful agents, both men and women over sixty years and under twenty—**BUT YOU MUST BE ANXIOUS ENOUGH TO MAKE MONEY TO BE WILLING TO WORK HARD!** If interested, write,

Agency Manager, The Michigan Business Farmer, Mt. Clemens, Mich.

# 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.

- Feb. 28—Brown Swiss Cattle and Poland China Hogs, E. H. Elsiele, Manchester, Mich.
- March 2—Holsteins, James Nye & Son, Pontiac, Mich.
- March 3—Durocs, Drott & Berns, Monroe, Mich.
- March 8—Durocs, Frank Borgert, Sturgis, Mich.
- March 9—Holsteins, John Schlaff, Chesterfield, Mich.
- March 10—Holsteins, E. A. Hardy, Rochester, Mich.
- March 29—Holsteins, J. F. Gladly, Vassar, Mich.
- April 20—Holsteins, Eaton County Holstein Breeders Ass'n., Charlotte, Mich.
- May 10—Shorthorns, Central Michigan Shorthorn Breeders Association, Greenville, Michigan.

### LIVE STOCK AUCTIONEERS

- Andy Adams, Litchfield, Mich.
- Ed Bowers, South Whitley, Ind.
- R. L. Benjamin—Waukesha, Wisconsin.
- Porter Colestock, Eaton Rapids, Mich.
- Harry A. Eckhardt—Dallas City, Ill.
- C. S. Furney, Mt Pleasant, Mich.
- John Hoffman, Hudson, Mich.
- John P. Hutton, Lansing, Mich.
- L. R. Love—Waukesha, Wisconsin.
- L. W. Lovewell, So. Lyons, Mich.
- J. E. Mack—Mt. Atkinson, Wisconsin.
- D. L. Perry, Columbus, Ohio.
- J. I. Post, Hillsdale, Mich.
- O. A. Rasmussen, Greenville, Mich.
- J. E. Ruppert, Perry, Mich.
- Guy O. Rutherford, Decatur, Mich.
- Harry Robinson, Plymouth, Mich.
- Wm. Waffle, Coldwater, Mich.
- E. T. Wood—Liverpool, N. Y.

### PURE BRED LIVE STOCK AUCTIONEERS

**WM. WAFFLE**, J. T. HOFFMAN  
Coldwater, Mich. Hudson, Mich.  
in the ring.  
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.

### U-NEED-A PRACTICAL COMPETENT AUCTIONEER

to insure your next sale being a success. Employ the one Auctioneer who can fill the bill at a price in keeping with prevailing conditions. Satisfaction GUARANTEED or NO CHARGES MADE. Terms \$50.00 and actual expenses per sale. The same price and service to everyone. I specialize in selling Polands, Durocs, and Chester. Let me reserve a 1922 date for you. Write or wire.

**HARRY A. ECKHARDT**  
Dallas City, Illinois

**JOHN P. HUTTON**  
LIVE STOCK AUCTIONEER  
ADVANCE DATES SOLICITED.  
ADDRESS 118 W. LAPEER ST.  
LANSING, MICH.

## CATTLE

### HOLSTEIN-FRIESIAN

### SHOW BULL

Sired by a Pontiac Assie 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

I AM OFFERING LIGHT COLORED HOLSTEIN-FRIESIAN bull 1 year old from 21.51 lb. dam and sire whose six nearest dams are 35.34 lbs. butter. Herd under state and federal supervision.  
Oscar Wallin, Wisconsin Farm, ...

### TUEBOR STOCK FARM

Breeders of Registered Holstein cattle and Berkshire Hogs.

Everything guaranteed, write me your wants or come and see them.

**ROY F. FICKIES**  
Chesaning, Mich.

# --- Complete --- DISPERSAL SALES of Federal Tested Cattle at 10 O'clock A. M. Sharp 135 head of choice Holstein-Friesian Cattle

We have tested everything that freshened for two years. All cattle in best of condition and free from disease and T. B., with A. R. O. records ranging from 24 to 33 pounds on aged cows, and from 15 to 22 pounds on two-year-olds, out of sires 31 to 36 pounds. Fifteen are due to freshen by time of sale, out of 31 to 35 sires. Following are some of the records made within the last two years at Fairchild Farms:

- Artis Pontiac Saskia, 601.1 lbs. milk, 33.40 lbs. B. F., 7 days; 2706.1 lbs. milk, 139.70 lbs. B. F., 30 days.
- Canary Spotted Lady—702.6 lbs. milk, 31.04 lbs. B. F., 7 days; 2,700.0 lbs. milk, 123.7 lbs. B. F., 30 days.
- Lowland Maple Crest Diana—554.0 lbs. milk, 29.64 lbs. B. F., 7 days.
- De Kol Pieterje Canary—705.3 milk, 27.2 lbs. B. F., 7 days.
- Lowland Maple Crest Cora Hartog—563.6 lbs. ilk, 27.67 lbs. B. F., 7 days
- Miss Hartog Elzever—508.6 lbs. milk, 26.2 lbs. B. F., 7 days; 2089.0 lbs. milk, 105.0 lbs. B. F., 30 days.
- Huron Hill Pontiac Korndyke, Sr., 2 year old—513.8 lbs. milk, 22.2 lbs. B. F., 7 days.
- Wabeek Minnie Roy, Sr., 2 years old—552.4 lbs. milk, 21.64 lbs. B. F., 7 days; 2112.0 milk, 84.33 lbs. B. F., 30 days.

Other records too numerous to mention.  
Four bulls out of Dams ranging from 22 pound 2 year old to 35 pounds.  
Good bankable notes will be accepted for 6 months or 1 year, at 7 per cent. Free transportation from Fairchild Farms to Rochester, a distance of 14 miles, Catalogs ready for distribution on March 1, 1922.

"Wood in the Box." Col. Mack, Fort Atkinson, Wis., auctioneer, Fairchild.  
"Wood in the Box." Col. Hulsizer, Rochester, Mich. Auctioneer, Hardy & Green

## Fairchild Farms, 400 acres, or any part thereof, For Sale.

## AUCTION SALE-25 head of PURE BRED HOLSTEINS

Complete dispersion sale of James Nye & Son herd of Pure Bred, Holstein-Friesian Cattle, located three miles northwest of Pontiac, out Oakland Ave., quarter mile south on bank of Scott Lake.

ON MARCH 2nd, 1922 commencing at 1:00 p. m. sharp

This sale consists of 25 pure bred holsteins, a few grades, three horses, one matched team, weight about 2,900, bay and gray 8 and 9 years old; one bay about 1,300, 9 years old; one Welch pony with cart and harness, 6 years old; International manure spreader, Ford one-ton truck, hot water heater, milk bottles, set double heavy harness, some household furniture and other small articles.

This herd consists of 18 milkers, four are fresh, several soon due, and are bred to a good 3-year-old herd sire which is also for sale. All cattle over six months old are tuberculin tested and are sold under 60 day guarantee.

TERMS: All sums under \$10.00 are cash, all sums above this amount six months time on good bankable notes bearing 7 per cent interest.

**JAMES NYE & SON, PPOPS., PONTIAC, MICH.**  
J. F. Fishbeck, Pedigree Expert  
Harry Robertson, Auctioneer, Bradford Smith, Clerk.  
H. H. Mack, Fieldman for M. B. F.

### TALK ABOUT GOOD ONES

Shiawana Farms Holsteins are making history. Just completed records of 31.53 lbs. at 3 years, 6 mos. and 24.69 lbs. at 2 yrs. 8 mos. Sired by one of the greatest sons of Colantha Johanna Lad. Three crackerjack bull calves from some of our best are going at \$75.00 to \$150.00. Accredited herd. Pedigrees furnished. Better Hurry.

**SHIAWANA FARMS**  
E. BOWLEY & SONS, Ovid, Mich.

**HOLSTEIN CALVES**, 7 weeks old, \$1-32nds pure. Tub. Tested, \$25.00 each, crated for shipment anywhere. Satisfaction guaranteed.  
**EDGEWOOD FARMS**, Whitewater, Wis.

**BULL CALF**, BORN APRIL 20, 1921, WELL grown, well marked, very straight, and sure to please you. Sire Segis Flint Hengerfeld Lad whose two nearest tested dams average \$1.93. The dam is a 21 lb. three year old grand daughter of King Segis, she has a 30 lb. daughter. Price \$125.00. L. O. Ketzler, Flint, Mich.

**COME 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.  
**M. J. ROCHE**  
Pleasant, Mich.

### 7 YEARLING BULL BARGAINS

Sired by Segis Korndyke De Nilander, 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 16 lbs. to 30 lbs. Priced at half value, \$100 up. Federally tested June 10. Write for list.  
**ALBERT G. WADE**, White Pigeon, Mich.

### 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 Ona. One is from a 17 lb. 2 yr. old dam and the other is from a 20 lb. Jr. 3 yr. old dam, she is by a son of Friend Hengerfeld De Kol Butter Boy, one of the great bulls.  
**JAMES HOPSON JR.**, Owosso, Mich., R. 2.

**WOLVERINE STOCK FARM REPORTS GOOD** sales from their herd. We are well pleased with the calves from our Junior Herd Sire "King Pontiac Lunde Korndyke Segis" who is a son of "King of the Pontiacs" from a daughter of Pontiac Clothilde De Kol 2nd. A few bull calves for sale, T. W. Spague, R. 2, Battle Creek, Mich.

**FOR SALE TWO HOLSTEIN BULL CALVES** of high breeding Dams ranging from 18 to 32 lbs. Nicely marked, and thrifty fellows. No. 1 born March 11, 1921; No. 2 born Nov. 26, 1921. \$75.00 apiece takes them. Pedigree will be furnished.  
**W. O. SEARS**, Sault, Mich.

## MACK'S NOTES

A. A. Feldkamp, at whose farm the Poland China sale on Feb. 11 was held, should be given the credit for having started many men in the hog-breeding business here in Michigan. This fine old-fashioned gentleman has a heart as big as his wonderful body and an enthusiasm that sweeps everything before it.

Col. John Hoffman, of Hudson, Mich., was the "ringmaster" at Parma and Manchester and a large share of the credit, for the wonderful way in which business moved off on both of these occasions. Must be given to this genial gentleman. John is certainly a "coaxer" and a count of the bids, that are given directly to him when he is in the ring, will convince the observer that this big blond has learned the secret of successful salesmanship.

It may be of interest to the dairymen of Michigan and neighboring states to learn that two very important auction sales of pure-bred Holstein cattle will be made in Macomb county early in March. The first of these sales will be held on the farm of John Schlaff, upon which is located the famous Chesterfield creamery, on March 9; everyone who is familiar with current Holstein history knows of this wonderful herd.

On March 10, an auction offering of 60 head pure-bred Holstein cattle will be made by the well-known breeder and Holstein enthusiast, E. A. Hardy. The sale will be held on the Hardy farm, located four miles northeast from Rochester. While Mr. Hardy has never done very much testing, the cows and young females in this herd are the descendants of 30-pound bulls and some of the greatest cows the breed has ever known.

