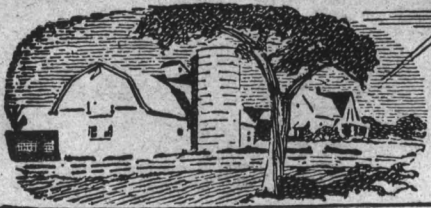
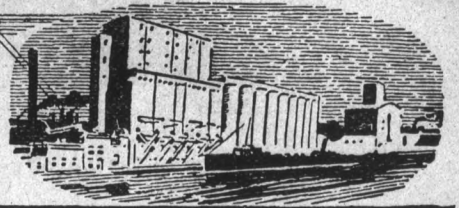


# *The Michigan* BUSINESS FARMER



An Independent  
Farm Magazine Owned and  
Edited in Michigan



VOL. XI, No. 13

SATURDAY, FEBRUARY 16, 1924

TERMS: TWO YEARS \$1  
60c PER YEAR—5 YRS. \$2



"AN EGG A DAY KEEPS THE AXE AWAY"



# A Giant Who Works For You

There is a giant who works tirelessly to lighten the labor on the American farm, to make the farm more productive, and farming more profitable.

He is personified by the vast resources of the Ford organization, whose herculean labors are directed primarily toward lowering the cost and increasing the efficiency of Ford cars, Ford Trucks, and the Fordson Tractor.

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To the farmer this has meant lower and lower farm costs, better arrangement of farming activities, more money crops, all with less effort and therefore with greater net profit—proof enough that it is to his interest to standardize on Ford equipment.

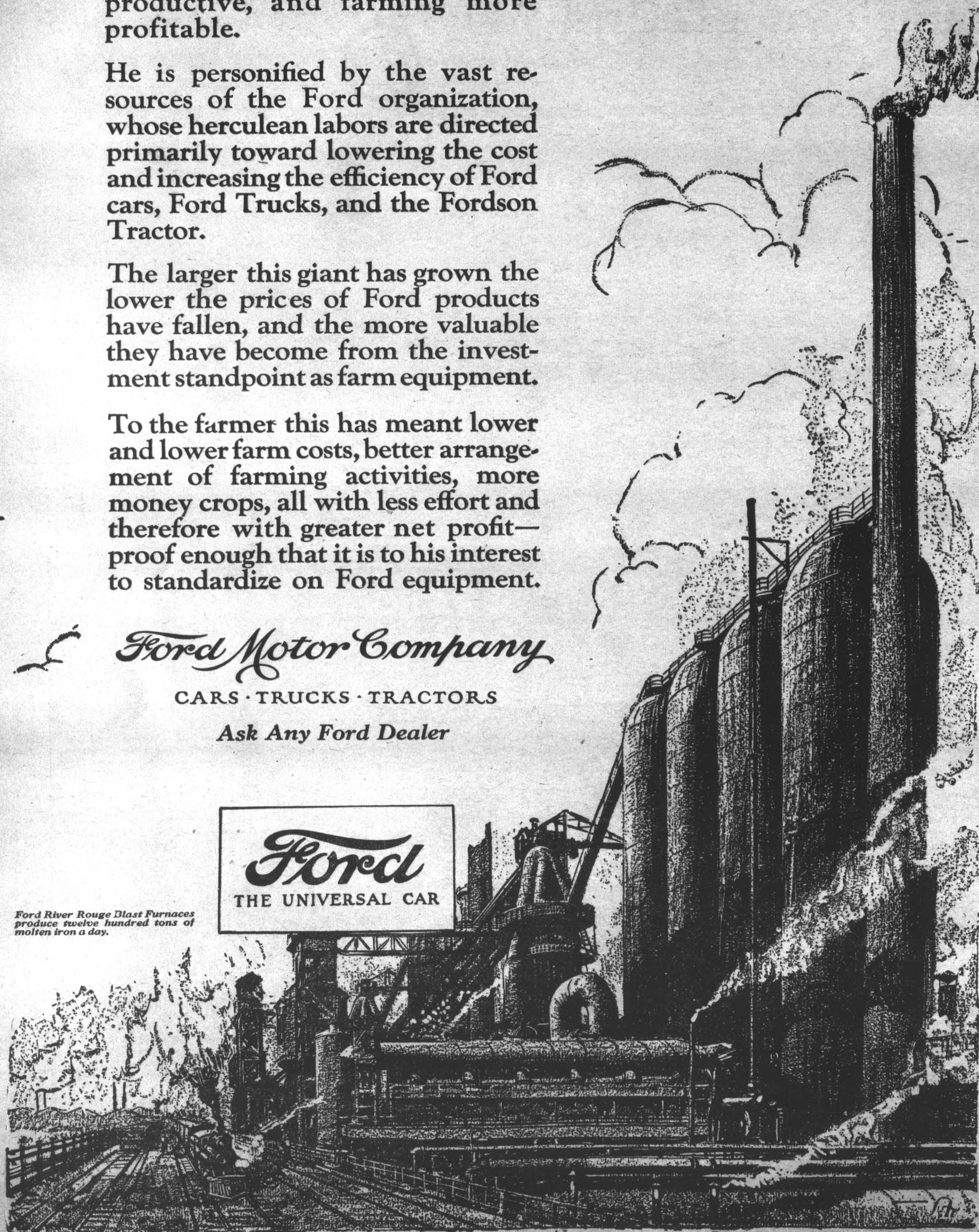
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Ford River Rouge Blast Furnaces produce twelve hundred tons of molten iron a day.





SATURDAY  
February 16,  
1924

VOL. VI, No. 13

Being absolutely independent  
our columns are open for the  
discussion of any subject per-  
taining to the farming business.

"How to the fine, let the chips fall where they may!"

# The Michigan BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly  
Mt. Clemens, Mich.

TWO YEARS \$1

Entered as second-class mat-  
ter, August 22, 1917, at the  
post-office at Mt. Clemens,  
Mich., under act of March  
3rd, 1879.

## Farm Bureau Pleased With Record of Past Year

M. L. Noon Elected President and Clark Brody Retained as Secretary—General Manager at Sixth

### Annual Meeting of Michigan State Farm Bureau.

By STANLEY M. POWELL

(Lansing Correspondent of The Business Farmer.)

**S**ATISFACTION, harmony and enthusiasm marked the sixth annual meeting of the Michigan State Farm Bureau Board of Delegates held at East Lansing, February 7-8. One hundred and fifty accredited delegates and about 300 other Farm Bureau members reviewed the splendid progress of the past year and aggressively formulated a program of policy and action for the coming year.

In a masterly way in the President's annual address, W. E. Phillips, retiring president of the Michigan State Farm Bureau, sketched the history of the organization, rejoiced in its admittedly splendid achievements and briefly outlined his recommendations regarding the future activities. He declared that the Michigan Farm Bureau was today stronger and more substantial than ever before, even though the present membership was less than that which was signed on the first wave of after-war enthusiasm.

#### Brody Pictures Progress

Perhaps the most impressive feature of the meeting was the annual report submitted by Secretary General Manager, Clark L. Brody, summarizing for the delegates the progress and achievements of organized agriculture in Michigan and giving the delegates a panoramic view of activities of the various Farm Bureau departments and services.

Other high spots of the two day meeting were the brief oral reports of the heads of the Bureau's departments, an exceptionally forceful and appropriate speech by N. P. Hull, the election of the new Farm Bureau Board of Directors and the consideration and adoption of the annual resolutions. As illustrating the close cooperation and harmony existing between Michigan farm organizations, it is worthy of note that Mr. Hull is chairman of the executive committee of the Michigan State Grange and is also President of the Michigan Milk Producers Association, one of the powerful commodity exchanges affiliated with the Michigan State Farm Bureau. He urged the delegates to be loyal to their own best interests by standing by their Farm Bureau and taking a personal responsibility for its advancement.

#### Pick New Bureau Heads

The new Farm Bureau Board of Directors, which is composed of one representative of each of the five affiliated commodity exchanges and six directors chosen at large was elected as follows: M. L. Noon, Jackson, Michigan Milk Producers Ass'n; Herbert Gowdy, Union Pier, Michigan Fruit Growers, Inc.; Fred Smith, Elk Rapids, Michigan Potato Growers Exchange; John O'Mealey, Pittsford, Michigan Live Stock Exchange; W. E. Phillips, Decatur, Michigan Elevator Exchange; L. Whitney Watkins, Manchester; E. C. McCarty, Bad Axe; Mrs. Edith M. Wagar, Carleton; George Wheeler, Mt. Pleasant; M. B. McPherson, Lowell; and Verold F. Gormely, Newberry. The new Board organized by electing M. L. Noon, President and M. B. McPherson, Vice-President. Clark L. Brody was re-engaged as Secretary and General Manager.

#### Resolutions Fix Programs

The resolutions adopted by the Farm Bureau Board of Delegates constitute probably the most comprehensive program of cooperative marketing and agricultural and general legislation which was ever laid down by any Michigan farm organization. Outstanding in popular interest were resolutions advocating a 2 cent gasoline tax, a State income tax and supporting the State Board

of Agriculture in the discharge of its full constitutional duties in the management of the Michigan Agricultural College and its extension activities.

The delegates expressed satisfaction with the present management of the State Farm Bureau and its affiliated commodity exchanges, urged the production of better quality products, favored the teaching of co-operative marketing and farm cost accounting in the public schools and colleges, endorsed County Agent and Boys' and Girls' Club work, favored greater participation by women in Farm Bureau affairs, opposed Pittsburgh Plus and commended the management of Michigan fairs for efforts now being made to present cleaner and more educational exhibitions.

#### Legislative Program

With reference to national legislation, the Farm Bureau delegates adopted resolutions opposing tax-exempt securities, consumption or sales taxes, government price fixing and governmental guarantees, any form of federal ship subsidy and a lowering of the Great Lakes-St. Lawrence Waterway, strict enforcement of the 18th amendment and Volsted Act, national truth-in-fabric and truth-in-fruit-juice legislation, a law requiring treating all imported seed with Eosin dye, continued support for T. B. work, a national standard container bill, a quarantine on the oriental moth, and a resolution which has as its aim securing a more desirable class of immigrants. The resolution adopted on Muscle Shoals, while not mentioning the Ford tender specifically, still corresponds with it in nearly every requirement which it prescribes and contains a provision in opposition to Government operation.

The State legislative program as laid down for the Farm Bureau by its Board of Delegates includes in addition to the State gasoline tax and the state income tax, a resolution favoring pay-as-you-go policy, another urging that the counties' share of the automobile license money should be collected by the counties wherein the autos are owned and that each county's portion be retained by the county treasurer and the balance turned over to the State. The Farm Bureau program

favors legislative reapportionment based on citizenship with a restriction on the maximum delegation from any one county and insists upon full observance of the moiety clause, advocates educational qualifications for citizenship, urges prison manufacture of binder twine and other farm supplies, favors the payment of state bounties on wolves and opposes the present system of paid state trappers.

#### Unexcelled in Progress

"The farmers of Michigan are not excelled by those of any other state in the development of their cooperative marketing, transportation, pure seeds and other services," Clark L. Brody told the delegates in presenting his annual report.

Speaking of the great commodity marketing organizations affiliated with the State Farm Bureau, Mr. Brody said that the Michigan Milk Producers Ass'n surpasses any organization of its kind in the country; the Michigan Elevator Exchange, serving 150 farmers' elevator associations, is a national leader in that field. The Michigan Live Stock Exchange with its two terminal marketing offices at the Detroit and Buffalo yards gives some 233 Michigan associations of farmers live stock marketing service.

The Michigan Potato Growers Exchange with about 112 associations and the Michigan Fruit Growers, Inc., with 30 associations enrolled complete the groups of Michigan farmers' cooperative marketing organizations that probably handle \$40,000,000 worth of business annually for their members.

"The commodity marketing exchanges are pillars of strength for the State Farm Bureau," declared Mr. Brody, and, on the other hand, the commodity exchanges to fortify themselves along grading, legislative, publicity, transportation and general service lines, need a powerful central service organization, combining all the farmers' organized economic power, such as the State Farm Bureau. Neither will reach its highest success without the other.

"In formulating the policies of the State Farm Bureau it is of highest importance that we keep close to the man actually tilling the land, and in this connection our member-

ship solicitors report that while the farmers are much concerned about cooperative marketing they regard with equal importance relief from unjust taxation, excessive freight rates, car supply, and information on public questions concerning agriculture. It should be recognized that cooperative marketing, while a big factor, will not alone bring the complete relief so sorely needed by the farmer."

#### The Bureau vs. Politics

Reviewing the history of the State Farm Bureau's legislative activities and discussing its failure to secure final passage of the gas tax and the income tax, Mr. Brody said, "There were many disappointments in attempting to carry out the legislative program outlined by the delegates one year ago. Nevertheless, the battles fought by our organization during the past year, especially that of the gas tax measure and resulting conflicts that followed along other lines, have demonstrated that the Michigan State Farm Bureau is a power to be reckoned with and that it is not subservient to the will of any politician or political faction.