A sale of large type pure-bred Poland China hogs has been announced for Friday, March 3 by Charles Wetzel & Sons, of Ithaca, Mich. The Wetzel herd made an enviable show record at the leading fairs of Michigan in 1921, winning 7 championships, 25 first prizes and 20 second prizes. At Grand Rapids, the Wetzels won first on breeder's young herd, first on senior yearling boar; first on senior sow and grand champion sow. At Bay City the firm showed the grand champion boar and sow. The Wetzel herd of hogs ranks with the best in the state and the owners have a reputation for fair dealing that should go far toward making their coming sale the outstanding success which it certainly deserves to be.

### HILLSDALE DUROC SALE

The Hillsdale County Duroc Breeders association held its first consignment auction sale at the Hillsdale fair grounds on Wednesday, February 15. The sale was a splendid success, from every standpoint. In the first place, the hogs offered were all extra fine quality; it is true that some of the spring gilts were too young and were bred too late to sell well. The general average of the sale, which was a few cents less than \$54, was greatly reduced by the presence in the sale of the few under-sized gilts.

The two highest-priced gilts in the sale were purchased by Hageman Bros. of Hillsdale; for the first, \$91 was paid and the other cost \$106.

Andy Adams, of Litchfield, cried the sale; the ring hustlers were J. I. Post, J. A. Fisher and Forest Haynes. The splendid work of Mr. Adams, in this sale, proves him to be one of the leading auctioneers of the middle west; the offering was disposed of in record time and no animal was "knocked down" until every bid that could possibly be secured, was in. "No stories, no bunk! Sell hogs every minute" was the formula.

Breeders, who consigned hogs to this sale, are as follows: William Schroy, T. J. Schofield, G. L. Lamb, H. F. Smith, J. D. Smith, Clyde Godfrey, W. E. Schofield, Charles Cramton, S. R. Kinney, R. W. Bates, A. M. LaFever, Kintner & Powderly, C. H. Tucker, Webster & Snyder, B. E. Kies, E. E. Eddy, H. B. Kelley, J. A. Fisher and M. L. Fisher.

The names and addresses of the men who bought the hogs at this sale, are as follows: E. M. Harris, Coldwater; John Stewart, Fletcher Porteg, E. S. Bell, J. P. Burroughs, R. H. Morelock, Hageman Bros., Roy Snow, J. A. Pensternmaker, and Walter Mody, all of Hillsdale; William Bowditch, Arthur Smith, J. E. Southern, Harry Fogg and George Hupp of Allen; P. J. Carr, Cambria; John Crall, Pioneer; Albert Dimmers, Jonesville; Will Lazenby, Litchfield; J. W. Harbaugh, Ray, Indiana; D. Osterlander, Jonesville; Clarence Smith, Montgomery; E. J. Kaitinback, Elmer Donbrock, John Phelps, all of Quincy; C. O. Brott, Montgomery; J. M. Williams, Noth Adams; E. M. Hawes, Coldwater; T. J. Schofield, Pittsford; Verne Crandall, North Adams; Williams Glasgow, Jonesville; L. G. Stump, Hillsdale; H. C. Oberlander, Montpelier, Ohio; A. D. Smith, Jonesville and C. S. Allen, Pulaski.

### THE MONROE DUROC SALE

On Friday, March 3, the Plum Creek Farm, Monroe, Mich., will make its regular annual offering of pure-bred Duroc hogs. The list includes four tried sows, four spring yearling sows, ten fall yearling sows and 26 spring gilts. The two-year-old bear, Orion Master King 2nd, will also be included in the sale. The majority of the sows and gilts in the offering were sired by Orion Junior King 2nd, a son of F. J. King's Lady, a splendid sow that was out of Jack's Friend. The offering is bred to Drott's Orion Masterpiece, Diamond Joe's Walt and Fourst Top Col. 2nd. The sale is made by Drott & Berns. The auctioneer is H. L. Igleheart, Elizabethtown, Ken., one of the most capable and popular auction salesmen in America. The Plum Creek herd of F. J. Drott is one of the oldest and most favorably known herds in Michigan; the admirers of this splendid breed of hogs will derive both profit and pleasure from attending this sale. The farm is located on the stone road, 3 miles west of Monroe and 6 miles east of Dundee.

DISPERSAL SALE
HARDY & GREEN

FRIDAY, MARCH 10, 1922, 10 A. M.
HARDY'S DAIRY FARM, Rochester, Mich.

60 HEAD OF HOLSTEINS
REGISTERED Federal Tested

In these herds are some very fine large cows carrying the best blood lines. Fifteen of these cows are fresh or will freshen soon.

All animals guaranteed. Satisfactory terms to responsible parties.

E. A. HARDY, WALTER GREEN

Col. Wm. Hulshizer, Auctioneer - Col. S. T. Wood, Pedigree Expert
Catalogues ready March 4. Auto service from cars and trains at Washington and Rochester.

Fairlawn Herd—Holsteins

Herd Sire, Embelgaard Lillith Champion 108073
His sire's dam Celantia 4th's Johanna, world's first 35 lb. cow, and world's first 1,200 lb. cow.

Butter, one year 1,199.22
Milk 28,515.9
Champion's sons from choice A. R. O. dams will add prestige to your herd and money to your purse.

J. F. RIEMAN
Owner
Fhnt. Mich.

A BLUE RIBBON WINNER YOUNG BULL
on the 1921 Show Circuit. For sale at a low price. Out of an A R O granddaughter of Pontiac Kornadyke.

GRAND RIVER STOCK FARMS
COREY J. SPENCER, Owner
111 E. Main Street, Jackson, Mich.

HOLSTEIN FRIESIAN PURE-BRED BULL
tested herd. Prices are right.
LARRO RESEARCH FARM, Box A North End, Detroit, Michigan.

HOLSTEIN BULL CALF \$25.
from a heavy milking Grade Cow bred to our Herd Sire King Segis Pontiac Kornadyke. Just be quick. He is a dandy, looks like his father.

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.

REGISTERED HOLSTEINS Our Special price on 32 lb. Sire.
J. M. WILLIAMS, No. Adams, Mich.

HOLSTEIN BULL READY FOR SERVICE.
Fine large growthy fellow born Jan. 16, 1921. From a fine large show cow with record of 25.93 lbs. butter 7 days. Sires dam 30 lbs. Nicely marked half white and half black. Price \$200. I also have 3 others. 1 horn Nov 1st, 1921 from cow with record of 30.21 lbs. butter, 633.8 lbs. milk. 1 horn Mar. 10, 1921 from cow with record of 20.23 lbs. butter, 509.5 lbs. milk as a 2 year old.

HOLSTEIN BULL BORN OCT. 13, 1921
low born Jan. 16, 1921. Dam is sired by a 30 lb. bull and out of a 22 lb. daughter of a 21 lb. cow. \$50 delivered your station.

SHORTHORNS

REGISTERED SHORTHORN CATTLE, DUROCS, Jersey Hogs and Percheron Horses. Quality at the right price.
CHASLEN FARMS, Northville, Mich.

SHORTHORNS COWS, HEIFERS, BULLS
18 head, 8 mos. to 4 yrs. old.
FRANK ROHRBACHER, Laingsburg, Mich.

MILKING STRAIN SHORTHORNS
Registered stock of all ages and both sex. Herd headed by the imported bull, Kelmscott Viscount 25th, 648,563. Prices reasonable.

SHORTHORN CATTLE AND OXFORD DOWN
sheep. Both sex for sale.
J. A. DeGARMO, Moler, Mich.

SHORTHORNS and POLAND CHINAS. We are now offering two ten-months-old bulls, one bred heifer, and two ten-months-old heifers.

TWO REAL SHORTHORN HERD BULLS
15 mo. old and sired by Imp. Dairy Prince.
W. W. KNAPP, Howell, Mich.

EXTRA GOOD BULL CALVES FOR SALE.
From the Maple Ridge herd of Bates Shorthorns. Calves in September 1920.
J. E. TANSWELL, Mason, Michigan.

SHORTHORNS COWS, HEIFERS, BULLS
offered at attractive prices before January first. Will trade for good land.

FOR POLLED SHORTHORNS
Shropshire, Southdown and Cheviot rams write to L. O. KELLY & SON, Plymouth, Mich.

FRANCISCO FARM SHORTHORNS AND BIG TYPE POLAND CHINAS

Now offering—Three bulls ready for service. Mastodes, Clansman, Emancipator breeding in gilts bred for spring farrow. See them.

POPE BROTHERS CO
Mt. Pleasant, Michigan

INHERITED SHORTHORN QUALITY
Our pedigrees show a judicious mixture of the best blood lines known to the breed. Write to JOHN LESSITER'S SONS, Clarkston, Mich.

RICHLAND SHORTHORNS

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.
C. H. Prescott & Sons
Tawas City, Michigan

REGISTERED SHORTHORNS
Six cows and heifers for \$700.00. Four due to calf before May 1st.
W.M. CLAXTON, Swartz Creek, Mich.

FOR SALE AT BARGAIN
1 Shorthorn Bull, 14 mos. \$75.00.
1 Shorthorn Bull 10 mos., \$60.00.
These are two of the Bargains I have now.
O. A. Rasmussen Sales Co., Greenville, Michigan

FOR SALE—REGISTERED SHORTHORNS and Duroc Jersey spring pigs, either sex; two red bulls, one 11 months and one 5 months old. Several heifers from 6 months to 2 years old. Scotch Top and Bates bred. Address
GEORGE W. ARNOLD or JARED ARNOLD
Williamsburg, R 1, Michigan

ATTENTION SHORTHORN BUYERS
If you want a real herd bull, or some good heifers bred to Perfection Heir, write me Satisfaction guaranteed.
S. H. PANGBORN & SON
Bad Axe, Mich.

DUROCS AND SHORTHORNS, BRED GILTS, yearlings and two year olds, few good boars, bull calf 8 weeks old, good cow with heifer calf. Several bred heifers.
P. B. LUDLOW, Rolling Prairie, Ind.

MILKING SHORTHORNS Bulls old enough for service, tuberculin tested and at bargain prices.
W. S. HUBER, Gladwin, Mich.

BUY SHORTHORNS NOW, 4TH ANNUAL
Herd test without a reactor. Some bargains in bulls.
JOHN SCHMIDT & SON, Reed City, Mich.

WATERLILY STOCK FARM
offers 4 fine Reg. Shorthorn Bulls from 10 to 22 mo. old at bargain prices.
THEODORE NICKLAS, Metamora, Mich.

JERSEYS

ONE OF OUR MAJESTY BULLS WOULD IMPROVE YOUR HERD.
FRANK P. NORMINGTON, Ionia, Mich.

WORLD'S RECORD MADE BY JERSEY

A new world's record for all breeds for cows under two years of age has just been made by the Jersey heifer St. Mawes Lad's Lady No. 451568, owned in Oregon. She began her test 1 year, 11 mos., 28 days of age and produced in one year of 11,756 lbs. of milk, 829.09 lbs. of butterfat, 975.29 lbs. of 85 per cent butter. This is the second time the world's record for all breeds for a heifer under two years of age has been made by a Jersey in Oregon. Jerseys are winners. Jerseys are ideal dairy cows. A pure bred Jersey bull is a money making investment. Think! Act!