"No farmers' organization has ever suffered more violent and unfair attacks than has your State Farm Bureau the past year, and those who would control your organization and make it serve their own ambitions have spared no effort to discredit your Farm Bureau officials and destroy the power and influence of the Farm Bureau. Had the farmers' interests been surrendered, these assaults would not have been made, as it is not the custom of those making such attacks to seek to destroy individuals or organizations that are serving their selfish purposes or that are not in their way.

"Our enemies who would destroy or cripple what they cannot control have attempted to brand the State Farm Bureau as a faction seeking to promote the ambitions of individuals for political office. While the Michigan State Farm Bureau has always taken a firm stand on legislative issues, and must continue to do so, it has never at any time been involved with the political fortunes of any person in any way whatsoever. It is and always has been kept free from such unsavory and emaciating entanglements and must be kept so at any cost. The Michigan State Farm Bureau has avoided those pitfalls that have too many times in the past destroyed or weakened farmers' organizations and has been strengthened rather than injured by the struggle. The Farm Bureau is still and always must be owned and controlled by its members only."

#### Conclusion

In concluding his masterly report, Mr. Brody uttered the following remarkable paragraph:

"The things really worth while in the world do not come easily but are the product of years and years of hard work, struggle and sacrifice, so it is not surprising and should not be discouraging that the development of the Farm Bureau has been a battle testing the mettle and demanding high courage and perseverance in the membership as well as in your officers and leaders. This is the stuff out of which the great movement essential to the welfare of thousands must be built. The mistakes and failures of yesterday are but the forerunners of the successes of tomorrow. We as farmers of Michigan have put our hands to the plow and are not turning back. The future is full of hope. We are going forward to a better day for organized agriculture."

## Eaton County Farmer is "Corn King"

**O**NE section of the recent M. A. C. Farmers Week program rather mysteriously announced that Michigan's 1923 Corn King would discuss the subject, "How I Did it." The mystery was finally cleared up when G. W. Putnam, Director of the M. A. C. farm crops extension work, announced that his department had been carrying on a semi-contest during this recent season. Twenty-five of Michigan's leading corn growers were chosen for this work and definite records were kept to determine the yield, the cost of production, and the profit per acre. Profit per acre was made the basis of the awards.

Charles Laughlin of Dimondale, Eaton county, produced 83 bushels of shelled corn per acre. Allowing a moisture content of 14 per cent, this is equivalent to a yield of 175 baskets of ears.

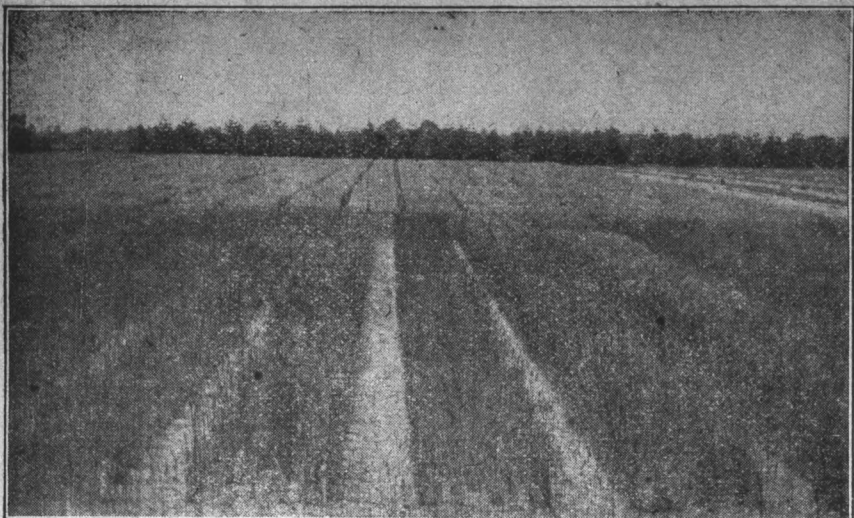
Totaling the cost of production up to, and including, the harvesting and then deducting this amount

from the value of the corn left a balance of \$63.51 profit per acre for Mr. Laughlin. As this was the largest per acre profit, a bronze medal, with the accompanying title of "Corn King of Michigan" was awarded to Mr. Laughlin.

Other leading contestants and the yields they secured per acre are as follows: "Paul Clement, Britton, Monroe county—72.5 bu.; Milo Robinson, Union City, Branch county—70.77 bu.; D. V. Bow, Saginaw—70.72 bu.; P. A. Smith, Mulliken, Eaton county—69 bu.; D. A. Geddes, Swan Creek, Saginaw county—67 bu.; Alfred Vincent, Durand, Shiawassee county—64 bu.; Rossman Bros., Lakeview, Montcalm county—53 bu.

This contest will be carried on during this coming season under the direction of the Michigan Crop Improvement Ass'n. Profit per acre will still remain as the basis of designating the winners. Additional awards will be made.





This is a view of the oat varietal series of the year 1909. You will note in fact that there are two such series of plots placed end to end. The one in the foreground is a small series planted from new strains that have not been sufficiently increased to plant plots in the longer series of varieties seen in the background. A varietal series is a collection of varieties planted side by side in a systematic manner. The standard variety is planted on the edge and each fifth plot throughout the series.

**T**HE problem in the production of a crop is to produce the greatest increase of value with the least expense. We must be careful to distinguish between increase of value and transfer of value already produced. The successful farmer must keep two bank accounts. One of these is in the form of soil fertility, and the other in the form of cash or credit. If he simply transfers his account from the farm soil bank to the one in town, he is not really producing any increase in his total valuation but merely changing the form of his wealth. He may do it in such a way as to easily deceive himself.

Farmers often are deceived also by appearances. A certain farmer's yield attracted attention for miles around, and other farmers traveled long distances to buy seed from him. This farmer did not have a superior variety, that could be depended upon to produce more than other varieties under the same conditions, but this high yield was largely due to the fact that the farmer knew how to farm. He was a good farmer living on a rich piece of land, improved by proper rotation and fertilization. He believed in plowing and fitting his land so as to give the seed the best chance to grow. He used acid phosphate that his crop might stand up, mature earlier and produce more under the same conditions. He believed in farming out all weed seeds that his soil might be put to the best use—the production of a desirable crop. He believed in saving his crop from the ravages of smut by the simple formaldehyde treatment. This alone probably saved him ten bushels per acre that would have otherwise gone to smut the threshers' faces, and make the passer-by think his barn on fire because of the dust.

Those who planted the seed that came from this splendid field, but planted it under different conditions, suffered a great disappointment because they did not get the results that they had expected. They had assumed that this fine yield was due to a superior variety and could be depended upon to give better yields than other varieties under poorer conditions, while the yield was actually due to good management of the soil. The yield of any crop is dependent upon two complex forces. One of them is the variety; the other, the conditions under which the crop grows.

The extra good farmer mentioned above had a neighbor who on a similar soil planted a high yielding pedigreed variety. He neglected to fit his land properly; he had run down his farm by failure to return to it the fertility taken out by the crops, and he did not treat his seed for smut.

Through this improper management, he lost heavily on a variety that had high-yielding characteristics and tried to do its best in spite of the farmer. Thus we had on the neighboring farms, conditions that more than counter-balanced the benefit obtained from the improved pedigreed high yielding variety.

What, then do we mean by an improved variety? We mean a variety that will under the same conditions produce better quality or yield or both. The best variety will fail if burnt up by drought, drowned by

poor drainage, consumed by smut, or if starved to death by lack of plant food, but even then the pedigreed strain will produce more than its poor competitor, if grown under the same conditions.

#### Plant Feeding

The problem of producing the greatest increase of value in oats with the least expense, was attacked by the Michigan Experiment Station



Mr. Frank A. Spragg

### MEET MR. SPRAGG, FOLKS

**I**N a series of articles, of which this is the first, Mr. Frank A. Spragg is going to tell the readers of THE BUSINESS FARMER about the different varieties of seeds for Michigan farms developed at the Michigan Agricultural College. Mr. Spragg is well qualified to write these articles as he has been plant breeder at the M. A. C. since 1906, coming to the College from Montana, and he has seen from the beginning the introduction of the new varieties of seeds introduced by the College. His first article is on oats, and following ones will take up wheat, rye, barley, beans, alfalfa and clover.

in 1900, when Prof. J. A. Jeffery began his selection work. Six years later, he turned over to the writer nineteen individual oat plants, whose pedigrees had already passed through six individually selected mother plants. The seed produced on each of these nineteen plants was planted in separate plots in 1907 and again in 1908. By this time the seed from each of Prof. Jeffery's selections had been increased enough to plant a one-twentieth acre plot side by side with each other and in direct comparison with a standard variety in 1909. The grain produced on each plot was carefully threshed by means of a small machine that was entirely cleaned out after every plot. Thus the seed was kept pure. One of these lines was distributed in 1911 as the Alexander and the other in 1916 as the College Wonder.

Beginning with 1906, individual plant selections were obtained from wider sources. Seed was obtained from farmers, seed men, other experiment stations, and from around the world through the U. S. Office of Seed and Plant Introduction and Distribution. About one hundred new sources of seed were received in the next five years. The seeds that went into the nursery were each individually planted five inches from its neighbor in order to be sure that what grew in a spot was only one plant. From these nursery beds thousands of plants have been selected and tested. Those that showed themselves superior were increased and later, tested for yield in direct comparison with one another so that the yielding powers of the varieties could be compared under like conditions. Each variety is usually planted twice in the same year and along side of a standard variety, for each of three years before making a selection for distribution. Those lots that stand at the top of an average of six such results are considered superior, and

# Improving the Oat Crop

M. A. C. Experts Very Successful in Developing Excellent Varieties of Seed for Michigan

By FRANK A. SPRAGG

Assistant Professor of Farm Crops, M. A. C.

worthy of further tests in the hands of farmers over Michigan. This work is being done by the members of the Michigan Crop Improvement Association. If a variety wins in the hands of this group of farmers, it is increased by them and distributed to those sections where it is best adapted.

The first group of varieties that were collected were tested for comparative yield only during the years of 1909 and 1910. Each of them were planted twice in each of those years however. Thus four results were obtained for each variety. On the basis of these results two new varieties were introduced in 1911. These were the Alexander oat and the Worthy oat, each of them coming from an individual plant selected in 1906. These two varieties were about equal in yield according to the test at M. A. C. and both of the varieties were about equal in yield of extra stiff straw. But some one started the story that the Alexander was suited to sandy soil and that the Worthy was suited to heavy

productions have replaced them in a few places, but the Worthy oat has become standard in the district around Fairgrove in Tuscola County where they can be obtained commercially in large quantities.

The oat-improvement work continued at M. A. C. and a large number of new sources of seed were drawn upon. The varieties that won in the earliest yields tests were later compared with the seed from new sources. The policy has been and still is, to send out an improved variety as soon as we are convinced that it is superior to known varieties, and then to keep looking for something better. Thus it happened that the College Wonder and College Success were distributed in 1916, and the Wolverine in 1917.

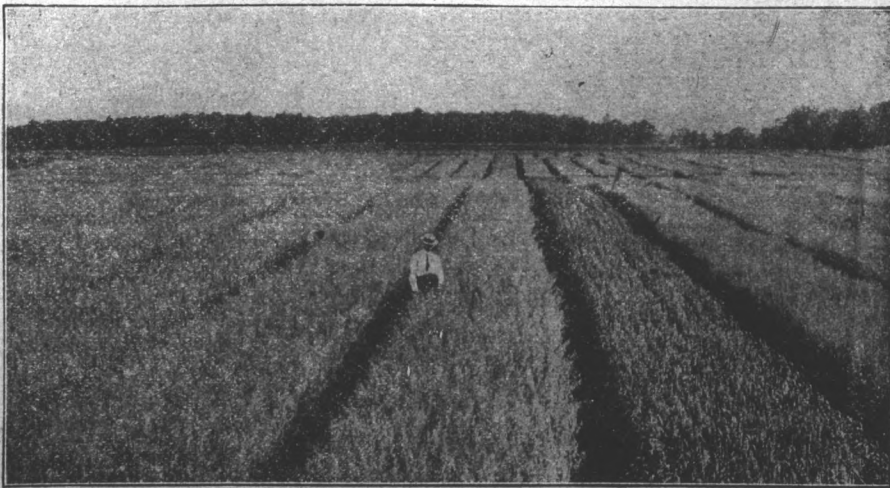
The College Success was a late variety that had to be planted extra early, but under those conditions produced exceptionally well. It was favored for a time by the farmers of Ottawa and the neighboring counties, where the Worthy had failed but the Worthy was generally reported superior to the College Success in eastern Michigan. However, twenty acres in Huron county showed 95 bushels of College Success oats per acre in 1918.

The Wolverine according to the College tests during the four years 1914 to 1917 averaged 20 per cent more bushels per acre than the Worthy. It is an earlier variety than any of the others mentioned in this paper. The Wolverine has taken well over Michigan and is now the leading pedigreed variety being grown by the Michigan Crop Improvement Association. One might wonder why the farmers of the Fairgrove district stick to and swear by the Worthy when the tests at the College show Wolverine superior. This brings up the problem of local adaptations, as well as personal preferences among farmers.

According to reports, the Strube oats have given extra good yields, on certain low, flat, recently drained parts of Saginaw and Bay counties. Also, it may be the ordinary varieties do not ripen properly under conditions that prevent early planting. Those conditions may need an extra early variety. The Worthy and Wolverine varieties were developed for good oat land. The Worthy and College Wonder were similar in many ways. They were equal in time of maturity belonging to the mid-season class that most farmers plant. However, College Wonder yielded 14 per cent more bushels per acre than the Worthy according to the college tests of 1911 to 1917. And yet among farmers the Worthy is still popular, and no pedigreed seed of the College Wonder is now available. This is an example of what is referred to above as personal preference among farmers.

In general, however, it might be said that wide awake farmers over

(Continued on Page 29)



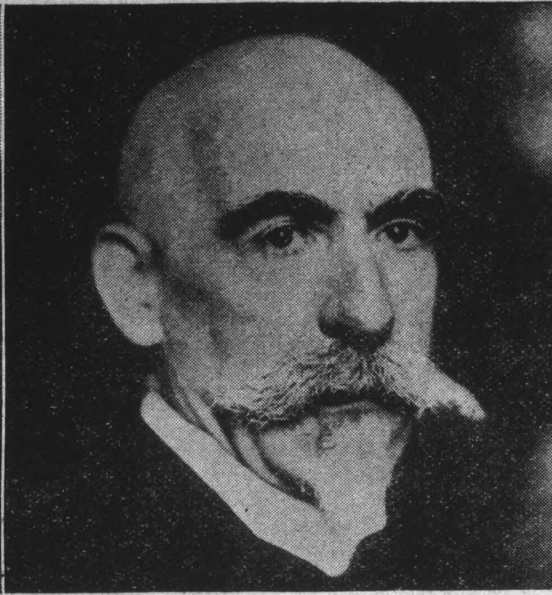
This is a view of a later varietal series when a large number of new series of seed had been drawn upon. This series, like all such varietal tests, is planted with the standard variety, sandwiched in frequently. This will give the farmer an idea of how he can compare varieties on his farm. They must not be planted on the edge of the field, and must be planted side by side in the same field. A drill width of each running the full length of the field will answer.



# PICTURES FROM FAR AND NEAR



**TWO BIG CHIEFS MEET.**—Chief Bacon Rind of the Osage tribe and some of his followers paid a visit to President Coolidge a short time ago, and the two big chiefs had their pictures taken together. The Osage tribe is the richest in the country and controls the vast oil fields in Oklahoma.



**INVENTS HUGE SUBMARINE CRUISER.**—Oswald Flamm, a German submersion specialist, who has invented a submarine cruiser of more than 7000 tons. A big successful model exists. It has been learned that the British, French and Italian governments are interested in the invention.



**STATUE TO THE SPANISH AMERICAN WAR FIGHTERS.**—Photo shows Mr. Robert Aitken, N. A., with his statue of "The Skirmisher" which is to be erected at Binghamton, N. Y. and unveiled on July 4, in honor of the boys, from Broome county, N. Y., who fought in the conflict of '90.



**LABOR VICTORY DEMONSTRATION IN ENGLAND.**—The Labor party held a demonstration recently in Albert Hall, London, to celebrate their victory. The new premier, Ramsey MacDonald, is shown standing at the left while seated behind him are several members of the Labor party.



**LEADS FEMINE BLACK SHIRTS.**—Mme. Amalia Besso leads the woman black shirts of Italy.



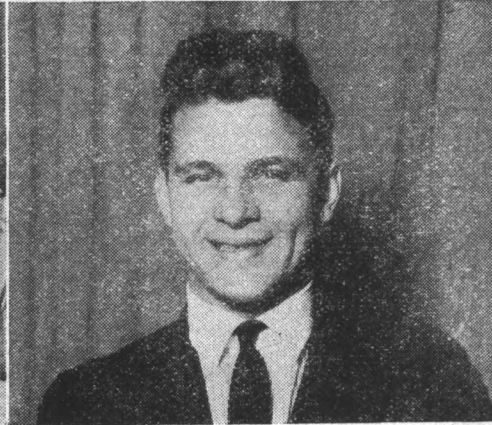
**A SHIP GRAVEYARD.**—Along a goodly stretch of the west bank of the Hudson River, just north of Weehawken, N. J., is to be found a typical graveyard—the last resting place for dead or forgotten ships. The photo shows group of abandoned ships in all states of decay.



**PRIEST IS ON LONE PATROL.**—The Rev. Phillip Magrath of St. Bridget's Church, N. Y., is making it his nightly duty to patrol the North River front from 23rd to Canal streets, New York City, and defend any peaceful citizen who may be the victim of a thug.



**BRAVEST AMERICAN HERO SITS FOR PORTRAIT.**—Sargeant Samuel Woodfill, selected by General Pershing as the outstanding American hero of the World War, and retired a few weeks ago from the army, is having his portrait painted in New York. He will be one of the collection of heroes of the war which will be painted by Joseph Cummings Chase, famous artist. Mr. Chase has been commissioned to do this work by the A. E. F.



**NOTHING HURTS HIM.**—Here is Ralph Colston, freshman at the University of Pennsylvania, who is absolutely immune to pain. Doctors declare that no pain hurts him, also he is double jointed throughout his body. He will take part in the coming Olympic games in the hop-skip-and-jump.



**McADOO PRESENTS COWBOY TROPHY.**—William Gibbs McAdoo has just proclaimed Yakima Canutt the World's champion cowboy at bull-dogging, roping and riding, and has presented him with a trophy. The trophy is presented annually by the Roosevelt Hotel, of New York, in honor of Theodore Roosevelt. This ceremony took place at Los Angeles, California.



**YOUNGEST BANK PRESIDENT IN EAST.**—Bernard C. Diekman, although only 28 years old, is president of Ridgely Park, N. J. Trust Company.



**AGED HUNTER KILLS 500 MOUNTAIN LIONS.**—Ben V. Lily, of New Mexico, 70 years old, has been a big game hunter from childhood on. He is now employed by the United States Biological Survey, to kill wild animals in the stock raising district. So far he has killed over 500 mountain lions. Each year he saves the stockmen thousands of dollars.



# Farmers' Week at M. A. C. is a Splendid Success

Discussion of "The Future of Agriculture" Attracts Thousands of Michigan's Farmers and Housewives. Optimism is Keynote of 1924 Sessions

By CARL H. KNOPF

(Special Correspondent of The Business Farmer.)

If one were to ask, "What is the greatest annual event in Michigan agriculture?" the answer would undoubtedly be, "The Farmers' Week and Housewives' Congress at the Michigan Agricultural College." This combined event brings together the farm folks from all parts of Michigan for a solid week of enjoyment and profit. The lectures, discussions, demonstrations, and exhibits are a rare blending of scientific discoveries and practical experience and give the maximum of information and inspiration.

The attendance at Farmers' Week for 1924, held February 4 to 8, nearly reached the 4000 mark. This is truly remarkable considering the weather which prevailed during the week. Snow and sleet blockaded railroads and highways in many sections of the state but still the people managed to reach East Lansing. And at M. A. C. they found a Farmers' Week program which justified every effort they made to attend.

Today the question uppermost in the minds of the farmer is, "What is to become of agriculture?" To a great extent the general public is puzzling over that same question. Each year the Farmers' Week program features the principal and timely topics of agriculture, and so the 1924 program was built around the subject, "The Future of Agriculture."

## Optimism Prevails Throughout

Probably the most striking thing about the Farmers' Week just past was the optimism which was manifest in the various addresses and discussions. The whole week was saturated with optimism. It was clearly recognized and frankly stated that agriculture is in an unsatisfactory condition. No effort was made to conceal the fact that the road to recovery and normal conditions is a long one. But the general feeling was that the bottom has been reached and that improvement is bound to come. No one predicts, or expects, a rapid rise but all are looking for a steady gain in agricultural affairs.

The Farmers' Week audiences and the sessions of the Housewives' Congress were addressed by men and women who have achieved prominence in state and national affairs. Members of the M. A. C. faculty and other Michigan talent were used on the program more extensively than out-of-state speakers. The wisdom of this was apparent in that our Michigan folks were able to outline definitely our problems in Michigan and to present specific plans for improvement.

## Pres. Shaw Predicts Recovery

Speaking at the close of the week's program, Dr. Shaw, Acting President of the M. A. C., made a summing up of the entire week when he discussed the general topic, "The Future of Agriculture." Describing the depression which existed about 1893, Dr. Shaw called to mind the fact that in those days dressed hogs sold for 4c per pound, feeder steers for \$4.50 per cwt. and wheat for 60c per bushel. Showing that the prices of the 90's were at much lower levels than during the present depression, Dr. Shaw stated the situation then was made even worse by the corresponding depressions in industry and commerce. The fact that industry is comparatively prosperous at the present time, gives the farmer a better market and greatly helps the present situation.

Dr. Shaw stated that the whole agricultural system was thrown out of balance during the war. Cereals and grains were produced in much greater proportion than livestock products. Poor lands and pastures were brought into the production of cash crops with the result that overproduction following the war wrecked the markets.

"Agriculture is certain to recover," stated Dr. Shaw. He warned his hearers that the process will be a gradual one. Comparing again with the "hard times" of the 90's he showed that the opening of great areas of new Western lands further hindered recovery at that time and

yet, 1897 the agricultural situation was quite satisfactory.

Comparing Michigan agriculture with that of the Northwestern states, Dr. Shaw showed how the diversity of this state's crops had helped her escape the crisis which the other sections now face. Michigan's dairy products, beans, poultry sugar beets, and similar crops, were cited as giving great advantages over the one-crop states.

Emphasizing organization as a great factor in improving present conditions, Dr. Shaw called attention to the wonderful aid which Michigan is receiving through the Farm Bureau, Grange, Gleaners, and Farmers' Clubs. He stated that Michigan's 75 cow testing associations, the Dairy-Alfalfa campaigns in 52 counties, the 38-million-dollar income from poultry, and the 1,373 Boys and Girls Clubs are all helping to again put Michigan on the high road to profitable farming.

## "Get Above Average"

In one of the most interesting addresses of the entire week, Eugene Davenport, formerly Dean of Agriculture in the University of Illinois, discussed "The Problems of Agriculture." With his keen analysis and pithy advice, Dean Davenport's saying might well be compiled into a sort of "Poor Richard's Almanac" for agriculture.

"You will never get anywhere by being simply an average farmer," stated Mr. Davenport, who added, "Prices of farm products are based on what the average farmer can produce them for—and with no profit added." He advised, as the remedy, that each find out the line of work which he can carry on to advantage and then get above the average.

In briefly discussing the various problems, Mr. Davenport advised that each farmer analyze his farming system. He stated that Michigan is one of the best sections for the production of wheat but that the Michigan farmer cannot compete with the peasants of Russia or the Hindus of India in the production of that cereal, hence the farmer must change his system.

A crop system in which the crops dovetail as to time, was advised. Plenty of equipment was recommended with a warning that this may be easily overdone.

Speaking of the time element, Dean Davenport stated that the farmers, as a class, waste more time than any other class of business men. He recommended livestock farming, and dairying especially, as a means of utilizing time to best advantage

throughout the year. Speaking of the objection to dairying as "confining" he said that the groceryman, the merchant, and the professional man seemed fully as confined, with the possible exception that they do not have to work on Sundays.

Proper use of capital and consulting with the banker, were strongly advised. "The banker is not a mere money lender, he is the business manager of the funds of the community."

The secret of success in marketing according to Mr. Davenport, has been found by those who realize that two good apples are worth more on the market than two good apples with one poor one thrown in. He told of the grower who made three grades of his apples. The No. 1's he packed in boxes, the No. 2's he fed to the pigs, and the No. 3's were buried.

Other advice given by Mr. Davenport was to improve the home conditions even during the hard times, to get plenty of the best reading matter, to systematize entertainment, and to take a vacation each year, for the farmer, preferably in the city.

The three requisites for successful farmers are, according to Dean Davenport, that they be progressive, be judicious, and that they have contented minds.

## L. J. Taber Says, "Organize"

The address given by Louis J. Taber, Master of the Ohio State Grange and also of the National Grange, was one of the high lights of the week. Speaking on "The Influence of Social Life on the Future of Agriculture," Mr. Taber emphasized social life as being the deciding factor in the agriculture of tomorrow. He strongly advised organization stating that, "The farmer in Michigan who does not belong either to the Grange or to the Farm Bureau is an agricultural slacker." Vigorous applause showed that the audience fully concurred in this opinion.