Write
SECY HENDRICKSON
Shelby, Mich.
for free literature.

GUERNSEYS

8 REGISTERED GUERNSEY COWS AGE from 2 to 7 years. 5 are imported.
PINE HILL FARM
Howard City, Michigan.

FOR SALE:--Three-year-old
May Rose Guernsey Bull.

Herd Federal Tested.

MAPLE HILL FARMS

North Farmington, Mich.

E. S. JACKSON,

Hemlock 984, Detroit, Mich.

GUERNSEY BULL & BULL CALVES
from dams making large A. R. O. Records. Accredited herd. Write for particulars.
A. M. SMITH
LAKE CITY MICHIGAN

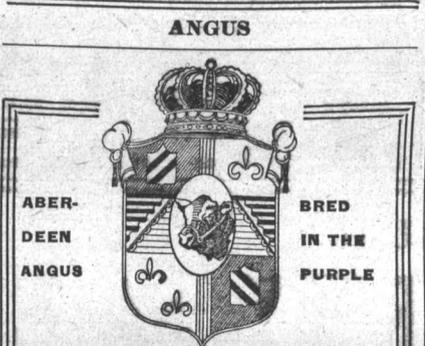
REGISTERED GUERNSEY BULLS
ready for service. Also yearling heifers. Farmers prices.
Dr. W. B. Baker, 4800 Fort St. W. Detroit, Mich

GUERNSEYS
OF MAY ROSE AND GLENWOOD BREEDING. No abortion, clean federal inspected. Their sire's dam made 19,460.20 milk, 909.05 fat. Their mother's sire's dam made 15,109.10 milk 778.80 fat. Can spare 3 cows, 2 heifers and a beautiful lot of young bulls.
T. V. HICKS, R 1, Battle Creek, Mich.

HEREFORDS
BEEF PRODUCERS!
Michigan Produces the World's Best Beef at the Lowest Cost. Raise far better feeding Cattle than you can buy. Grew Baby Beef when gains cost least in their shrink, bruises and loss.

SOTHAM'S EARLRIPE BEEF CONTRACT
Solves your problem—insures your success. A fair intelligent, satisfying system evolved from 37 years conscientious service to American Cattle Industry by three generations of Sothams. GET THE FACTS. Write now or wire. Address
T. F. B. SOTHAM & SON
(Cattle Business Established 1835)
Phone 250. SAINT CLAIR, MICHIGAN

ANGUS
ACHIEVEMENT
The reward of pure breeding; the accomplishment of quality. Success has again contributed more laurels to the already remarkable record of
EDGAR OF DALMENY
THE SIRE SUPREME
At the International Live Stock Exposition, where gathers each year the elite of North American Cattle to compete for the coveted awards, five more honors have been bestowed upon the "get" of Edgar of Dalmeny. You too may share these honors. A bull by this world famous sire will prove a most valuable asset to your herd. Write us today.



WILDWOOD FARMS
ORION, MICHIGAN.
W. E. Scripps, Prop. Sidney Smith, Mgr.

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

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

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

RED POLLED
THREE YOUNG RED POLLED BULLS FOR sale. Sired by Cosy Eils Laddie. He took the prize at six State Fairs.
PIERCE BROS., Eaton Rapids, Mich., R 1

25 RED POLLED CATTLE
Registered. All ages.
E. S. CARR, Homer, Mich.

SWINE
POLAND CHINA
WALNUT ALLEY
Big Type Poland Chinas. I have a few more of those big boned, high backed, smooth sided boars left. The kind that makes good at one-half their value. Come or write and let me tell you what I will do.
A. D. GREGORY, Ionia, Michigan.

FOR SALE, LARGE TYPE
POLAND CHINA
boar pigs. Sired by F's Clansman 391211, Michigan's 1920 Gr. Champion boar, and by Smooth Buster 395823, Michigan's 1920 1st Jr. Yearling Boar. Immune by double treatment. Priced to sell. Write or see them. Free livery to visitors.
A. A. FELDKAMP
Manchester, R. R. No. 2 Mich.

LEONARD'S BIG TYPE P. O. BOAR PIGS
at weaning time, from Mich. Champion herd \$25 with pedigree. Satisfaction guaranteed. Call or write E. R. LEONARD, R 3, St. Louis, Mich.

L. T. P. C. \$15-\$20-\$25
We are offering our 1921 fall crop of pigs at the above prices. They are sired by Hart's Black Price and Right Kind Clan.
F T HART, St. Louis, Mich.

BIG TYPE POLAND CHINAS
Spring pigs of both sex for sale at reasonable prices. Sired by Orange Clansman 2nd, litter brother to Michigan 1920 Gr. Champion. Also fall pigs. Write for prices. Immuned by double treatment.
MOSE BROS., St. Charles, Mich.

GLADWIN COUNTY PURE BRED LIVESTOCK ASSOCIATION. Hereford, Shorthorn, Jersey and Holstein cattle; Duroc-Jersey, Poland China and Hampshire hogs; Oxford, Shropshire and Hampshire sheep. A place to buy good breeding stock at reasonable prices.
FRED B. SWINEHART O. E. ATWATER
President Secretary
Gladwin, Mich.

BRED GILTS now ready to ship, bred to boars of Bob Clansman, Defender and Joe breeding at farmers prices. H. O. Swartz, Schoolcraft, Mich.

L T P C BRED GILTS
Bred to my new boar Liberator Pride. Priced with the time. Nuff sed.
M. W. PATRICK, Grand Ledge, Mich.

BOARS AT HALF PRICE BIG TYPE
bred in the purple, sired by Mich. Buster, A Giant and Butler's Big Bob. No better breeding. A big rugged, big-boned boar ready for service, registered, for \$25.00—\$30.00.
JNO C. BUTLER, Portland, Mich.

SALE OF BIG TYPE POLAND CHINAS

Chas. Wetzel & Sons, Ithaca, Mich., will sell
38 BRED SOWS AND GILTS
FRIDAY, MARCH 3rd

of the most popular breeding as Big Bob, The Clansman, Giant Buster, Big Halfton, Gerstdale Jones, Big DesMoines and Is Big Orange. Sows bred to Crange Clansman, Wetzel's Cavalier and Monster Bob. All hogs double treated. Write for catalog. All trains met at Ithaca in the forenoon. Auctioneers, Wm. Waffle and J. B. Rowell.

CHAS. WETZEL & SONS, ITHACA, MICH.

**BIG TYPE P. O. SPRING PIGS EITHER SEX** from large growthy dams and sired by choice herd boars. Come and see our stock, prices reasonable.  
**L. W. BARNES & SON, Byron, Mich.**

**POLAND CHINA BRED GILTS**  
 Bred to Hillcrest Liberator by Liberator Leader the 1920 Grand Champion and to Big Prospect by Liberator Buster the 1921 Grand Champion. They will start you right in the breeding industry. Exceptional bargains. Write for prices.  
**HILLCREST FARMS**  
 Kalamazoo, Mich.  
**F. B. LAY,**

**BIG TYPE POLAND CHINAS**  
 Spring pigs all sold. For fall pigs, write  
**W. CALDWELL & SON, Springport, Mich.**

**LARGE TYPE POLAND CHINAS**  
 For sale, boars and gilts sired by B's Clansman, grand champion at 1921 Mich. State Fair, and by F's Clansman 1920 grand champion. Prices reasonable. Visitors welcome. Free livery from Parma. Correspondence cheerfully answered.  
**N. F. BORNER, R 1, Parma, Mich.**

**DUROCS**  
**FOR SALE EXTRA FINE SEPT AND OCT** pigs, either sex, priced right.  
**HARLEY FOOR & SONS,**  
 Gladwin, Mich., R 1.

**1 FINE DUROC SPRING BOAR** ready for service. Sired by Big bone Giant Sensation, Brookwater Dam, Registered, \$35.00 gets him.  
**SCHAFFER BROS., Leonard, Mich. R 1.**

**DUROC** bred sows all sold. We are offering high class fall pigs. Double Immune.  
**JESSE BLISS & SON, Henderson, Mich.**

**PEACH HILL FARM**  
**TRIED** sows and gilts bred to or sired by Peach Hill Orion King 152489. Satisfaction guaranteed. Come look 'em over. Also a few open gilts.  
**INWOOD BROTHERS**  
 Romeo, Mich.

**AM SELLING A GREAT OFFERING OF DUROC BRED SOWS AND GILTS** March 4th, mostly mated to Orion Giant Col., a son of Ohio Grand Champion. Get on mailing list for catalog.  
**W. C. TAYLOR, Milan, Mich.**

**DUROC JERSEY BOARS.** Boars of the large, heavy-boned type, at reasonable prices. Write, or better, come and see.  
**F. J. DRODT, R 1, Monroe, Mich.**

**PURE-BRED DUROC JERSEY HOGS** We usually have good boars and sows of all ages for sale. Reasonable prices.  
**LARRO RESEARCH FARM, Box A North End Detroit, Michigan.**

**DUROC SOWS AND BRED GILTS, \$35 and \$50** Fall pigs \$12.50 and \$17.50. Unrelated. Send for circular and price list.  
**Michigan Farm, Pavilion, Kalamazoo County.**

**Duroc Jersey Bred Stock** all sold. Orders taken for ventling pigs, 1,000 pound herd boar.  
**JOS. SCHUELLER, Weidman, Mich.**

**OAKLANDS PREMIER CHIEF**  
 Herd Boar—Reference only—No. 129219  
**1919 Chicago International**  
**4th Prize Jr. Yearling**  
 BOOKING ORDERS FALL PIGS AT \$25  
**BLANK & POTTER**  
 Potterville, Mich.

**FOR SALE GILTS BRED TO FANNIES'** Joe Orion, for March farrow. Prices right.  
**H. E. LIVERMORE & SON, Romeo, Mich.**

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

**Durocs, Hill Crest Farms.** Bred and open sows and gilts. Boars and spring pigs. 100 head. Farm 4 miles straight S. of Middleton, Mich., Gratiot Co. Newton & Blank, Ferrinton, Mich.

**Duroc sows and gilts bred to Walt's King \$2949** who has sired more prize winning pigs at the state fairs in the last 2 years than any other Duroc boar. Newton Barnhart, St. Johns, Mich.

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

**FOR SALE: HERD BOAR A MODEL ORION** King, a line bred and son of Jackson's Orion King. Call or write  
**CHAS. F. RICHARDSON, Blanchard, Mich.**

**FOR SALE PURE BRED CHESTER WHITE** BOAR.  
**T. J. SWEENEY, Brant, Mich.**

**THE FINEST DUROC JERSEY HOGS** in Michigan. Nearly 100 to choose from. Bred Sows, Gilts, Fall pigs, either sex. Write us your wants. Farmer prices.  
**SCHAFFER BROS., Leonard, Mich., R 1**

**FOR SALE DUROC BRED SOWS OR OPEN** gilts and only 1 boar left. 14 sows to farrow in spring beginning March 8th. Always satisfaction or money back.  
**B. E. KIES, Hillsdale, Mich.**

**HAMPSHIRE**  
**An Opportunity To Buy Hampshires Right**  
 We are offering some good sows and gilts, bred for March and April farrowing. Also a few choice fall pigs, either sex. Write or call  
**GUR THOMAS, New Lothrop, Mich.**

**HAMPSHIRE BRED GILTS ONLY FOR** sale.  
**JOHN W. SNYDER, R 4, St. Johns, Mich.**

**BERKSHIRES**  
**BERKSHIRES**  
 Special prices for Registered Berkshire Breeding stock:  
 10 Mature Bred Sows.....\$75.00  
 10 Fall Yearlings, Bred..... 50.00  
 Best type with size and quality. Satisfaction absolutely guaranteed. Write for information.  
**C. C. COREY**  
 2428 First National Bank Bldg.  
 Detroit Michigan  
**O. I. C.**

Registered **O. I. C** bred gilts for sale. Weight around 250 pounds at \$40.00.  
**JOSEPH R VAN ETEN, Clifford, Mich.**

**O. I. C.'s SERVICE BOARS, SPRING PIGS** at Farmer's prices.  
**CLOVER LEAF STOCK FARM, Monroe, Mich.**

**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 5.**

**SHEEP**

**\$125 BUYS 8 REG. SHROPSHIRE EWE** lambs that have both quality and breeding. Just the thing to start a flock with.  
**CARL TOPLIFF, Eaton Rapids, Mich.**

**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**

**FOR SALE, FLEMISH GIANT RABBITS** does breeding age, \$6. Three months old pair, \$5. Registered does \$12 each. Stock pedigreed. Quality guaranteed.  
**E. HIMEBAUGH, Coldwater, Mich.**

**WANTED MALE GOAT, SAANEN BREED,** for breeding purposes. White preferred. Address.  
**H. DEVERS, Inkster, Mich.**

**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.**

**COLLIE PUPPIES**  
 Write Dr. W. Austin Ewalt, Mt. Clemens, Mich. for thoroughbred, pedigreed Collie puppies; bred from farm trained stock that are natural heelers with plenty of grit. All Puppies guaranteed.

**BREEDERS' ATTENTION**  
 If you are planning on a sale this year, write us now and  
**Claim The Date!**  
 This service is free to the live stock industry in Michigan to avoid conflicting sale dates.  
**LET "THE BUSINESS FARMER" CLAIM YOUR DATE!**

**HORSES**

**ESTABLISHED 1879**  
**BELLS' PERCHERON & BELGIANS**  
 The most complete selection in America of these popular breeds. International and state fair winners.  
**STALLIONS AND MARES**  
 Write today.  
**BELL BROS., Wooster, O.**

**FOR SALE THE BLACK PERCHERON** Stallion, Sampson, No. 110945, weighing close to a ton, 8 years old, and a splendid producer, 1922 license, price \$500. We also have on hand a splendid lot of young Aberdeen Angus bulls ready for service at bargain prices, sired by imported bulls. Address  
**WOODCOTE STOCK FARM, Ionia, Mich.**

**REGISTERED BELGIAN STALLION** weighing 1800 lbs. Sound, 6 years old. Sure Foot getter.  
**D. F. HOPKINS, Milford, Mich., R. F. D. 5**

**FOR SALE**  
 Jessie Mignon No. 99800 Percheron Brood Mare Dapple Grey, nine years old, probably one of the best in this state. Price \$500, not half her value.  
**L. H. CHEESEMAN, Clarkston, Mich.**

**PURE BRED STALLIONS**  
 One black Percheron, 7 yrs old weight 1800 lbs. One black Percheron 5 yrs old weight 1800 lbs. One 2 yr. old black with small star, weight 1400 lbs. Registration papers furnished. These stallions are sound and right and will be sold on reasonable terms.  
**JOSHUA HILL, Box 6, Capac, Mich.**

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

**POISONOUS WEEDS**  
 One of my neighbors has lost two milch cows and one steer. These cattle apparently seem to be just as well as can be at night, go out in the morning and there would be one dead. He had our local veterinarian and he can't find anything wrong. He opened one from one end to the other. In one stomach at the entrance we found a lot of weed seed and the feed on the inside seemed to be very hard. Could there be any disease, if so would it be catching?—  
**F. C.—Rosebush, Mich.**

There are a great many poisonous weeds and the weed seed you found at the entrance into the stomach was no doubt the cause of the death of your neighbor's cattle. The feed in that portion of the stomach, known as the omasum, will always be found hard and dry and has the appearance of a book, the feed being between the leaves.

**HIND PARTS SEEMS PARALYZED**  
 I have a collie dog two years old that will suddenly throw head sideways and writhe and roll as though in pain. Seems to be unable to use hind parts as he will get up on front feet go a short ways when his hind parts seem to paralyze and go down. He does not froth at the mouth and his eyes look natural. He has had two spells like this about five weeks apart. We keep him tied in the barn nights and he runs loose during day. He is fat, eats well and appears to feel good. Plays and acts very natural at other times.—  
**R. A. W., Saint Charles Mich.**

Either the result of a blood clot, thus interfering with the circulation, or, the result of an injury, causing some pressure on the nerves of the hind quarters. Keep him quiet, not allowing him to run at large for at least a month and give the following: Potassium Iodid, four drams; tincture nux vomica, three drams; add sufficient water to make four ounces and give one teaspoonful three times a day.

**HORSE WEAK AND DEBILITATED**  
 I have a horse that sweats nights. Begins to sweat about 7 o'clock and sweats until about 12 o'clock. He is in fairly good flesh and feels good. The barn is very cold but he seems to sweat just the same. Can you tell me what is the cause and what to do?—  
**G. P. K., Delton, Mich.**  
 This condition is often caused by an animal becoming weak and debilitated. In other cases it might be caused by an animal having too long hair, not having shed properly in the fall. Give one ounce Fowler's solution of arsenic morning and night and one dram powdered Nux Vomica at noon.

**OBSTRUCTION IN TEAT**  
 There seems to be a growth in one teat of my cow's udder. I cannot milk her by hand at all and only get a little using milking tube. Your advise will be appreciated.—  
**N. E. L., Elwell, Mich.**

Have this cow examined by a graduate veterinarian and he will be able to tell you whether the obstruction is in the teat or in the udder itself. It is a bad practice to use a milk tube, as sooner or later you will infect the udder and then your trouble begins.

**PECULIAR CASE**  
 I have a mare 9 years old that after eating her grain will hold her head down and put her tongue on the outside of her upper lip and suck. It sounds like a calf sucking. When she first started I was grainng heavy with oats. It was during hot weather. She was and is in fair flesh.—  
**S. F., Kalamazoo County.**  
 A bad habit; try painting lip with pine tar. Are you sure she doesn't choke? Rather peculiar case, write us again after trying the above.

**ANNUAL**  
**DUROC - JERSEY SALE**  
 of the  
**St. Joseph County Duroc-Jersey Swine Breeders' Ass'n**  
 At the Fair Grounds, Centerville, Mich.  
**Wednesday, March 8, 1922 at 1:30 P. M.**  
 The offering consists of  
**40 head of Bred Sows**  
 Catalogs mailed on request. Address  
**FRANK BORGERT**  
 Route 5 **STURGIS, MICHIGAN**

**DUROC BRED SOW SALE**  
**Friday, March 3, at 12:30 p. m.**  
 At farm on Stone Road, 8 miles west of Monroe and 6 miles east of Dundee.  
 Four tried sows, four spring yearlings, 10 fall yearlings and 26 spring gilts; also Orion Master King, boar, 2 years old.  
 Write for Catalog.  
 Auctioneer, **H. L. gleheart, Elizabethtown, Ky.**  
**Fieldman, H. H. Mack, M. B. F.**  
**DRODT & BERNS, Proprietors, Monroe, Mich.**

**OWOSSO SUGAR CO.'S PRAIRIE FARM**  
 More of the better kind of Draft Horses used on the farm would lower the cost of production. Heavy Draft Horses on short hauls are economy and will lower the high cost of transportation.  
 Buy Heavy Draft Mares and raise your own power on the Farm. We have fifty mares in foal to select from. They possess the best blood that Belgium has ever produced.  
 Belgian Draft Horses are getting more popular. Their qualities as workers cannot be excelled by any other breed.  
 Before buying see the sires and dams and also see the largest breeding establishment of Belgian Draft Horses in the world. Located at  
**ALICIA, Saginaw County, MICHIGAN**

Feb  
 D  
 being at  
 You will  
 and Bu  
 the egg  
 Also Be  
 bottles.  
 ORP  
 Two  
 free cat  
 breeding  
 CYCLE  
 D  
 EL  
 SINGL  
 Legho  
 Barred  
 son. W  
 Cedar L  
 FOR S  
 Eggs \$2  
 Port Hu  
 M  
 offers y  
 White C  
 White V  
 Write to  
 D  
 Top Qu  
 Reds,  
 TYRON  
 W CHI  
 MRS.  
 BARRE  
 from  
 strains  
 1921, o  
 TO  
 BARRE  
 Norman  
 ing cont  
 fellows a  
 MRS.  
 BARRE  
 200-  
 best ped  
 per 100  
 for sale.  
 BARRE  
 winning  
 prepaid.  
 S. C. W  
 wrels, big  
 guarantee  
 WIL  
 SINGL  
 S CHIC  
 Send for  
 J. V.  
 SINGL  
 Great  
 T  
 Single C  
 \$5.00 ea  
 each W  
 March  
 LAP  
 BRABO  
 G cocke  
 L. G.  
 COLOME  
 C Cocker  
 one fema  
 bound, \$  
 HENRY  
 HEIM  
 won silve  
 Ooliseum  
 5 pull  
 and win  
 in 8, 7  
 winning 2  
 Have a  
 for sale.  
 from Ros  
 stock. S  
 C. V.  
 EGGS F  
 White  
 ANTH  
 WHITA  
 Blood  
 an's gr  
 free. Inte  
 RHODE  
 hatching  
 far. Ap  
 Chicks tw  
 WM. H.

# 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

### DAY OLD CHICKS

**HOMESTEAD FARMS LEGHORNS**

We are issuing a Bulletin that describes the kind of a fowl the farmer now days wants. Send for this description of our Pure Bred Practical Poultry.

The highest class practical stock in Michigan; stock that each year is also now being shipped to poultry farmers of other states. You will like particularly the White, Brown, and Buff Leghorns of this breeding; they give the eggs.

Also Barred and White Rocks, Reds, Wyandottes, Orpingtons, Anconas.

STATE FARMS ASSOCIATION  
B 2 Kalamazoo, Michigan

### ORPINGTONS AND LEGHORNS

Two great breeds for profit. Write today for free catalogue of hatching eggs, baby chicks and breeding stock.