Mr. Taber stated that the cost of government must be decreased and at the same time the efficiency of government must be increased. Prosperity now hidden must be made to pay its share of the tax burden. The effort of the Grange in Michigan to initiate an income tax was lauded as being splendid work.

Law enforcement is a vital issue stated Mr. Taber. He would deport every alien who violates the liquor law and he would also send to the penitentiary every millionaire who employs men to violate that law for him. "We need a re-baptism in Americanism," stated Mr. Taber who

urged that the immigrants be taught to "leave Europe behind."

"Production is more important than marketing," was a rather startling statement from the National Master. He also stated that cooperative production will be a vital factor in the future. Cooperative production was defined as being, not limited production, but rather, "production guided by information and wisdom."

"Farmers have the right to strike the same as have workers in other lines of industry but God forbid that the farmers of America should ever bring want and suffering to innocent people, simply for the sake of advancing their own interests", was a sentiment from Mr. Taber which met with unanimous approval.

Mr. Taber advised the farmers to train leaders for conducting the business of agriculture. He stated that the farmers must not denounce other lines of business but rather that they must learn from, and work with, other business men.

He closed with an appeal to the farmers' organizations to improve the social advantages of the country and raise the standard of living because "the hope of agriculture is the type and standard of its social life."

## Housewives Congress

Much interest was shown in the sessions of the Housewives' Congress. Topics of interest to homemakers were presented by various members of the home economics teaching and extension staff. Miss Jean Kreuger, who recently came from the University of Wisconsin to become Dean of the M. A. C. Home Economics Department, presided at these meetings.

The list of topics considered ranged from clothing and furniture to diets and diseases of malnutrition. "How to be Wise When One Buys," was another topic which indicated that the business side of home management must be studied. 'Step Saving Suggestions' were also well received.

Dr. Marie Dye, Assoc. Professor of Home Economics, created something of a sensation in discussing, "Rickets, the Most Universal Disease of Childhood." Rickets was described as a disease of the bones caused by improper feeding. Dr. Dye asserted that almost every infant, between the ages of 6 to 18 months, has rickets to a greater or less degree. As proof of this she cited the experience of a Lansing baby specialist who has found that fully 90% of the children which he examines have rickets to some extent. Sunlight, small quantities of cod liver oil, and egg yolks were recommended for the prevention or cure of rickets.

Following the formal opening of the new Home Economics building on Tuesday evening the remaining sessions of the Housewives' Congress were held in that building.

Erected at a cost of \$400,000 this new structure is easily the finest building on the M. A. C. campus and is also claimed to be one of the finest buildings of its kind in the United States. Built of brick and trimmed with sandstone this building has a beautiful and imposing style of architecture which makes it dominate the northern end of the college campus.

The interior of the building is finished in keeping with the whole structure. Nothing has been left undone in the way of arrangement, furnishings, and equipment to provide for the comfort, convenience, and efficient training of the young women fortunate to be enrolled in the M. A. C.

Simultaneous with the opening of the new building comes the announcement that a new course in nursing will be established at M. A. C. in cooperation with Sparrow hospital at Lansing.

## The Big M. A. C. Parade

A Farmers' Week feature of recent years has been the annual parade. This year a mile-long procession gave to the thousands of visitors some idea of the activities and resources of the college. Headed by the M. A. C. military band, one of the finest college bands in the U. S., there came

(Continued on Page 19)

## Sidney Smith Wins Livestock Judging Contest

ONE of the most interesting events of the recent Farmers' Week at M. A. C. was the livestock judging contest. This contest differed from most of its kind in that the visiting farmers were the contestants. While club boys and college students have had their judging contests for years, "dad" has usually been on the sidelines with nothing to do but look on. This recent contest at M. A. C. was arranged for the farmers and they got into the game most heartily. Each of the two forenoons of the contest the Judging Pavillion was well filled with contestants and spectators and the discussions frequently waxed warm over the merits of the various animals.

Percheron horses, Holstein and Angus cattle, Shropshire sheep, and Duroc Jersey hogs were the breeds used for the contest. Four animals were displayed in each of the five classes.

Each contestant was given a card for each class and on the card he wrote the order in which he placed the animals and also the reasons for so placing them. The contest-

ant was allowed to judge as many of the different classes as he chose. At the close of the contest on Wednesday forenoon, the official placings were announced and discussed.

Beautiful silver trophy cups were provided by the State Board of Agriculture and these were presented to the winners at the close of the general program on Wednesday afternoon. The following are the winners in each of the classes; Percherons, Andy White of Orion; Shropshires, Fred Weikenbach of Beulah; Duroc Jerseys, Russell Jordan of Eaton Rapids; Holsteins, James Avery of Lansing.

Although not making the highest score in any one class, Sidney Smith of Orion had the highest average score for the entire five classes and so he was awarded the championship trophy cup.

As a means of arousing interest in better livestock and also to teach the practical points of livestock selection, the Farmers Livestock Judging Contest seems to fill a very great need and there is no doubt but that the event will be staged at Farmers' Week meetings in succeeding years.



# Thirty-Three State Organizations Meet at M. A. C.

*Livestock and Poultry Ass'ns, Rural Press and Y. M. C. A. Groups, Muck Farmers, Vinegar Manufacturers and Nurserymen Assemble During Farmers' Week*

By CARL H. KNOFF

(Special Correspondent of The Business Farmer.)

EACH year sees a large increase in the number of organizations holding meetings in connection with Farmers Week at the Michigan Agricultural College. There are several reasons for this. Convenient places for meetings are available at M. A. C. while the Farmers Week events attract thousands of farmers from all parts of Michigan and tend to increase the attendance at the group meetings.

Monday afternoon of Farmers' Week was given over to the meetings of the several swine associations in the state. Most of these organizations had a good attendance of interested breeders. Despite the present low prices of pork there was a feeling of optimism in evidence among the swine breeders. The very fact that hog prices have dropped to very low levels is encouraging the swine breeders to believe that there will soon be a steady and gradual improvement in the business.

The various associations elected officers as follows:

**Michigan Poland China Ass'n.**  
President, W. E. Livingston of Parma; Secretary and Treasurer, W. L. Wood, Birmingham.

**Hampshire Breeders Ass'n.**  
President, Floyd Aseltine, Okemos; Vice President, John Landon, Addison; Secretary-Treasurer, C. F. Luckhard, Bach.

**Duroc Jersey Breeders Ass'n.**  
President, O. F. Foster, Pavillion; Secretary-Treasurer, J. F. Schaeffer, Detroit; Directors: V. A. Freeman, East Lansing; Harold Shafley, St. Johns; Newton Barnhart, St. Johns.

**Spotted Poland China Ass'n.**  
This is a new state organization of swine breeders which was formed during Farmers' Week. The following officers were chosen:

President, G. S. Coffman, Coldwater; Vice President, C. F. Luckhard, Bach; Secretary-Treasurer, C. L. Nash, Cassopolis; Executive Committee: Dr. F. Watson, Breckenridge; P. Clark, Adrian; Alfred Grueber, Frankenmuth; C. L. Emery, Albion.

**Chester White Breeders Ass'n.**  
President, A. J. Hawkins, Coldwater; Secretary-Treasurer, F. W. Alexander, Coldwater.

**Swine Breeders Ass'n.**  
This organization looks after the general swine interests of the State. Its officers are: President, John Miller, Swartz Creek; Vice President, W. E. Livingston, Parma; Secretary-Treasurer, W. E. Haynes, Hillsdale. In addition to the officers this Association also has a board of directors, one director to represent each breed. The directors are: F. J. Schaeffer, Detroit, Duroc Jerseys; Albert Feldcamp, Manchester, Poland Chinas;

E. R. Morrish, Flint, O. I. C's; F. W. Alexander, Vassar, Chester Whites; George Starr, Grass Lake, Hampshires; C. L. Nash, Cassopolis, Spotted Poland Chinas.

**State O. I. C. Ass'n.**  
President, Edward Smith, Saline; Secretary-Treasurer, Earle R. Morrish, Flint.

The greater part of the cattle associations held their meetings on Tuesday forenoon. The newly elected officers of the various associations are:

**Hereford Breeders Ass'n.**  
President, W. W. Crapo, Swartz Creek; First Vice President, L. Whitney Watkins, Manchester; Second Vice President, E. C. McCarty, Bad Axe; Third Vice President, J. R. Campbell, St. Johns; Secretary-Treasurer, Verne A. Freeman, East Lansing.

**Aberdeen Angus Breeders Ass'n.**  
President, Sidney Smith, Orion; Vice President, Jas. Curry, Marlette; Secretary-Treasurer, Jas. McNab, Cassopolis.

**Red Polled Cattle Club**  
President, N. C. Herbison, Birmingham; Vice President, R. L. Finch, Saline; Secretary-Treasurer, Mark Westbrook, Ionia.

**DAIRY BREEDS**  
The dairy breed organizations also had large attendances at their respective meetings. The Michigan Holstein-Friesian Ass'n. held a sale of 43 purebred Holstein cattle on

Monday afternoon of Farmers Week. This was followed in the evening by the annual banquet. At the business meeting on Tuesday the following officers were elected: President, M. W. Wentworth, Battle Creek; Vice President, W. R. Harper, Middleville; Secretary-Treasurer, H. W. Norton, Jr., Lansing. Executive Committee, E. L. Smith, Adrian; H. W. Norton, Jr., Lansing; Dudley E. Waters, Grand Rapids; J. E. McWilliams, Mt. Clemens; Silas Munsell, Howell; John B. Strange, Grand Ledge; John H. Wynn, Rochester.

Other dairy cattle associations and their officers are:  
**Guernsey Cattle Club**  
President, John Endicott, Detroit; Vice President, George Hoffman, Monroe; Secretary-Treasurer, C. F. Meyers, Grand Blanc; Directors, F. C. Holbeck, Long Lake; H. W. Wigman, Lansing; J. M. Williams, North Adams; J. B. Deutsch, Big Bay.

**Ayrshire Breeders Ass'n.**  
President, W. T. Shuttleworth, Ypsilanti; Secretary-Treasurer, E. C. Roberts, Fennville.

**Brown Swiss Breeders Ass'n.**  
President, L. S. Marshall, Leslie; Vice President, H. C. Teel, Lansing; Secretary-Treasurer, E. H. Creuss, Sebawaing.

**A Pioneer of Thirty-Four Years**  
One of the veteran livestock organizations of the state is the Michigan Improved Livestock Breeders and Feeders Association which had

charge of the general program on Tuesday afternoon of Farmers' Week. Following the regular program a business session was held and the following officers were elected: President, Jacob De Geus, Alicia; Secretary, George A. Brown, East Lansing; Treasurer, H. F. Probert, Jackson.

The livestock organizations in Michigan are not confined entirely to the cattle breeders as proved by the interest and attendance at the meetings of the Michigan Horse Breeders Ass'n. Officers of this association for the coming year are:

President, L. C. Hunt, Eaton Rapids; Vice President, Jacob De Gues, Alicia; Secretary-Treasurer, R. S. Hudson, East Lansing; Executive Board, O. E. Bell, Mason; Ray Whitney, Onondaga; William Bird, St. Johns; Sidney Smith, Orion.

Large and enthusiastic meetings were held by the Michigan Muck Farmers Association during parts of two days during Farmers' Week. This association elected as its officers: President, Robert Zimmerman, Centerville; Vice President, George Kaper, Hamilton; Secretary-Treasurer, P. H. Harmer, East Lansing.

The Michigan Crop Improvement Association has become a vital factor in the farm industry of the state. During the past year its work has been considerably extended as well as increased in scope. The association takes the new and improved varieties developed at the M. A. C. and distributes them over the state. It also maintains an inspection service which handles the certification and registration of worthy seed. After this improved seed is produced in sufficient quantity it is placed on the market, usually through the agency of the Seed Department of the Michigan State Farm Bureau. By thus acting as the intermediary agency between the College's development work and the Farm Bureau's marketing system the M. C. I. A. is rendering a very valuable service to the farmers of Michigan. Its officers as chosen for the ensuing year are: President, Garfield Farley, Albion; Vice President, Ralph Arbogast, Union City; Secretary, H. C. Rather, East Lansing; Directors, A. B. Cook, Owosso; E. C. McCarty, Bad Axe; George Wheeler, Mt. Pleasant; W. R. Kirk, Fair Grove; C. R. Oviatt, Bay City; Charles Laughlin, Dimondale.

Other organizations relating to, or allied to agriculture which held meetings during Farmers' Week are: Michigan Press Association; Michigan Crop Reporters Association; Vinegar Manufacturers Association; Michigan Nurserymen Association; County Y. M. C. A. Secretaries; and Short Course Students Association.

## Holstein and Shorthorn Breeders Hold Sales

HUNDREDS of Farmers' Week visitors mingled with Holstein and Shorthorn breed enthusiasts in the crowds which attended the two sales of purebred cattle during Farmers' Week. The sales were held in the judging pavilion of the Agricultural building and, each time, the crowd of spectators and buyers taxed the capacity of the pavilion.