**BOYLE HATCHER COMPANY, 149 Philo Bldg. Elmira, N. Y.**

### DARK CORNISH COCKERELS, Sired by a 12 1/2 pound cock. \$6 and \$8.

**ELDRED V. CAMPBELL, Atkins, Mich.**

### SINGLE COMB BROWN, WHITE AND BUFF Leghorns, R. I. Reds, White Wyandottes and Barred Rocks. Eggs, stock and chicks in season. Write for prices.

**Cedar Lawn Poultry Farm, Dansville, Mich. R1**

### FOR SALE—SILVER SPANGLED HAMBURG Eggs \$2.00 per setting. ROSEDALE FARM, Port Huron, Mich, R1, J. G. Philpott.

### MUD WAY AUSH-KA FARM

offers young stock and a few mature breeders in White Chinese Geese, White Runner Ducks and White Wyandottes. Also O. I. C. spring gilts. Write today for prices on what you need.

**DIKE C. MILLER, Dryden, Mich.**

### Top Quality Chicks, Spanish, Minorcas, Rocks, Reds, Wyandottes and Orpingtons.

**TYRONE POULTRY FARM, Fenton, Mich.**

### W CHINESE GEESSE, PEKIN DUCKS, R. O.

**MRS. CLAUDIA BETTS, Hillsdale, Mich.**

### PLYMOUTH ROCK

**BARRED ROCK COCKERELS AND PULLETS** from America's best prize-winning heavy-laying strains. Winners Detroit National Show Dec. 1921, of five first prizes. Low prices.

**TOLLES BROS., R 10, St. Johns, Mich.**

### BARRED ROCK cockerels from the famous Norman strain, winners in the Illinois egg laying contest over all breeds. Large, finely barred fellows at farmers' prices.

**MRS. JESSIE B. DEAN, R 1, Mason, Mich.**

### BARRED ROCK, Hatching eggs from Parks 200-egg strain from stock direct from Parks best pedigreed pens. \$2 per 15, \$6 per 50, \$12 per 100. Prepaid by parcel post. No chicks for sale. R. G. Kirby, R 1, East Lansing, Mich.

### BARRED ROCKS—HILL'S heavy-laying, prize-winning strain. Eggs: 15, \$2.50, 50, \$5, 100, \$9 prepaid.

**LUCIAN HILL, Tekonsha, Michigan.**

### LEGHORNS

### FOR SALE

S. C. White Leghorn (Ferris) cocks and cockerels, big healthy farm raised birds. Satisfaction guaranteed, also eggs and day old chicks.

**WILLIAMSTON POULTRY FARM WILLIAMSTON, MICH.**

### SINGLE COMB BUFF LEGHORN BABY CHICKS. Order now for spring delivery. Send for circular.

**J. W. WEBSTER, R 2, Bath, Mich.**

### SINGLE COMB BUFF LEGHORN COCKERELS

Great laying strain, \$2.50 each.

**THELO GIFFORD, Winn, Mich.**

### LEGHORNS

Single Comb Buff Leghorn Cockerels \$3 to \$5.00 each. Hens and pullets \$2.50 to \$5.00 each. Will start shipping Baby Chicks in March.

**LAPHAM FARMS, Pinckney, Michigan.**

### GRABOWSKIE'S S. C. WHITE LEGHORNS,

cockerels and cocks for sale.

**L. G. GRABOWSKIE, Merrill, Mich., R 4**

### WYANDOTTE

### COLOMBIAN WYANDOTTES, A FEW CHOICE

Cockerels from choice flock, \$5.00 each. Also one female fox hound, bred to American fox hound, \$35.00 if taken soon.

**HENRY BRODBERG, Jr., Reed City, Mich., R 3**

### HEIMBACH'S White Wyandottes

won silver cup for best display at Grand Rapids Oileum Show.

5 pullets entered: win 1, 2, 3, 5, 6, 5 hens and win 2, 5, 1 cock and win 1st 5 cockerels, win 3, 7, 8, 1 young pen winning 1st. 1 old pen winning 2nd.

Have a few utility cockerels and yearling hens for sale. Baby chicks and hatching eggs. Also from Rose Comb Rhode Island Reds of good stock. Send for catalog.

**C. W. HEIMBACH, Big Rapids, Mich.**

### EGGS FOR HATCHING, from prize winning White Wyandottes at \$3 and \$5 per setting.

**ANTHONY WARELE, Mt. Clemens, Mich.**

### 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.

### RHODE ISLAND RED TOMPKINS STRAIN

hatching eggs and baby chicks, Feb. \$12.00; Mar. \$10.00; April, \$10.00; May, June, July, \$8.00. Chicks twice the price of eggs. Both combs.

**Wm. H. FROHM, New Baltimore, Mich., R 1**

### S. C. RHODE ISLAND WHITES, GOOD mating eggs. \$2.00 up per setting.

**John A. Hartgarnik, Zeeland, Michigan, Box 67**

### CHOICE SINGLE AND ROSE COMB RHODE Island White Cockerels for sale. \$4.00 each.

**JOHN J. GOLBERG, Munger, Mich.**

### ORPINGTONS BUFF, WHITE BLACK HATCHING EGGS IN SEASON.

**GRABOWSKIE BROS. Merrill, Mich., R 4.**

### ANCONAS

### SINGLE COMB ANCONA COCKERELS. Direct descendants from pens started with the Worlds Champion Layers sons, Beauties. Prices right.

**E. W. MOEMBER, Pentwater, Mich., R 1.**

### 3000 EARLY APRIL HATCHED FULLY MATURED ANCONAS. BUCKEYE ANCONA FARM

**NEW LONDON, OHIO.**

Heavy layers and show birds, none better. Reasonable prices and quality stock is our motto. Can furnish winners for any show. Ask for our late winnings at Columbus, O., Louisville, Ky., Cleveland, O., Pittsburg, Pa., Hagerstown and Cumberland, Md., 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.

### LANGSHAN

**DR. SIMPSON'S LANGSHANS OF QUALITY** Bred for type and color since 1912. Winter laying strain of both Black and White. Have some cockerels for sale. Eggs in season.

**DR. CHAS. W. SIMPSON Webberville, Mich.**

### TURKEYS

### FOR SALE, MY THOROUGHBRED WHITE

Holland tom 2 1/2 years old. A fine large bird to head your flock. Price \$15.00.

**Fred Fausnaugh, R 5, Chesaning, Michigan**

### GIANT BRONZE TURKEYS

Hens all sold. Have several splendid young toms. Large type, well marked.

**MRS. PERRY STEBBINS, Saranac, Mich.**

### TWO LARGE BRONZE TOMS LEFT. PURE Bred, weight 22 1-2 and 23 1-2 lbs. \$10 each.

**JOHN BUCHNER, Morley, Mich., R 1, Box 29**

### GOLLINGS BEST: PURE BRED WHITE HOLLAND Turkeys, Hens, \$8. Toms, \$10 to \$12.

**MRS. ED. COLLINGS, Mayville, Mich.**

### MICHIGAN'S BEST Giant Bronze Turkeys

Splendid pure bred birds. Great in size; fine in color.

**N. EVALYN RAMSDALE, Ionia, Mich.**

### FOR SALE—MAMMOTH BRONZE TURKEYS.

Write for prices.

**MRS. H. D. HORTON, Fillon, Mich.**

### HATCHING EGGS

### EGGS \$1 SETTING, Parcel Post Paid. Thoroughbred. 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.

### DUCKS AND GEESSE

### DUCK EGGS MAMMOTH WHITE PEKIN

stock. A limited number of orders accepted for future delivery. \$1.50 per setting.

**CEDAR BEND FARM, Okemos, Mich.**

### BABY CHICKS

### THE J. B. FARMS HATCHERY

S. C. White Leghorn Chicks. Best selected stock; large, with capacity for eggs which they DO lay. Only THE BEST grade. Write for terms.

**LORING AND MARTIN COMPANY East Saugatuck, Mich.**

### CHICKS WITH PEP

If you want chicks that pay you we have them. Ours have the egg-laying habit. From show winning strains and egg strains as high as 296.

**Leghorns, Rocks, Reds, Anconas, Wyandottes, Minorcas, Orpingtons, Safe delivery. Prepaid. Prices right. Free catalog.**

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

### BABY CHICKS

200,000 FOR 1922. Sheppards Anconas, English type White Leghorns and Brown Leghorns, Barred Rocks. Get them direct from Hatchery from all culled out flocks. Free and safe delivery guaranteed. Catalogue free.

**KNOLLS HATCHERY Holland, Michigan, R 8.**

### The 'Old Reliable' OHIO HATCHERY

which has been in the business TWENTY-TWO YEARS can supply you with the best Chicks from all leading varieties and at reasonable prices. Get our Free Catalogue NOW before you order Chicks elsewhere. 100 per cent Live Delivery Guaranteed. To your door by Prepaid Parcel Post.

**THE UHL HATCHERY, Box 502 New Washington, Ohio.**



## EXTRA! EXTRA! PURE BRED BABY CHICKS

From our tested and culled flocks on free range. The best that money can buy, delivered to your door prepaid and live arrival guaranteed.

Prices for March and April delivery:

S. C. American White Leghorns.....	per 25	50	100	500
S. C. Brown Leghorns .....	\$3.50	\$7.00	\$14.00	\$67.50
S. C. Mottled Anconas .....	3.75	7.50	15.00	72.50
Tom Barron Eng. White Leghorns, Extra Selected .....	4.00	8.00	16.00	77.50

Start RIGHT by placing your order today for some of these HIGH GRADE SELECTED BABY CHICKS. Order direct from this ad or send for our FREE CATALOGUE.

**SUPERIOR POULTRY FARMS BOX 2052, ZEELAND, MICH.**

### IF YOU ARE GOING TO BUY CHICKS THE coming season write me; get description of pure bred S C W leghorns, S C Brown, Anconas, Barred Rocks. Send your order in early for 1922 delivery. Our prices are reasonable. We give you a square deal.

**QUEEN HATCHERY, Zeeland, Mich. D J. Van Der Koal.**

### BABY CHIX, MARCH AND APRIL DELIVERY.

Prices: Barred Plymouth Rocks, R. I. Reds, Black Minorcas, White or Brown Leghorns, 25 for \$5.50; 50 for \$10.00, or 100 for \$17.00, parcel post prepaid. 100 per cent delivery guaranteed. Our 12th year producing the kind of chick that please. Get our prices on 500 or 1000 lots. Green Lawn Poultry Farm, R3, Fenton, Mich

### QUALITY BABY CHICKS

DON'T place your order for chicks until you have secured our catalogue and prices on ROCKS, ANCONAS, ENGLISH and AMERICAN WHITE LEGHORNS. Our Chicks are hatched in the best machines, by genuine experts, and our flocks are of the best in Michigan. We guarantee delivery and quality.

### PROGRESSIVE HATCHERIES

Box L, Holland, Michigan.

### 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.**

### DAY OLD CHICKS

It is now time to think about next season's chicks. You want the best available to start with at the right time, and at a reasonable price. We are here to meet those demands. We supply 'efficiency chicks' Reds, Rocks, Wyandottes, Leghorns Ship them prepaid by special delivery parcel post, guaranteeing delivery. You take no chance. Send for our catalogue for full information and why you should buy chicks.