The Holstein sale was held on Monday afternoon, February 4th. Under the direction of J. G. Hays, field man for the Michigan Holstein Breeders Association, 43 head of purebred Holsteins had been consigned by various Holstein breeders throughout the state. These were all animals of excellent type and breeding, some of them being backed by creditable production records made in Cow Testing Associations or under official supervision.

The 43 head of Holsteins sold for a total of \$10,800.00 or an average

of more than \$250 per head. This sets a high mark for state sales of Holstein cattle during recent years. It shows that good animals were consigned and also proves that people will pay good prices for good stuff.

The two cows brought \$420 each. One was consigned by John C. Buth, of Grand Rapids and sold to L. C. Carlyle of Yale, Michigan. The other \$420 cow was purchased by M. D. Buth of Grand Rapids from the consignment of J. N. Lamoreaux of Grand Rapids.

An aged bull, also consigned by Mr. Lamoreaux, was sold to a group of Holstein breeders in Newaygo County for \$415. Two other animals sold for \$400 while 4 other animals reached, or exceeded, the \$300 mark, each.

The range of prices and the spirited bidding at the sale indicates (Continued on Page 31)

## "A Stitch in Time Saves Nine" Applies Very Well to Work on the Farm

By F. T. RIDDELL

(Department of Farm Management, Michigan Agricultural College.)

DID you ever stop to think of the thousands of dollars that are spent every year for farm machinery? Did you ever stop to consider that this machinery had to be replaced about every ten years? Not only this but there are the repair costs that must be taken care of which helps to add to the bill.

An investigation conducted by the Farm Management Department of the Michigan Agricultural College showed that the investment in farm machinery in twenty-five of the better farms in Lenawee County amounted to \$1,800 per farm and the average investment on the same number of high grade farms in Montcalm, Antrim and Emmet Counties amounted to \$1,000 per farm. At once it is apparent that the farmer has no small amount of money invested in this sort of farm equipment. The depreciation charge alone amounts to approximately one-tenth of the investment. While this is an unavoidable charge, there are many other things entering in which indirectly tend to lower the farm income.

Farm machinery is a very important and dependable factor in our production and the efficiency of util-

ization of this factor depends on the farmer himself, as to the condition of the machine when he desires to use it. In many cases too much valuable time is wasted making repairs and adjusting machinery at the time of year when a few hours delay may mean the cutting down of crop yield or the entire loss of the crop.

The farmer's time is divided into seasons; seeding time, cultivating, and harvesting cover three of these periods and the operations performed in any one of these cannot be postponed to any other period. Thus the farmer must be in readiness at the proper time if he expects to get the best results out of the business. For a few hours delay at seeding and harvesting time may mean a bank balance in red ink at the end of the year. (A poor or damaged crop.)

Oats is a crop that must be sown at a time of year when the weather conditions are catchy, and if not seeded when conditions are right it may mean several days delay and a

lot of extra work to refit the ground. Much of this delay coming through poor preparation for the task at hand. The horses are in poor condition, the tools are rusty, the drill needs repairing or the seed has not been cleaned, perhaps it was the farmer's intention to treat his seed for smut but due to delay in securing the disinfectant he postpones this operation for this year trusting to luck. Thousands of tons of hay are ruined each year because the hay loader failed to work; because the hay fork, the track, or ropes were in poor repair. The hay loader may have been left in the field where it was last used all winter or long enough so that it is rusty, the ropes are rotten or the slats are cracked or warped out of shape, so when farmer Brown finds himself confronting a twenty-acre field of hay ready to harvest and the weather man predicting a storm within a few hours he frets and stews, and everything is in an uproar because the hay loader won't work.

Often-times spraying is delayed and put off until it is too late because the materials were not secured at the proper time or the spraying outfit does not work, the pumps need rewashing, the hose or pipes leak, or have corroded.

The tractor is another piece of farm machinery that is not only expensive but complicated and fails to function unless in perfect condition. It is a powerful machine and if in condition is a big factor in production when things are favorable for its work. Investigations show that the tractor only operates about 33 days a year on the average farm, thus if the machine is not in preparation for utilization at the proper time its overhead expense per working day or per acre will be greatly increased.

On the majority of farms the winter season is the farmer's slack period. Outside of caring for livestock there are very few operations to perform and these do not have to be done at any definite period, thus leaving time on the farmer's hands which could be utilized very profitably in the overhauling and repairing of farm machinery, cleaning (Continued on Page 19)



(Continued from February 2nd issue.)

MR. SMITH, these days was keeping rather closely to his work, especially when reporters were in evidence. He had been heard to remark, indeed, that he had no use for reporters. Certainly he fought shy of those investigating the Fulton-Blaisdell legacy. He read the newspaper accounts, though, most attentively, particularly the ones from Chicago that Mr. Norton kindly sent him sometimes. It seems in one of these papers that he found this paragraph:—

There seems to be really nothing more that can be learned about the extraordinary Stanley G. Fulton-Blaisdell affair. The bequests have been paid, the Blaisdells are reveling in their new wealth, and Mr. Fulton is still unheard from. There is nothing now to do but await the opening of the second mysterious packet two years hence. This, it is understood, is the final disposition of his estate; and if he is really dead, such will doubtless prove to be the case. There are those, however, who, remembering the multi-millionaire's well-known eccentricities, are suspecting him of living in quiet retirement, laughing in his sleeve at the tempest in the teapot that he has created; and that long before the two years are up, he will be back on Chicago's streets, debonair and smiling as ever. The fact that so little can be found in regard to the South American exploring expedition might give color to this suspicion; but where, oh, where, on this terrestrial ball could Mr. Stanley G. Fulton find place to live in unreported retirement?

Mr. Smith did not show this paragraph to the Blaisdells. He destroyed the paper containing it, indeed, promptly and effectually—with a furtive glance over his shoulder as he did so. It was about this time, too, that Mr. Smith began to complain of his eyes and to wear smoked glasses. He said he found the new snow glaring.

"But you look so funny, Mr. Smith," said Benny, the first time he saw him. "Why, I didn't hardly know you!"

"Didn't you, Benny," asked Mr. Smith, with suddenly a beaming countenance. "Oh, well, that doesn't matter, does it?" And Mr. Smith gave an odd little chuckle as he turned away.

## CHAPTER XII

## The Toys Rattle Out

Early in December Mrs. Hattie, after an extended search, found a satisfactory home. It was a somewhat pretentious house, not far from the Gaylord place. Mrs. Hattie had it repapered and repainted throughout, and two new bathrooms put in. (She said that everybody who was anybody always had lots of bathrooms.) Then she set herself to furnishing it. She said that, of course, very little of their old furniture would do at all. She was talking to Maggie Duff about it one day when Mr. Smith chanced to come in. She was radiant that afternoon in a handsome silk dress and a new fur coat.

"You're looking very well—and happy, Mrs. Blaisdell," smiled Mr. Smith as he greeted her.

"I am well, and I'm perfectly happy, Mr. Smith," she beamed. "How could I help it? You know about the new home, of course. Well, it's all ready, and I'm ordering the furnishings. Oh, you don't know what it means to me to be able at last to surround myself with all the beautiful things I've so longed for all my life!"

"I'm very glad, I'm sure," Mr. Smith said the words as if he meant them.

"Yes, of course; and poor Maggie here, she says she's glad, too,—though I don't see how she can be, when she never got a cent, do you, Mr. Smith. But, poor Maggie, she's got so used to being left out—"

"Hush, hush!" begged Miss Maggie.

"You'll find money isn't everything in this world, Hattie Blaisdell," growled Mr. Duff, who, to-day, for some unknown reason, had deserted the kitchen cook-stove for the living-room base burner. "And when I see what a little money does for some folks I'm glad I'm poor. I wouldn't be rich if I could. Furthermore, I'll thank you to keep your sympathy at home. It ain't needed nor wanted—here."

"Why, Father Duff," bridled Mrs. Hattie indignantly, "you know how poor Maggie has to—"

"Er—but tell us about the new home," interrupted Mr. Smith quickly, "and the fine new furnishings."

"Why, there isn't much to tell yet—about the furnishings, I mean. I haven't got them yet. But I can tell you what I'm going to have." Mrs. Hattie settled herself more comfortably, and began to look happy again. "As I was saying to Maggie, when you came in, I shall get almost everything new—for the rooms that show, I mean—for, of course, my old things won't do at all. And I'm thinking of the pictures. I want oil paintings, of course, in gilt frames." She glanced a little disdainfully at the oak-framed prints on Miss Maggie's walls.

"Going in for old masters, maybe," suggested Mr. Duff, with a sarcasm that fell pointless at Mrs. Hattie's feet.

"Old masters?"

"Yes—oil paintings."

"Certainly not." Her chin came up a little. "I'm not going to have anything old in my house—where it can be seen. For once I'm going to have new things—all new things. You have to



# Oh Money! Money!

By ELEANOR H. PORTER

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## THE STORY TO DATE

MR. STANLEY G. FULTON, 50-year old bachelor and possessor of twenty million dollars, calls on his lawyer and they discuss the disposition of this large fortune after its owner's death. The lawyer is in favor of giving the money to colleges or charities while Fulton is opposed to these ideas. He remembers that he has some distant cousins and decides to leave the money to one of them, but first he determines to learn which one will use it to the best advantage. To find out who is the worthy one he, through his lawyer, gives, each cousin \$100,000 to use as they will. Before giving them the money grows a beard and, using the name of Mr. John Smith, goes to the town where they live to find out what kind of people they are. Upon arriving in town he visits James Blaisdell, one of the cousins, where he tries to hire board and lodging. While there he meets Miss Flora Blaisdell, another cousin who is a dressmaker. They decide they cannot rent a room to him and supply him board and refer him to Frank Blaisdell, the third cousin. He gets a room there and, passing as a writer gathering material for a book on the Blaisdell family in this country, he starts out. He calls on all of the Blaisdells and as they all talk of a relative by the name of Miss Maggie Duff he decides to call on the lady. He finds her living with her father, an old man who seems to have soured on the world. He secures what information he can from her and her father. He then writes a letter to his lawyer discussing the various relatives he has met. The members of the Blaisdell family learn that each cousin of Stanley G. Fulton has fallen heir to \$100,000 and there is much excitement.

make a show or you won't be recognized by the best people."

"But Hattie, my dear," began Miss Maggie, flushing a little, and carefully avoiding Mr. Smith's eyes, "old masters are—very valuable, and—"

"I don't care if they are," retorted Mrs. Hattie, with decision. "If they're old, I'm not wanting them, and that settles it. I'm going to have velvet carpets and the handsomest lace curtains that I can find; and I'm going to have some of those gold chairs, like the Pennock's have, only nicer. Theirs are awfully dull, some of them. And I'm going to buy—"

"Humph! Pity you can't buy a little common sense—somewhere!" snarled old man Duff, getting stiffly to his feet. "You'll need it, to swing all that style."

"Oh, father!" murmured Miss Maggie. "Oh, I don't mind what Father Duff says," laughed Mrs. Hattie. But there was a naughty tilt to her chin and an angry sparkle in her eyes as she, too, arose. "I'm just going, anyway, so you don't need to disturb yourself, Father Duff."

But Father Duff, with another "Humph!" and a muttered something about having all he wanted already of "silly chatter," stamped out into the kitchen, with the usual emphasis of his cane at every other step.

It was just as well, perhaps, that he went, for Mrs. Hattie Blaisdell had been gone barely five minutes when her sister-in-law, Mrs. Jane, came in.

"I've come to see you about a very

important matter, Maggie," she announced, as she threw off her furs—not new ones—and unbuttoned her coat—which also was not new.

"Then certainly I will take myself out of the way," said Mr. Smith, with a smile, making a move to go.

"No, please don't," Mrs. Jane held up a detaining hand. "Part of it concerns you, and I'm glad you're here, anyway. I should like your advice."

"Concerns me?" puzzled the man.

"Yes, I'm afraid I shall have to give up boarding you, and one thing I came up today for was to ask Maggie if she'd take you. I wanted to give poor Maggie the first chance at you, of course."

"Chance at me!" Mr. Smith laughed, but unmistakably he blushed. "The first—"

But, my dear woman, it is just possible that Miss Maggie may wish to—er—decline this great honor which is being conferred upon her, and she may hesitate, for the sake of my feelings, to do it before me. Now I'm very sure I ought to have left at once."

"Nonsense!" (Was Miss Maggie blushing the least bit, too?) "I shall be very glad to take Mr. Smith as a boarder if he wants to come—but he's got something to say about it, remember. But tell me, why are you letting him go, Jane?"

"Now this surely will be embarrassing," laughed Mr. Smith again nervously. "Do I eat too much, or am I merely noisy, and a nuisance generally?"

## Farmers Service Bureau

(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.)

## LUMPS IN ALUMINUM PAIL

I have an aluminum pail and there are small lumps around on the inside. Is it alright to use it for drinking water? What is the cause of the pail getting that way?—Mrs. A. O., Carsonville, Mich.