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

### CHIX FROM TWELVE LEADING VARIETIES of heavy layers on free range. Reasonable prices. Get catalog and order NOW.

**SUNBEAM HATCHERY, H B Tippin, Box 303, Findlay, Ohio.**

### LOOK! S. C. WHITE LEGHORNS, 230-264 egg strain. Prices greatly reduced for 1922. Satisfaction and delivery guaranteed. Hundreds of satisfied customers. Catalog FREE.

**GERIG'S LEGHORN FARM Box 50, Auburn, Ind**

### BABY CHICKS

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

**LAPHAM FARMS, Pinckney, Mich.**

### NABOB JUST-RITE Baby Chick

1 1/2 MILLION CHICKS Postage PAID 95 per cent live arrival guaranteed. MONTHLY FEED FREE with each order. A hatch every week all year. 40 breeds chicks 4 Breeds Ducklings Select and Exhibition Grades. Catalogue Free, stamps appreciated.

**NABOB HATCHERIES, Dept. 30, Gambler, O.**

### BABY CHICKS BARRON STRAIN

SINGLE COMB WHITE LEGHORNS. Also heavy laying S. C. Brown Leghorns and Anconas. Chicks, \$7.25 per 50; \$14.00 per 100; \$67.50 per 500; \$130 per 1000. ROSE AND S. C. R. I. REDS, \$8.50 per 50; \$17.00 per 100.

100 PER CENT LIVE DELIVERY GUARANTEED BY RPEPAID AND INSURED PARCEL POST. Order direct from this ad and save time. Circular Free.

**STAR HATCHERY Holland, Mich. Box 500**

### CHICKS THAT SATISFY

Our 11th year. Brown Leghorns English Type White Leghorns GREAT LAYERS Large white eggs. 100 per cent safe arrival guaranteed. Get our prices at once. We save you money.

Large instructive catalogue free.

**WOLVERINE HATCHERY ZEELAND, MICH., R. M. 2.**

## CHICK PRICES SMASHED



### CITY LIMITS HATCHERY

Route 5 Holland, Mich.

CHICKS for 1922 season from Michigan's old reliable Hatchery. White Leghorns, Anconas Barred and White Rocks and Reds, the popular laying strains. High record, expert Hogan tested flocks only. Preference given early orders. Chicks delivered Postpaid and full count strong live chicks guaranteed 14th season. Fine instructive poultry catalog and price list free. We want to show you that we deserve your business. Write

**HOLLAND HATCHERY, Holland, Mich., R 7**

### 500,000 CHICKS

at very reasonable prices from our heavy laying strain of English and American White Leghorns, Brown Leghorns and Anconas. Shipped by parcel post prepaid. Special prices on 1,000 lots. Catalogue free.

**Wyangarden Hatchery Box B, Zeeland, Mich.**

### BABY CHICKS

We furnish Pure Bred Chicks of the finest quality from high egg-producing stock. Flocks built directly from laying contest winners. We have seventeen breeds. Write for our free illustrated catalogue and price list.

**J.W. OSSEGE HATCHERY, Dept. 36 Glandorf, Ohio**

### Big Value Baby Chicks

Eleven popular, money-making breeds. Easy to buy—priced low. Easy to raise—husky, healthy, vigorous. And guaranteed! Write today for FREE catalog showing many breeds in full colors.

**OHLS POULTRY YARDS and HATCHERY BOX 28, MARION, OHIO**

### CHICKS

### GUARANTEED TO SATISFY

Barron strain White Leghorns and S. C. Brown Leghorn chicks from Hoganized, heavy laying selected breeders. Can ship March 13th and later. Order at once. 14c each postpaid. 100 per cent delivery guaranteed.

**ROYAL HATCHERY Zeeland, Mich.**

### CHICKS

from stock that is true to name in both plumage and type. Selected each year for health and high egg production. LEGHORNS, ROCKS, ORPINGTONS, WYANDOTTES, REDS and MINORCAS. Descriptive catalog free. Get it before ordering elsewhere.

**STANDARD POULTRY CO., Route 21, Nappanee, Ind.**

### Day Old Chicks, Standard varieties. Make your selections. Catalogue and price list now ready.

**H. H. PIERCE, Jerome, Mich.**

### DAY OLD CHICKS

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

**JAMESTOWN HATCHERY JAMESTOWN, MICHIGAN**

### DAY OLD CHICKS

Order your Baby Chicks now from selected heavy laying strain single comb White Leghorns, English strain Brown Leghorns, Anconas and Reds. Send for price list.

**HILOREST HATCHERY, R 2, Holland, Mich.**

# MARKET FLASHES

## TRADE AND MARKET REVIEW

**L**ITTLE change in the general business and trade situation has been noted during the past week; the lack of uniformity in trade development, in different parts of the country, is the leading feature, local conditions having much to do with the volume of business transacted. Good judges of trade conditions express the opinion that the country is at this moment rather long on optimistic sentiment and short on real business. Cut rate sales are still the rule, the country over, making it certain that business will be rather quiet until this bargain-counter stuff is out of the way. Trade sentiment in the central and western areas of the country, is favorably affected by the rapid rise in the selling prices of farm products which has occurred during the past 60 days. Wheat is 40 per cent higher than the autumn "low," corn is 35 per cent and hogs 25 per cent higher, with still a fair prospect of more appreciation.

The markets for nearly all basic materials are fairly active at prices which hold firm with a tendency to advance. Orders for structural steel are coming in rapidly and manufacturers are making ready for an increased production. Wool is firm and steady and cotton has one cent per pound on spot sales; in spite of better cotton prices, the southern district is reported to be decidedly dull, from a trade standpoint.

Reports, from the leading agricultural districts of Michigan, indicate a much better feeling among farmers than that which prevailed on the opening of the year. In many districts, the banks are said to be giving more favorable consideration to loans for production purposes. While the supply of what is termed "new money" is rather limited the pressure, for immediate payment on past due paper, has been relieved and growers are making their usual plans for spring planting. The War Finance Corporation reports that they have, had three applications for loans to Michigan banks, one of which has been approved. Inquiries have been received from many bankers in the state and the prospect is that a large number of loans will be made in the next 60 days.

The week has been decidedly quiet in financial and investment circles; the recent strength and general firmness in the New York stock market gave way to a wave of profit taking during the latter part of the period and the final business was decidedly dull and featureless. Call money ruled at 4 per cent with a weakening tendency noted in connection with long-time paper. Liberties and other bond issues were strong and active. The weeks bank clearings were \$5,576,085,000.

## WHEAT

Following a strong day Monday and a strong opening Tuesday on

Grade	Detroit	Chicago	N. Y.
No. 2 Red	1.43	1.42 1/2	1.52 1/2
No. 2 White	1.40		1.43 1/2
No. 2 Mixed	1.40		

No. 2 Red	No. 2 White	No. 2 Mixed	
Detroit	1.94	1.92	1.92

both the Chicago and Detroit markets when wheat prices advanced from three to six cents a bushel the close of the market Tuesday was weak and unsettled with prices down a cent or two. At that Tuesday's final quotations placed Detroit No. 2 red wheat at \$1.43 and Chicago \$1.40. A prominent grain dealer in the state offers the opinion that the present grain market is purely a speculative affair and that present prices cannot hold. At the same time export business is on the gain and there appears to be a genuine conviction on the part of the trade that the world is rapidly getting down to a hand-to-mouth basis. Among the more recent bidders on grain for export were firms representing German and Holland inter-

Edited by H. H. MACK

## MARKET SUMMARY

Grain market steady; demand good. Rye higher. Beans continue strong and in demand. Produce market rules easy with demand and receipts light. Hay firm. Cattle steady. Sheep active. Hog market shows much activity and prices advance. Receipts of all kinds of live stock small.

(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.)

ests, Japan continues to take a goodly supply through Pacific coast ports. It would not be at all surprising to see some temporary weakness develop in this market. It all depends on the amount of wheat held in speculative hands. But if there is very much of this wheat held it is surprising that the recent strong market has not brought about greater selling. If on the other hand the speculators can withstand the temptation to unload at this time and take profits which must be large, in order to wait for higher prices it must be that they have excellent reasons for believing in higher prices.

## CORN

The corn market continued strong last week and new price levels were

Grade	Detroit	Chicago	N. Y.
No. 2 Yellow	.62	.58 1/2	.75 1/2
No. 3 Yellow	.60	.56 3/4	
No. 4 Yellow			

No. 2 Yellow	No. 3 Yellow	No. 4 Yellow	
Detroit	.73		.70

made nearly every day. Trading was liberal the entire week. Buying as an investment increased owing to the belief that consumption of the grain this season is greater than usual and that there will soon be a fair decline in the movement of corn from farm to market. Foreigners were active all week and they took large quantities, the major portion going to the United Kingdom, it was reported, but the Russian Relief Commission also purchased considerable. Europe is expected to be in the market for some time yet. Country offerings were moderate on all markets. Receipts at Chicago amounted to 8,906,000 bu. and shipments 4,922,000 bu. Reports from Argentina have it that the crop in that country will not be as good as that of last year, and that the holdover from last year is about all sold. This augurs well for the market in this country if such be true. Although there may be a temporary weak-

spell in the market and prices decline slightly, we look for still higher prices within the next few weeks. The opening of the present week found a strong market and prices higher.

## OATS

Oats are in poor demand and improve only slightly as other feeding

Grade	Detroit	Chicago	N. Y.
No. 2 White	.42 1/2	.39 1/2	.40 1/2
No. 3 White	.40	.37	
No. 4 White			

No. 2 White	No. 3 White	No. 4 White	
Detroit	.49 1/2	.48	.45

grains advance. Best quality oats reached 43 cents at Detroit Monday, but dropped down again a half cent by the close of the session. Receipts are fairly liberal and demand is poor.

## RYE

There was a good demand for rye the fore part of last week and by Wednesday the price was up to \$1.04 for No. 2 at Detroit but later there was a temporary weakness and a decline of one cent. This was gained back on Saturday and the market was steady. At Chicago the price went as high as \$1.02 for this grade but before the close of the week it was down to 99 1/2-2c. This period of weakness was due in the markets. We never have a steady period of strength or weakness without reaction. The present condition of the market warrants further advances within the near future.

## BARLEY

A slightly stronger tone is noted in the barley market and prices at Detroit are \$1.20@1.25 per cwt. Chicago prices are 60@64c per bu.

## BEANS

The bean market is shaping up in fine style. For some time the Detroit market has shown unusual activity with prices advancing rapidly. Other markets, like Chicago, New

York and Boston failed to follow suit, at least in any where near the same degree. Not being able to clearly understand the forces at work on the Detroit market we have

Grade	Detroit	Chicago	N. Y.
C. H. P. Red Kidneys	5.95	6.25	

Grade	N. Y.
Detroit	8.85

been puzzled to know why this market has been running so much stronger than any of the others. There is no doubt but what the bear jobbers of the state are very anxious to secure an increased acreage and are using such means as their command to boost the price of beans at this particular time. The end of last week, however, found other markets responding to the improved demand and gradually declining supplies and the Boston market touched \$6. Prices at Detroit gained all last week and closed Tuesday of the current week at \$5.95, a gain of 45 cents over the previous week. We advise our readers to watch this market very closely from now on. We do not expect prices to go very much higher. They have already advanced more in proportion than the prices of any other comparable food, and the natural thing to expect is that they will soon reach a point where buying for both canning and immediate consumption will be curtailed.

## POTATOES

The potato market is giving holders some worry. For two weeks it

Grade	Detroit	Chicago	New York	Pittsburg
Detroit	2.08			
Chicago		1.92		
New York			2.20	
Pittsburg				2.20

Grade	Detroit
Detroit	1.50

has been unsettled and price trends have been downward. The feeling of confidence that was so prevalent a few weeks ago has given way to a feeling of doubt. This has no doubt been caused in large measure by the bureau of markets recent estimate of potatoes still in the hands of farmers. These estimates placed some 20 million bushels left in Maine, 14 million in New York state and large quantities in other states, or a total yet to market of 141 million bushels. It is generally believed that these estimates are greatly exaggerated and that no such amount of potatoes remain at country points. A large New York shipper who has a number of stations throughout the state declares that there are less than 10 million bushels back in New York. He says:

"According to reports given by the same bureau up to January there were about 18,000 cars more shipped to date than there were last year. Now, according to the December final report when the crop was all grown and gathered the total crop was 346,000,000 bushels. When you add the 40,000,000 bushels already shipped more than last year, the 76,000,000 bushels short that the total crop estimate showed how in the world can there be such an amount of potatoes left in the United States?"

This gentleman blames these alleged incorrect reports for the present condition of the market and feels that were it not for this demand would be better and prices higher.

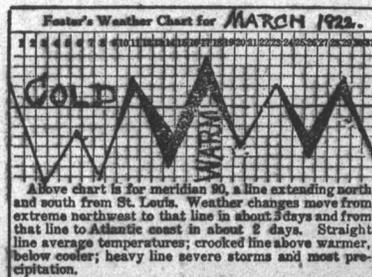
The Business Farmer has not lost confidence in this market by any means. We expect to see higher potato prices.

## HAY

There is a little more strength in the hay market than at our last writing owing to small offering of No. 1 hay. The poor grades continue a drag on the market and move only when the better grade cannot be secured. No price changes have been made the past week on the leading markets.

## THE WEATHER FOR NEXT WEEK

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



WASHINGTON, D. C., Feb. 23, 1922  
 The week centering on Feb. 23 will average about normal temperature on meridian 90 from Gulf of Mexico to the far north. The high temperature of that disturbance will be in northwestern Canada about Feb 26, in Michigan March 1, and in eastern section March 2. A cool wave will be in northwestern Canada near March 4, Michigan March 7, eastern sections March 2. A cool wave will be in northwestern Canada near March 4, Michigan March 7, eastern sections March 8.  
 March temperatures will average near the average of the past four months or somewhat colder. Two principal storms will stir up the atmosphere severely and that is the only cause of the month averaging colder

than the past six cropweather months. The storms upset the atmosphere and bring the cold, pure, upper ozone down to the surface. These storms will get in their work during the weeks centering on March 16 and 27. Both of them will be near the March equinox when the sun will be over the earth's equator. That event surely adds something to the severity of the storms, but not as much as many have supposed.

The storms of the week centering on March 16 will be exceedingly severe and will begin to affect the weather near March 9. Better prepare for rough weather and carefully study the weather chart, so as to understand when the storms are expected to reach your vicinity. The other storm will center on March 27.

Between the middle of April and May 1 cropweather conditions will change from the average of the past five months to an entirely different makeup.

The cool wave of March 4 will be a severe cold wave on northern parts of meridian 90 and will work southward and eastward slowly across the continent. Bad storms will come on to the continent from the northwest Feb 27 or 28. Don't neglect preparation for these storms.

*W. T. Foster*

	No. 1 Tim.	Stan. Tim.	No. 2 Tim
Detroit	19.00 @ 20	18.00 @ 19	17.00 @ 18
Chicago	22.00 @ 23		19.00 @ 20
New York	28.00 @ 29		23.00 @ 24
Pittsburg	21.50 @ 22	19.00 @ 20	17.00 @ 18

	No. 1	No. 1	No. 1
	Light Mix.	Clover Mix.	Clover
Detroit	18.00 @ 19	15.00 @ 16	14.00 @ 15
Chicago	20.00 @ 21	18.00 @ 19	17.00 @ 18
New York	25.00 @ 26	22.00 @ 23	
Pittsburg	18.50 @ 19	20.50 @ 20	20.50 @ 21

LIVE STOCK MARKET

The general live stock situation is gaining strength, every day, as time goes on. Live cattle and dressed beef have been slow to start up the line but the tremendous gain in hogs and lambs is sure to have an effect upon selling prices in the other leg of the live stock triangle. The opening, last week, in the cattle division of the Chicago market, was rather weak but on every other day in the week, except Friday, prices were firm with an advancing tendency; the gain in the steer division was from 40 to 50 cents per cwt. for the week. Arrivals in the Windy City were 3,000 larger than for the week before but the quality was just about the same with very few extra killing loads on offer.

Exporters sent out about 1,250 cattle, last week, running largely to medium grades. The eastern beef trade showed strength all the week the close being at a gain of \$1 to \$2 per cwt. Order buyers were the main support of the Chicago market and even the packers were more active than on any other market since the beginning of the year. Long yearlings, sold in Chicago, last week, for \$9.25 per cwt.

While steers were rather the most active, all grades shared the advance, a fact, that usually develops whenever the market begins to advance as a result of other kinds of meat going higher. Stockers and feeders are meeting with a widening demand and values are hardening all along the line. Western cattle-men's needs are far in excess of the supply and prices are sure to go higher while the crowd is scurrying around trying to buy something cheap to consume grass. During the next month several live stock meetings are to be held in the west and some "price-fixing" is sure to come out of them.

The sellers are surely in the saddle in the sheep markets everywhere and the end is evidently not quite yet. Last week's receipts, at Chicago, were nearly twice as large as those of the week before but the trade was out after the wooly fellows and the week's gain, from the close of the week before, was from 50 cents to \$1 per cwt. Fat ewes, in fleece, brought \$8.25 and a load that had been clipped brought \$7 per cwt. Mature wethers sold up to \$9.25 while lightweight yearlings turned the trick at \$13 per cwt. The top for lambs in Chicago, last week, was \$15.85 being \$1.10 higher than the previous week and the highest price paid since the beginning of August, 1920. The demand for dressed lamb is growing in activity every day and the same can be said of the wool and belt markets.

The decided upward trend of live hogs and the speculative provision market have resulted in bringing about a situation that is unprecedented for this time of the year. Shippers continue to set the pace in all western markets but even the big packers have come into the market during the past week and made liberal purchases. Hogs are gaining steadily, in weight but it is a uniform average gain and not the result of a large number of heavy sows, sprinkled thru the arrivals. Hog raisers are beginning to "get next" and are holding onto everything with maternity instincts. The market looks stronger to the writer than on any preceding date.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, February 21st

**BUTTER**—Best creamery, in tubs, \$4 @ 34 1-2c per lb.  
**EGGS**—Fresh, current receipts, 27 @ 28c per dozen.  
**APPLES**—Greening, \$3.25 @ \$3.50; Steel's Red, \$3 @ \$3.50; Baldwins, \$2.75 @ \$3; Spy, \$3.50 @ \$4; Jonathan, \$3.25 @ 3.50.

**POPCORN**—Globe, 5c; Little Buster, 10c per lb.

**DRESSED HOGS**—Small to medium, 11 @ 12c; heavy, 8 @ 10c per lb.

**DRESSED CALVES**—Choice, 16c; medium, 12 @ 13c; large coarse, 5 @ 10c per lb.

**LIVE POULTRY**—Best spring chickens, smooth legs, 27c; leghorn springs, 23c; large fat hens, 28 @ 29c; medium hens, 27c; small hens, 25c; old roosters, 17c; geese, 20 @ 22c; ducks, 35c; choice large turkeys, 35c per lb.

**SUGARS**—Eastern granulated, \$5.85; non-caking mixture, \$7.15; XXXX powdered, \$7.05; No. 3 soft, \$5.50; Michigan granulated, \$5.65 per cwt.

**HIDES**—No. 1 cured, 6c; No. 1 green, 5c; No. 1 cured bulls, 4c; No. 1 green bulls, 3c; No. 1 cured calf, 14c; No. 1 green calf, 13c; No. 1 cured kip, 9c; No. 1 green kip, 8c; No. 1 horsehides, \$2.50; No. 2 horsehides, \$1.50; sheep pelts, 25c @ \$1; grubby hides, 2c under No. 2, No. 2 hides 1c under No. 2, calf and kip 1 1-2c under No. 1.

BOSTON WOOL MARKET

The Commercial Bulletin says: "The demand for wool in the eastern markets has fallen off considerably and some of the low grade scoured wools are held less strongly than they were, although the market generally is steady. The goods market is reported as somewhat erratic, overcoatings having sold fairly well, but staple suitings having dragged early. Every one seems to be pausing at the moment to determine so far as possible just what the future has in store."

The Bulletin gives quotations as follows:

Domestic—Ohio and Pennsylvania fleeces: Delaine unwashed, 48 @ 50c; fine unwashed, 38 @ 39c; 1-2 blood combing, 42 @ 44c; 3-8 blood combing, 40 @ 42c.

Michigan and New York fleeces—Delaine unwashed; 44 @ 45c; fine unwashed, 34 @ 36c; 1-2 blood unwashed, 39 @ 41c; 3-8 blood unwashed, 39 @ 41c; 1-4 blood unwashed, 37 @ 39c.

WEEKLY MARKETGRAM

U. S. Bureau of Markets and Crop Estimates

WASHINGTON, D. C.—For the week ending February 18, 1922.

**FEED**—Western feed markets strong, Eastern markets steady but inactive. Offerings of wheat feeds for prompt shipment light but considerable pressure to sell for March and April shipment. Production of wheat feeds in southwest improving and offerings are better. Linseed meal strong, production light, offerings small. Cottonseed meal firmer, supplies good, demand light. Gluten feed in good demand, production heavy. Hominy feed steady, offerings freer. Alfalfa meal demand and offerings light. Receipts and stocks generally good, demand light. Quoted Feb. 17; Bran, \$25; middlings, \$25, Minneapolis; White Hominy feed \$22.50, Chicago; Gluten feed, \$32.15, Chicago; 36 per cent cottonseed meal \$37, Memphis; Linseed meal, \$46, Minneapolis; No. 1 Alfalfa meal, \$17, Kansas City.

**DAIRY PRODUCTS**—Butter markets irregular at beginning of week but steady to firm at close. Closing prices \$2 score: New York, 38; Chicago, 36 1-2; Philadelphia, 37 1-2; Boston, 37 1-2 cents. Cheese markets firm with higher prices at Wisconsin country points. Distributing markets also show partly increased strength. Prices at Wisconsin Primary markets Feb. 17: Twins, 21c; Daisies, 22c; Double Daisies, 21 3-4c; Longhorns, 22 3-4c; Square Prints, 22 3-4c; Young Americans, 20 1-2c.