—The lumps on the aluminum pail are due to an impurity in the alloy which has been used recently to make cheaper grades of aluminum utensils. A little electric battery is set up in the structure of the metal. It is in no way harmful.—Dr. C. C. Young, Dept. of Health.

## CAN REMOVE FENCE

I have a farm I bought on contract. I missed payment but my contract has not been foreclosed. I bought fence and temporarily fastened it up. Can I take it away?—J. B., Whittemore, Mich.

—If the fence is of temporary construction and you removed it before the contract was foreclosed, I am of the opinion you would have the right to take it off the farm.—Asst. Legal Editor.

## STATE FUND FOR PURCHASING ATHLETIC EQUIPMENT

Could you please tell me if there is a place in Lansing or elsewhere in Michigan that schools get playthings free, such as footballs, basketballs, etc.? I have been told there is such a place, but do not know where to send.—D. B., Bad Axe, Mich.

—Just after the war when the Michigan Boxing Commission was organized, a certain part of its receipts was turned over to this Department for the purchase of athletic equipment. With the dying out of boxing in Michigan this fund was not kept up and, consequently, the supplies purchased at that time have

been practically used up. There was, however, at that time a good deal of equipment sent to schools, especially in the smaller communities and in rural districts. This practice has been discontinued.—A. F. Westphal, State Director of Physical Education.

## FELL TREES INTO DITCH

I sold a piece of timber to a lumber company and they let the job of cutting the timber to some parties. There is quite a large ditch running through this piece of timber and when they cut the trees they fell several of them into the ditch. Now these tops are stopping up the ditch to a certain extent and causing sand bars. Would the parties that cut the timber be obliged to remove these tops from the ditch or will I have to do it?—L. Y., St. Johns, Mich.

—I am of the opinion you could recover damages from the parties who cut the timber, if they refuse to remove the tops from the ditch.—Asst. Legal Editor.

## CANNOT MAINTAIN GASOLINE PUMP ALONG TRUNK LINE

I am writing to you for a little information about a gasoline pump on Michigan trunk line between Flint and Owosso. There is a party trying to make us move it but I say they cannot because they do not show any papers from the State Highway Department. Have they got the right to make us remove it? I have had trouble with the oil company and believe they are trying to bluff us so we will move it. The pump is located on five points and the pump is thirty feet from state trunk line. Is that far enough or not? And will they have to serve

(Continued on Page 26)

But Mrs. Jane did not appear to have heard him. She was looking at Miss Maggie, her eyes somber, intent.

"Well, I'll tell you. It's Hattie."

"Hattie!" exclaimed two amazed voices.

"Yes. She says it's perfectly absurd for me to take boarders, with all our money; and she's making a terrible fuss about where we live. She says she's ashamed—positively ashamed of us—that we haven't moved into a decent place yet."

Miss Maggie's lips puckered a little.

"Do you want to go?"

"Y-yes, only it will cost so much. I've always wanted a house—with a yard, I mean; and 'twould be nice for Mellicent, of course."

"Well, why don't you go? You have the money."

"Yes, I know I have; but it'll cost so much, Maggie. Don't you see? It costs not only the money itself, but all the interest that the money could be earning. Why, Maggie, I never saw anything like it." Her face grew suddenly alert and happy. "I never knew before how much money, just money, could earn, while you didn't have to do a thing but sit back and watch it do it. It's the most fascinating thing I ever saw. I counted up the other day how much we'd have if we didn't spend a cent of it for ten years—the legacy, I mean."

"But, great Scott, madam!" expostulated Mr. Smith. "Aren't you going to spend any of that money before ten years' time?"

Mrs. Jane fell back in her chair. The anxious frown came to her face.

"Oh, yes, of course. We have spent a lot of it, already. Frank has bought out that horrid grocery across the street, and he's put a lot in the bank, and he spends from that every day, I know. And I'm willing to spend some, of course. But we had to pay such an inheritance tax and all that it would be my way not to spend much till the interest had sort of made that up, you know; but Frank and Mellicent—they won't hear to it a minute. They want to move, too, and they're teasing me all the time to get new clothes, both for me and for her. But Hattie's the worst. I can't do a thing with Hattie. Now what shall I do?"

"I should move. You say yourself you'd like to," answered Miss Maggie promptly.

"What do you say, Mr. Smith?"

Mr. Smith leaped to his feet and thrust his hands into his pockets as he took a nervous turn about the room, before he spoke.

"Good Heavens, woman, that money was given to you to use. Now, why don't you use it?"

"But I am using it," argued Mrs. Jane earnestly. "I think I'm making the very best possible use of it when I put it where it will earn more. Don't you see? Besides, what does the Bible say about that man with one talent that didn't make it earn more?"

With a jerk Mr. Smith turned on his heel and renewed his march.

"I think the only thing money is good for is to exchange it for something you want," observed Miss Maggie sententiously.

"There, that's it! triumphed Mr. Smith, wheeling about. "That's exactly it!"

Mrs. Jane sighed and shook her head. She gazed at Miss Maggie with fondly reproving eyes.

"Yes, we all know your ideas of money, Maggie. You're very sweet and dear, and we love you, but you are extravagant."

"Yes. You use everything you have every day; and you never protect a thing. Actually, I don't believe there's a tidy or a linen slip in this house." (Did Mr. Smith breathe a fervent "Thank the Lord!" Miss Maggie wondered.) "And that brings me right up to something else I was going to say. I want you to know that I'm going to help you."

Miss Maggie looked distressed and raised a protesting hand; but Jane smilingly shook her head and went on.

"Yes, I am. I always said I should, if I had money, and I shall—though I must confess that I'd have a good deal more heart to do it if you weren't quite so extravagant. I've already given you Mr. Smith to board."

"Oh, I say!" spluttered Mr. Smith.

But again she only smilingly shook her head and continued speaking.

"And if we move, I'm going to give you the parlor carpet, and some rugs to protect it."

"Thank you; but, really, I don't want the parlor carpet," refused Miss Maggie, a tiny smouldering fire in her eyes.

"And I shall give you some money, too," smiled Mrs. Jane, very graciously,—when the interest begins to come in, you know. I shall give you some of that. It's too bad you should have nothing while I have so much."

"Jane, please!" The smouldering fire in Miss Maggie's eyes had become a flame now.

"Nonsense, Maggie, you mustn't be so proud. It's no shame to be poor. Wasn't I poor just the other day? However, since it distresses you so, we won't say any more about it now. I'll go back to my own problems. Then, you advise me—you both advise me—to move, do you?"

"I do, most certainly," bowed Miss Maggie, still with a trace of constraint. Any you, Mr. Smith?"

Mr. Smith turned and threw up both his hands.

"For Heaven's sake, lady, go home, and spend—some of that money!"

(Continued in March 1st issue.)



# Fashions for Springtime

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## What the Neighbors Say

### WHEAT GROWERS SHOULD RAISE SUGAR BEETS NOW

DEAR EDITOR: A remedy is sought for distressed American wheat farmers who are selling their surplus abroad at less than its cost of production.

This condition arises not so much from the low price of wheat as from the fact that while cost of production has increased, the yield per acre remains at 13 to 15 bushels, compared with an average of 24.7 bushels in northwestern Europe, their high yield having been brought about by the introduction of sugar-beet culture.

One of the suggestions made for their relief is for our farmers, where the growing of sugar beets is possible, to devote sufficient of their present wheat area to sugar-beets to produce at home the sugar we now import.

Among the numerous important advantages of this plan are:

FIRST: It would create for American wheat farmers a home market for a profitable cash crop, on which they would realize nearly two hundred million dollars annually.

SECOND: It would save our sending several hundred million dollars abroad for the purchase of a crop we are eminently fitted to produce at home.

THIRD: It would save consumers on the purchase price of sugar, as domestic sugar always sells at a lower price than imported sugar. For several months consumers in the west have been purchasing domestic beet sugar for a full cent a pound less than consumers in the east have been compelled to pay for imported sugar made from Cuban raws.

FOURTH: It would free the American people from subjection to foreign combinations which in 1920 boosted the price of Cuban raw sugar to 24c per pound, at a time when refined domestic beet sugar was selling at one-half that price.

FIFTH: But more important than all other considerations combined, it would double the yield and reduce the price of every crop grown in rotation with sugar beets, thus adding the farmer and lowering the price of all foodstuffs to the consumer.

Sugar beets improve the soil. Europe doubled her yield of cereals per acre by growing them in rotation with sugar beets and other hoed root crops. In a thirty year period (1879-1909), Germany increased the cereal yield on 34,000,000 acres by 530,000,000 bushels, the value of which since has been as much every year as all it cost her to establish the greatest beet-sugar industry in the world.

A similar increase in this country would give our farmers an extra four billion bushels of cereals without extra cost, thus enabling them to produce in competition with the world, however low the price might go.—Truman G. Palmer, Sugar Statistician, Washington, D. C.

### SIMPLER SYSTEM OF GETTING TITLE TO LAND

DEAR EDITOR:—I have just been reading in your issue of January 5th, the letter from Ealy & Co., abstractors, Tuscola county, Mich. Now I wish every property owner in Michigan could read and ponder this letter.

If it is such trouble and expense to get an abstract now, what will it be a hundred years from now? It would seem as if our legislators might put in some of their time in giving us a better and simpler system of title to real estate than we have at present.

Just a suggestion: I understand that original title to a large part of the real estate in this country was acquired by warrant or grant directly from the state or United States. Certainly a good enough title for any one. Now why not have our probate or our circuit courts examine and correct the title to every piece of property in the country. Then let the state give a warranty deed to every owner. When a man sells let him surrender his deed and let all the old records be destroyed.

Of course some lawyers and perhaps abstractors might be out of a job, if they really want to do some really useful work, I could give one of them a job on my farm. Aside from said lawyers and abstractors, does any one know of any good reason why, some such plan should not be put in operation.—A. Bauhahn, Ottawa County, Mich.

## FRUIT AND ORCHARD

Edited by FRANK D. WELLS

### PRUNING OF SMALL FRUITS

THE pruning of small fruits although necessary is an operation which is in general badly neglected. Raspberries, blackberries, gooseberries and currants are often able to survive neglect and still produce small crops of fruit annually. For this reason they are often left uncared for, with the result that the plants become very thick, and thus spraying, cultivation and harvesting operations are made difficult. The yield of the plantations is likewise reduced. When the plants are regularly and well pruned, they will produce larger and better fruit, cultural operations are made easier, and the plantations will remain in a profitable condition over a much longer period than will those which are neglected. Pruning the small fruits is often tedious, but the actual work is very simple and easily performed if a few principles are kept in mind. Raspberries, Blackberries and Dewberries

The methods of growth and fruit bearings of the raspberry and the blackberry are essentially the same. The canes bear fruit but once. Each season new shoots are developed from the crown of the plant or from buds on the roots. The following year they produce flower clusters, bear fruit, and die. The object to be kept in mind when pruning these fruits is to remove all the old canes which are of no further use, and to secure, by proper thinning and heading-in, a proper number of vigorous, well-developed shoots for the production of a crop the following season.

The practice of removing the old canes varies with different growers. Some remove them soon after the fruit is harvested; others leave them until spring. Both practices undoubtedly have some advantages, but better results are secured when the old canes are cut out and burned as soon as the fruit is harvested. Insects and diseases which they harbor are in this way destroyed and the growth is given more room to develop.

At the time the old canes are cut out, the young shoots should be thinned. When the plants are kept in hills or the growth confined to original crowns, all weak and badly diseased shoots should be removed and those remaining thinned out, leaving only a sufficient number to produce the next season's crop. In the case of the red raspberries, when the canes are not much branched eight or ten may be left in each hill; but if they are large and much branched, five is enough. Four or five canes is the usual number left with the blackberries and with the black and purple raspberries.

When red raspberry plants are allowed to form a solid or continuous row, all suckers should be kept cut out so that only a narrow hedge about twelve inches wide is allowed to form. Those in the row should then be thinned, leaving the remainder spaced so that they will stand about six inches apart.

Spring pruning is usually practiced, especially if the canes are tall and vigorous or have been severely winter-injured. They are cut back to live wood or to a desirable fruiting height, usually four or five feet,



so that they will support a crop of fruit.

Black raspberries are usually pruned more severely than the reds. They are pruned during the summer by pinching off or heading-in the young shoots to stop the terminal growth and to induce the development of low and well-branched plants. The work should be done during June and July when the shoots are 18 to 24 inches high. In order to check growth at the desired height it is necessary to go over the plantation several times, as all the new shoots do not attain the proper height at the same time. Weak plants are likely to result if the shoots are allowed to grow much beyond the desired height and are cut back later. In the spring, all the lateral or side shoots should be cut back to 12 to 18 inches in length, depending upon the vigor of the variety. The pruning of the blackberries and the purple varieties of raspberries is similar to that just described for the black raspberries, except that the new growth is allowed to grow to a height of about 30 to 36 inches before being pinched back.