**FRUITS AND VEGETABLES**—Potatoe markets slow, dull and nearly steady during the week. New York sacks round whites weak in Philadelphia. Steady in New York at \$2 @ \$2.15 per 100 pounds. Northern sacked round whites down five cents in Philadelphia at \$1.65 @ 1.90. Colorado and Idaho rurals down 15 cents in Chicago at \$2 @ 2.10, Maine Green Mountains in bulk steady in New York at \$2.20 @ 2.35. Down 10 cents at shipping points \$1.41 @ 1.46. Round whites down 4 cents f. o. b. western New York shipping points

at \$1.82 @ 1.88. Northern stock firm f. o. b. shipping points at \$1.55 @ 1.70. Markets for barreled apples hold steady. Boxed stock advanced, New York Baldwins at 2 1-2 range \$7 @ 8.25 per barrel in leading markets. Michigan stock steady in Philadelphia at \$8 @ 8.50. In producing sections firm f. o. b. wire orders at \$7.25. Sales f. o. b. cash track up 25 cents at \$7 @ 7.25. Markets for old cabbage slow and dull. New York Danish type stock weak in New York city at \$35 @ 38 per ton bulk.

**GRAIN**—All grains sold at new high points on crop during the week. Principal market factors were: Strong Liverpool and Buenos Aires markets, improved flour and milling demand, bullish crop reports from southwest and Argentina. Closing prices in Chicago cash market: No. 2 red winter wheat \$1.37; No. 2 hard winter wheat, \$1.35; No. 2 mixed corn 57 cents; No. 2 yellow corn, 57 cents; No. 3 white oats, 36 cents. Average farm prices: No. 2 mixed corn in central Iowa, 44 cents. No. 1 dark northern wheat in central North Dakota, \$1.32 1-2; No. 2 hard winter wheat in central Kansas, \$1.20. For the week Chicago May wheat up 7 1-4c; closing at \$1.40 3-8; Chicago May corn up 3 1-2 cents at 62 1-2 cents; Minneapolis May wheat up 6 3-4 cents at \$1.43; Kansas City May wheat up 7 cents at \$1.28 3-4; Winnipeg May wheat up 10 1-2 cents at \$1.38.

FARM BUREAU NOTES

The Transportation Department of the American Farm Bureau Federation announces that all farmers having claims for damages, loss in transit, etc., against the U. S. Railroad Administration must file them in the proper court before February 28.

Congress recently grew weary of waiting for the house committee on Interstate and Foreign Commerce to report out the bill, H. R. 64, commonly known as the Truth-in-Fabric, which the American Farm Bureau Federation and other farm organizations are interested in seeing passed. The Agricultural Bloc and others recently introduced a resolution that the house of representatives resolve itself into a committee of the whole of the house of the union, for the purpose of considering the bill.

I like your paper very much. I don't see how any one can get along without it. It is food for thought and it will make you think whether you want to or not.—Fred L. Babbit, Clinton County, Mich.

We couldn't do without your good paper. Keep it coming always and I assure you, your efforts in behalf of the farmers are appreciated.—Bert. S. Fausett, Isabella County, Mich.

For Healthy Orchards Plant Michigan Grown Trees



**BUY** handsome, thrifty trees, grapevines, berry bushes, roses, and shrubs from your own state and insure prompt receipt in vigorous condition. Kalamazoo County is famous for hardy, well-rooted stock. We guarantee healthy and true to name. You ought to plant more fruit trees this season. Special rates if you order now. Our handsome catalog of dependable trees for the asking.

**Celery City Nurseries**  
Box 216 Kalamazoo, Mich.

Nursery to you, At Pre War Prices

**BEFORE YOU SELL YOUR EGGS, POTATOES, CABBAGE, APPLES AND OTHER PRODUCE** write this farmer owned organization telling what you have to sell. With a large warehouse in Detroit and an efficient selling organization we can assure you of best service. **PRODUCERS & CONSUMERS CO.** Grand River & Lorraine Ave. Detroit, Mich.

BOTH MICHIGAN FARM WEEKLIES

**THE MICHIGAN BUSINESS FARMER**  
WEEKLY, \$1 PER YEAR

**THE MICHIGAN FARMER**  
WEEKLY, \$1 PER YEAR

\$1 50

ONE YEAR FOR BOTH

Advise in each case whether new or renewal subscription. Send money order, check or registered letter to The Michigan Business Farmer, Mt. Clemens, Mich.

The Seven Gifts of GRIMM Certified-Genuine

**Assure You**

Feeding out specifically for crop more alfalfa Assured returns much greater

**Hardy Long Life** drives under severest conditions, from alternate freezing and thawing of milky churning to extreme cold of long northern winters

**Powerful Soil Improver**, producing abundant nitrogen and humus and excellent mechanical condition. 10% to 50% increase yield of crops following

**Drought Resistant**. Not a better under summer drought conditions. Seedlings survive when others perish

**Largest Yield**. Short and longtime tests prove to outyield and contain alfalfa or hay crop once to two tons per acre per year

**Best Hay**, most palatable, most economical of any farm feed.

**Finest Pasture**. Stands more abuse, with later pasture than common alfalfa. Also no equal for pigs.

**Prosperity.**

Due to the vast amount of common alfalfa, or badly mixed lots sold on the market as GRIMM, many farmers have been bound into using poor or inferior crops. On the other hand, from actual clearances, tests of GENUINE GRIMM are greatly exceeding those of alfalfa and becoming more progressive each year.

You will be assured success by sowing this spring CERTIFIED GENUINE GRIMM seed, produced by conservative progressive organizations under strict field and bag supervision. We are anxious to make possible for you to get absolutely reliable GRIMM that will give results.

**Idaho Grimm Alfalfa Seed Growers Association, Grimm Alfalfa Seed Producers Assn., N. Dakota**

**WRITE AT ONCE** for particulars & quotations to

**MICHIGAN SEEDS** SEED DEPARTMENT BOX 51 MICHIGAN STATE FARM BUREAU Lansing, Michigan

4 HEMSTITCHED PILLOW CASES 98c



YOU'VE put off buying a new pillow case—when you have really needed—until you could get them at a reasonable price.

Here's your chance to get just what you want not only at a reasonable price, but at a real BARGAIN PRICE! This extraordinary offer is possible only because of our enormous volume of business.

We've made up these sets of 4 carefully hemstitched pillow cases in full size (42x36 inches before hemstitching), and they are the quality formerly priced at \$2. Now, as a special spring offer, they're marked at 98c.

SEND NO MONEY

Just fill in and mail today this **SATISFACTION COUPON**

**HOMES SUPPLY CO.,** Dept. 380 Yonkers, N. Y.  
 Send me a set of 4 fine white hemstitched pillow cases, your special spring offer No. 511. I'll pay the postman 85c plus postage when he brings them. If I'm not satisfied, I'll return them to you and you agree to return promptly my money plus postage. I thus assume no risk nor obligation.

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 (Note: Many customers order several sets)

JOHN LEWIS CHILDS, INC.



Clusters of delicate light blue blossoms, in size and color like the Forget-me-not, borne on long slender stems. Texture resembles Queen Anne Lace. Exquisite with cut flowers.

**Chinese Wool Flower**, flower clusters, massive feathery balls of brilliant crimson, blooming till frost.

**Aster Novelty Hybrids**, will produce many new types and colors never offered.

ALSO 2 FAMOUS VEGETABLES

**Matchless Lettuce**, remarkable for crispness and juicy texture. Grows somewhat like Romaine.

**Sweet Corn**, 60-day Makedog. Earliest of all, large, sweet and tender.

All Five Packets for 25c

All tested novelties and easy to grow. Send for big colorplate catalog free. Complete stocks of seeds, bulbs, window plants, perennials, fruits, berries and special novelties. Values exceptional.

John Lewis Childs, Inc., Floral Park, N. Y.

**Choice Strawberry Plants** \$3.75 per 1000 all standard varieties at \$3.75. Guaranteed first class or money refunded. Catalog. Filson Woolf, Allegan, Mich.

# —WIN A PRIZE—

26 Prizes  
for the best,  
most attract-  
ive and  
carefully  
made  
descriptions



What is  
Your  
Conception  
of a  
Good  
Pair of  
Shoes?

## BIG CONTEST NOW ON!

Read the List of Prizes and the Rules of the Contest

## THEN SEND IN YOUR ANSWERS

There is yet time for all to compete, as this contest is open until noon, April 15th. The prizes are very much worth while. The effort to compete is not taxing.

But do not delay. Read the rules, given below,

and forward your answers to the Contest Editor. He will answer inquiries from those who do not fully understand the rules. If there is a dealer in your town who sells Hirth-Krause MORE MILEAGE SHOES, see them. It will help you write a better answer.



### More Mileage Shoes Are Good Shoes

We have been in the leather tanning and shoe manufacturing business for three generations. Through all these years we have marketed a full line of shoes for men, women and children. Our shoes have been known for fit and comfort, for good-style, for wonderful wear and for reasonable prices.

That is OUR conception of good shoes. What is yours? We believe the clever answers we receive in this contest will teach us many new and interesting ways of expressing our thoughts about the shoes we make and sell.

Maybe YOUR particular answer will be THE ONE to win one of the CASH PRIZES. Give it a try. And do it soon—the sooner the better.

Watch for final announcement of names of prize-winners, to be made by dealers, who will post bulletins in their store windows, giving names of the lucky ones. If you do not know name of your nearest Hirth-Krause dealer, write us for it.

Go to a Hirth-Krause dealer and see these shoes before you try for a prize

#### LIST OF PRIZES

First Prize \$25.00 in cash.  
Second Prize \$10.00 in cash.  
Third Prize \$ 5.00 in cash  
and a pair of \$5.00 More  
Mileage Shoes.  
Twenty-three Prizes of a pair  
of Hirth-Krause More Mile-  
age Shoes—the kind that  
retails for \$5.00.

#### RULES OF CONTEST

Contest is open to everybody. Opens January 28th and closes at noon April 15th.

Answers limited to 25 words. Hyphenated words counted as one.

Contestants permitted to send three answers—no more.

In case of a tie, both parties get full amount of prize.

All answers must be plainly addressed to Contest Editor, HIRTH-KRAUSE CO., Grand Rapids, Mich.

Winners of these prizes will be announced in bulletins posted in store windows of Hirth-Krause dealers; and through circulars distributed by said dealers from their stores, on or about May 1st.

Both cash and shoe prizes will be distributed by Hirth-Krause dealers when winners' names are received from Contest Editor. If shoes desired are not in stock dealers take size and stock number and get them from us for delivery to the winner, when taken from dealer's stock to save time, dealer sends us size and stock number and we replace same without any cost whatsoever.

This is to be the most hotly contested prize contest we ever staged. Send in your answers. Maybe you will be one of the lucky ones.

# HIRTH-KRAUSE CO.

Tanners - Shoe Manufacturers  
Grand Rapids, Michigan