The new growth of the dewberry is not pinched back in the summer, but is allowed to run on the ground. It is cut back to the desired length the following spring and tied to the trellis.

When pruning currants and gooseberries, it should be borne in mind that the best of fruit is usually produced at the base of one-year-old shoots and on the spurs which have developed from the two and the three-year-old wood. The pruning of these fruits, therefore, consists of cutting out all of the oldest wood each year and thinning out the new shoots so as to leave only a few of the strongest ones to form the older bearing wood. A good bush should have from five to ten bearing stems, the number depending upon the fertility of the soil and the vigor of the variety. It should be the aim at each annual pruning to provide this number of stems two or three years of age and a continuous supply of young ones coming in to take the place of those removed. Very vigorous young shoots are sometimes headed-in to induce the development of spurs. All branches tending to lie on the ground should be removed and the center of the bushes kept open by cutting out crowding and interfering branches. Do not leave the bushes too thick. This is a common mistake when pruning these fruits. Larger berries and better filled bunches are secured and the fruit is more easily harvested if the bushes are not allowed to become too dense.

Black currants bear the most fruit on the one-year-old canes, and for this reason it is necessary to keep up a good supply of young shoots. The wood must practically be removed each year.

The pruning of the gooseberries and currants may be done any time during the dormant season, but it is usually deferred until late winter or very early spring just before growth starts. When pruning, watch for indications of the cane borer. A cane with a black center and somewhat hollow indicates the presence of the borer, and such a cane should be cut back until sound, healthy pith is reached.—R. E. Loree, Horticultural Department, M. A. C.

#### DO NOT GROW GRAPES

Would you advise growing grapes on a large scale here in Arenac county? What would be a reasonable return off an acre of grapes and what kind would you advise growing here? The ground is sand and clay loam. I have a piece of ground that is quite sandy. Would you advise planting cherry trees on it?—G. La G., Twining, Mich.

—We do not recommend the commercial culture of grapes in Arenac county. Occasionally there might be a season when the fruit would ripen properly if the soil and the location happen to be particularly favorable. However, growing season temperatures in that part of the state are not sufficiently high in the average season to mature grapes satisfactorily.

The cherry which is mentioned in your letter would be much more satisfactory for that part of the state.—V. R. Gardner, Professor of Horticulture, M. A. C.

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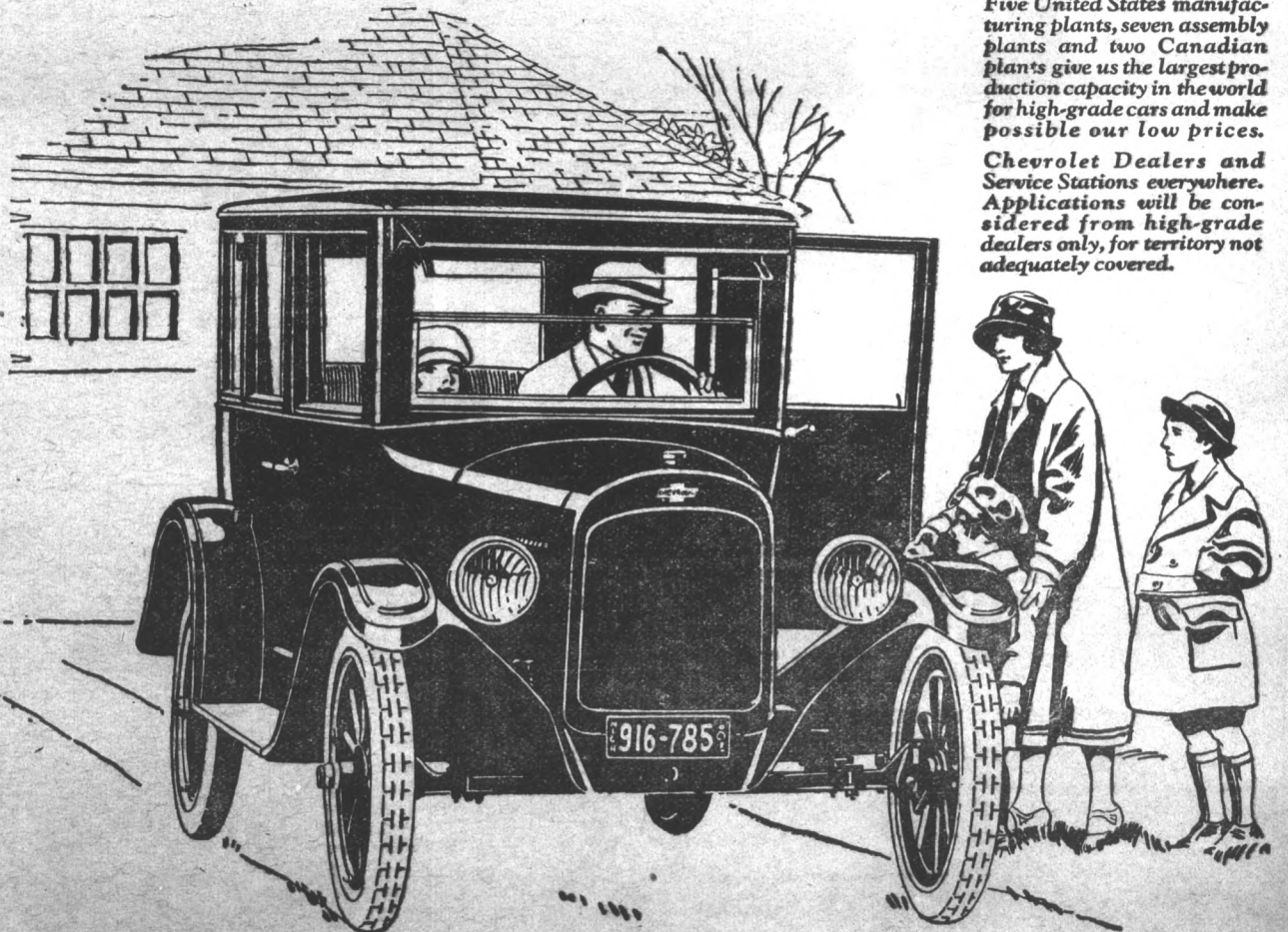
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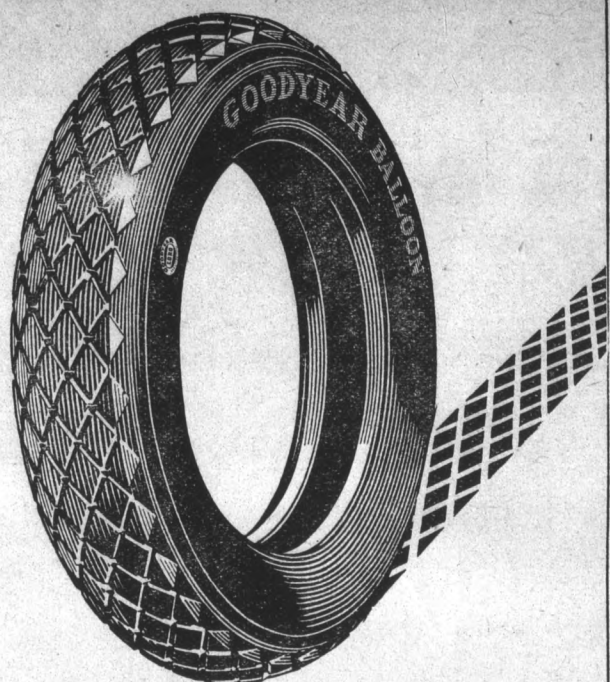
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A SERMON BY REV. DAVID F. WARNER

TEXT: "Work out your own salvation with fear and trembling."—Phil. 2:12b.

**T**HIS is the emptied life. We pray for a filled life. Why? That we might empty it. For an inworked life that we might outwork it. It is the only way to keep life from decaying. The Dead Sea stinks. Why? It has no outlet. It is not outworked. When the word was made flesh, Jesus was under the same demand for outworking his life as we are. This he called obedience. "He learned obedience by the things which he suffered. And having been made perfect, he became unto all them that obey him the author of eternal salvation."

In this vision of the incarnate Christ we get our true setting of the meaning of life and how to save it to serve this meaning. And isn't this the great concern of living? There is nothing quite so pitiful as to see men satisfied with the trivial, and who daily hinder the sublime possibilities of the soul. We want the things of earth and we get them. And when life closes to familiar scenes we have but a handful of fading glory. We return to our Maker the ashes of a burnt-out life. What shame!

The Bible teaches that every man away from God is fit only for disgrace and eternal death. But it teaches that a deliverance from this is the "blessed hope." When we are led out to the gallows of judgment, and the trip is ready to pull, and then comes the voice of pardon; that will be the unspeakable blessing. But it is now, for the judgment day is on now, yet, there awaits that final transaction with God, when we pass thru, all alone, the last turnstile of earth's journey. Ominous dread? No. "Death is swallowed up in victory," says Paul.

But this is not all of salvation. If so, my personal escape from hell would be my only purpose in life. But isn't that the traditional belief? Yes, but it is untenable in the light of a social Gospel. And just this has produced many negative and selfish lives. Salvation has another dimension and a larger spiritual content. It is deliverance from, into—, from a slavery to sin into a bondservice to righteousness; from a negative into a positive outworked life; from a religion of "nots" into a religion of "dos," and into a wider existence where we expand and grow into mighty trees of God's planting; "unto the measure of the stature of the fullness of Christ;" which fullness was emptied, outworked for our example. What insufficient definitions and understanding of religion we have had! To be like Jesus, who loved his neighbor as he loved himself, is to be saved.

But this salvation is to be reached after. "I press toward the goal," says the apostle. You have seen athletes running in a race. How hot and eager! How hard they worked! Well, they could not run that race by sitting in the grandstand with the crowd. Neither can you. But how may we win the race of salvation? Work it out. You'll not win by accident, and not get it from your ancestry. "My father worketh hitherto and I work." "We must all appear before the judgment seat of Christ"—Well, read it for yourself in 2 Corinthians 5:10. Work is the primal law of redemption. You will remember God's charge to Adam. This is man's noblest birthright. And to think of your own vainglory and high-mindedness is to know that developing a Christian personality is hard work, but a noble achievement. It means the form of work that serves out amidst the lust and power, and the greed and gain of this world. Out where the cloud of sin is darkening the pathway of men. Out of the pews of the church into the world fields of action. Love working out is the only way to resist the appetite for sin and keep oneself from the meannesses of earth. Work is the open way to health and success. Call up Abe Lincoln and hear his testimony. Ask the rest of the rail-splitters and frontiers-

men. What say you, friend? Open the portals of the past and hear what great men of God have said. Well, whenever I see a holy, Christian character, I know that he has come up thru the Gethsemane of struggle and tears. "Work out your own salvation," and yet it comes as by magic.

And in what spirit shall we work? Well, just read Phil. 2:12-18. "Do all things without murmurings and questionings." Some of us have fallen out with work and others complain that it does not suit their case, opinion, or party. This darkens our light amidst a crooked generation. We are looked upon as no different than the world. When we give way to these surface vices, our life loses its attraction. We are asked to speak to some erring friend, or to go on some mission of mercy, but we put it off, and off, until at last, the clock of conscience says it is time to act; and then we go, but with murmuring and disputing. And so with our giving and self-denying, we murmur and complain. Yet, at last we may do it, thinking that in the mere doing conscience may be satisfied. No, no, there is no radiation of Christ in this. And this wise generation knows it. The imperfect in accomplishment, we are urged to be perfect in motive. This gives spiritual sanction to the most humble service. Religion must have something rare and uncommon to be attractive.

No one was more glad and free in his new-found religious liberty than was the apostle, Paul. He was always happy and optimistic, yet sublimely serious. "This one thing I do." And he did it in fear and tremblings; in shipwreckings, scourgings, and death. Friends, most of us take life so lightly. We seem not to have counted the glory of spiritual achievement, or the tragedy of spiritual defeat. We seem not to feel that God has invested his son in us and we are bought with a tremendous price. Why barter away our lives and blest immortal prospects? Why are we not serious and earnest? My penmanship teacher practiced two hours before writing a letter to a particular friend. We are writing our own life's epistle and sending it on to our Dearest Friend where we are to meet it as our book of life. Ought we not to work out our salvation with fear and trembling?

And God is out enabling power. It is he who worketh in us both to will and to work his good pleasure. To attempt to work out our salvation on the field of human effort alone, is to meet defeat and failure. This is Paul's argument, in the seventh chapter of Romans. But when God works in us we are willing his good pleasure, and are no longer debtors to fleshly appetites and disobedience. Why does the little bud on the tree develop into fruitage? Why does the acorn grow to be a massive oak? God, is the answer. This is what the apostle means by strength in weakness.

Pull the switch and feel the pull and energy of that mystical force, electricity. Paul was constantly pulling the switch, or rather, he left it open. How easy and free his life! Said he, "It is no longer I that work but Christ that worketh in me." God takes up his abode in the heart's holy of holies that he might work out in the ideals of life. He lays hold of the intellect that we might understand his will; upon the emotions that we might feel his pleadings; upon the will that we might be helped into right choices; and upon the imagination that we might enjoy the city of gold. All this, that we might not run in vain. Work out your own salvation with fear and trembling.

**SUFFICIENCY:**—Our Sufficiency is of God.—2 Corinthians 3:5.

**G E T UNDERSTANDING:**—A scorner seeketh wisdom, and findeth it not; but knowledge is easy unto him that understandeth.—Proverbs

**EVERY DAY:**—This is the day which the Lord hath made; we will rejoice and be glad in it.—Psalm 118:24.



# UNCLE RUBE SPINACH SAYS

## WHY WORRY?

HOW much worryin' we do when there aint a thing to 'worry about, don't we now? You know, right here, this very night, an' its night now, as purty nigh it any ways. It's past 'leven o'clock P. M., but I've been settin' here wonderin' what I could worry 'bout an' then all to once, I happened to think of my shoe strings. You know I most always gen'rly wear two shoes an' I have an awful time with the strings 'at I tie 'em up with. Mostly I tie 'em in a double bow knot, not that I have to tie 'em that way, but I do.

Well its easy enough to tie 'em but the untyn' aint always so easy. You see my strings, the end of 'em I mean, has a habit of droppin' through the loops 'an when I jerk 'em to git my shoes off, I'm all tangled up, so as I said, tryin' to think of somethin' to worry 'bout, I thought of the shoe strings, an' I reached down an' give one a jerk,—she came off jest fine. I wuz surprised an' used some rather harsh words—give the other string a jerk an' would you b'lieve it—it came also. Well there, an' here I am jest provin' to me that this worry bizness is all foolish. We worry 'bout things that can't possibly happen to us.

Mebbe we think the Lord put us here to worry 'bout somethin', but good friends, he never did any such thing. He put us into this world, made the world beautiful, put flowers, trees, an' everythin' here for us to enjoy. If we don't enjoy all the beauty that is around us, well then, dear friends, there's somethin' wrong with us ourselves, an' we'd ought to see a doctor right away. An' I don't mean a reg'lar doctor that charges a dollar for a little box of pills 'at costs him 'bout 3 cents. I mean a doctor that will tell you your real trouble. An' gen'rly speakin' you'll find you aint so sick as you think. Your mind gits kinda warped or somethin' an' you think the world is upside down. No matter folks, I know 'cause I've been into an' thorough it—yes, lots of times, an' its a dear ol' world, beauty all 'round us, even the snow flakes, if you've ever examined 'em, have a beauty all their own. Every one of 'em have a form perfect, each one is perfect. Were we half so perfect there would be no jails, no prisons, no lunatics, no feeble minded, there would be nothin' in this world but peace an' happiness.

But we worry, we feel that we must worry 'bout somethin'. That's why I worried 'bout my shoe strings. Friends, mebbe you're lookin' for bigger things to worry 'bout. You'll find the things you're lookin' for, don't ever fear. If you want to worry jest keep a finger in the air, an' worry will come to you. It's a bountiful crop this year—every year for that matter. Always plenty of material to start things, but what does it get you in the end?

Oh shucks! When my shoe string came untied I quit the worryin' folks. Friends, jest think the matter over, resolve right now that two things shall not worry or fret you. An' here are the two things that no one should ever worry 'bout; the things you can't help, an' the things you can help. If you can't help a thing why worry 'bout it? If you can help it, go ahead an' change it an' don't worry 'bout it any more. An' last an' finally, don't worry anyway. Cordially yours,—UNCLE RUBE.

## Clean Through

A superintendent of public instruction in Georgia explained the powers of the X-ray machine to a gathering of negroes at the school commencement. After the meeting was over a negro called him aside and wanted to know if he was in earnest about his machine. The superintendent assured him that he was. "Boss, I wants to ax you ef er nigger et chicken, kin you look in him and see chicken?"

"Why, yes, Ephraim."

"Well, boss, I wants to ax you jes' one mo' question. Kin you look in dat nigger an' tell whar dat chicken come from?"—Royal Gaboon.

## He Was Loyal Anyhow

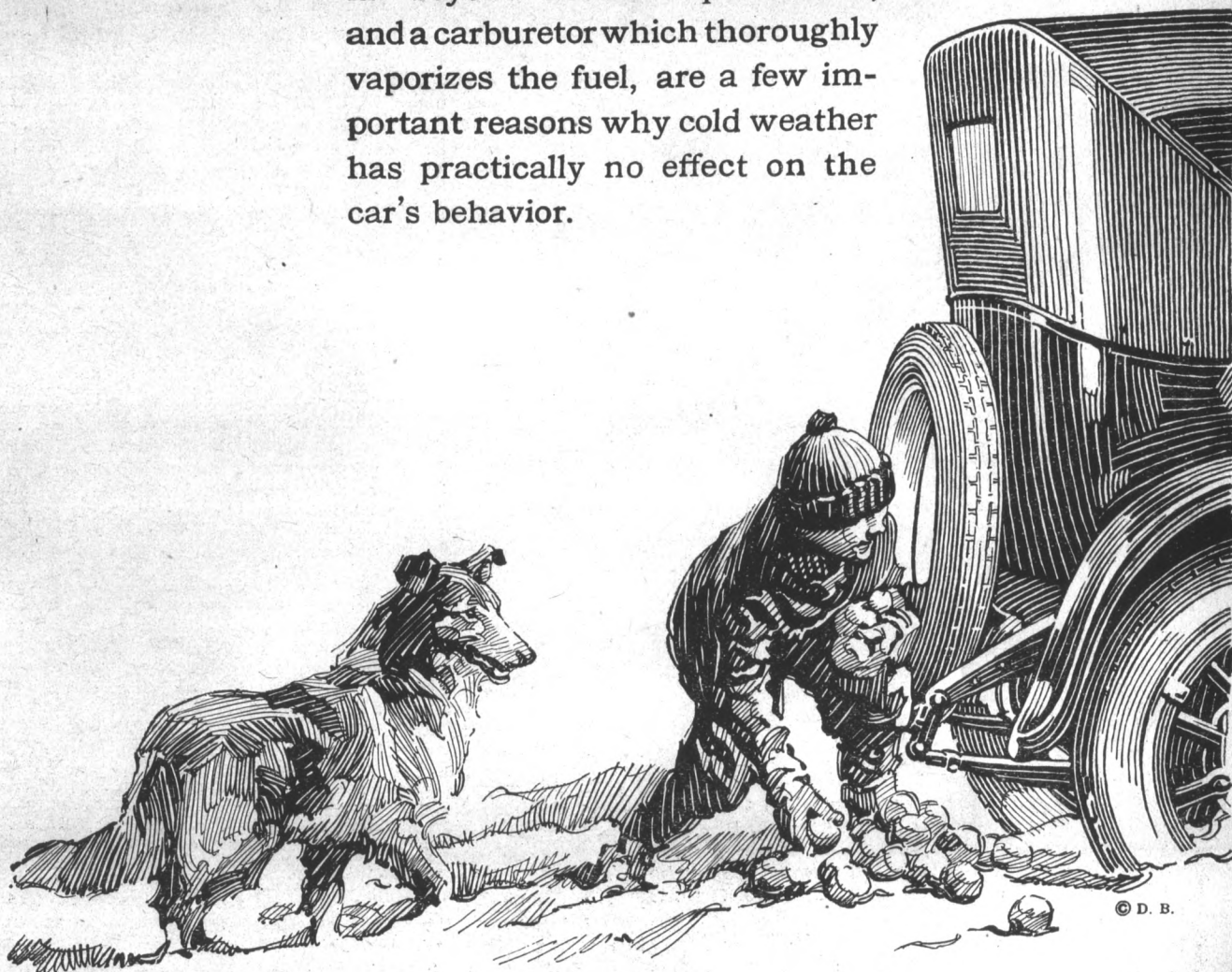
"Can't yer go any faster?" roared the angry traffic cop to the fellow who had delayed a string of autos several blocks long.

"Yes," calmly replied the driver of the antiquated flivver, "I can, but I don't want to leave the car."—Wallace Farmer.

# DODGE BROTHERS TOURING CAR

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# The Michigan BUSINESS FARMER

SATURDAY, FEBRUARY 16, 1924

Edited and Published by  
THE RURAL PUBLISHING COMPANY, Inc.  
GEORGE M. SLOCUM, President  
Mt. Clemens, Michigan

Detroit Office—818 Washington Boulevard Bldg., Cadillac 9440  
Represented in New York, Chicago, St. Louis and Minneapolis by  
the Associated Farm Papers, Incorporated  
Member of Agricultural Publishers Association  
Member of Audit Bureau of Circulations

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## WOODROW WILSON

AMERICA has paid its final respects to one of its great presidents, Woodrow Wilson. His earthly remains have been deposited in the cathedral which overlooks the capitol of the great democracy whose destiny this man helped to mold.

The name of Woodrow Wilson will oft be mentioned in history and in school-rooms many generations after the names of those who harassed his plans have been forgotten.

The principles which Woodrow Wilson laid down at a time when all of the world was a seething cauldron of war and hatred attracted all men of every nation, creed, and color to the standards of humanity which he unfurled. The principles of world peace and world democracy which he preached during those trying years and which he failed to accomplish in practical form at Versailles will be echoed from one generation to the other until their accomplishment is assured on this earth.

Woodrow Wilson will be remembered always as the pioneer apostle of world peace. Nothing that his enemies have said will deter in the slightest the measure which history takes of this man.

As one writer has so aptly expressed it "Woodrow Wilson was the greatest single casualty which the United States suffered in the World War."

He died a martyr to a principle as lofty as that for which Lincoln died and which, like Lincoln, he could not live to see completed.

We bow our heads in humble reverence to the memory of a man who gave his life for his country—Woodrow Wilson.

## MICHIGAN LEADS IN BEANS

ACCORDING to Frank B. Drees, secretary of the Michigan Bean Jobbers Association, the 1923 crop of navy beans in Michigan exceeded two million bushels, and if so this will place California in second position.

In navy beans the farmers of Michigan have a crop which can be made, if it already is not, the most profitable single crop grown on the farm in our state and a crop which will make the particular sections of Michigan especially suited to it among the most profitable farming lands in America.

If it is true that Michigan grows practically three-fourths of all the navy beans sold in the United States, then it is equally true that the men who grow them should control its price and destiny on the market.

In the face of some discouragement from co-operatives which have been organized during the past few years and which has not made a success in controlling the markets, we predict that for the growers of any single commodity who can band themselves together as can the bean growers of Michigan, there is excellent reason to believe that they can control the price of their product on the market and thus realize from it the profit to which they are entitled as manufacturers.

A recent meeting of the bean growers at De-

troit showed that these gentlemen have at last awakened to the possibilities of cooperating with the grower and their action is not to be discouraged, but that they must get ready to share the profit and responsibilities of marketing Michigan's beans with the authorized representatives of the growers themselves is only a case of "eventually, why not now?"

## HORSE VS. TRACTOR

AT one of the Farmers Week meetings at Lansing, Mr. R. L. Hudson, superintendent of the horse department, made the following statement: "It has been generally agreed by horsemen and tractor men alike that the horse as well as the tractor are here to stay and that we have been going through a period of adjustment in which the place of each has come to be recognized."

This would seem to indicate that both sides of a controversy which has waxed warm during the past decade have come to acknowledge the rightful place of each, on the farms of this country.

It is safe to assume that the tractor will never entirely supplant the horse and it is equally true that the horse cannot meet the competition of the tractor in certain lines of farm work which must be done quickly and efficiently.

It is equally true that the tractor will replace two or three teams and that the ordinary farm in Michigan, for instance, of comparatively small acreage can be well handled by a small tractor and one team, whereas three or four teams might be required without the aid of the tractor.

It is interesting also to note that the cost of a tractor is today less than a portable engine of the same horsepower would have cost ten years ago. There is no reason for the farmer waiting for silo filling, wood cutting, or even threshing if he and his neighbor will purchase cooperatively these important machines and handle them with their own tractors.

We predict a large sale of tractors in Michigan this year, principally because farmers are becoming convinced that these machines have been brought to a practical and efficient point which guarantees them long life and proves that they are out of the experimental class.

To those farmers who are planning to buy tractors this year we want to add just one word of advice, and that is: get your tractors early enough so that it can be well worn-in before you put it to the heavy duties of plowing. You would not think of running an automobile at high speed with a load of six or seven people the minute you bought it, and yet your tractor in plowing works even harder. Our suggestion is that you get delivery of your tractor at once and begin using it on light work around your farm so that it will be well worn-in by the time plowing starts. You have not a minute to lose and your dealers will be glad to accommodate you in the matter of time because he is as anxious as you to see you make a success of a tractor on your farm.

## PROHIBITION ON TRIAL

NO sane man would attempt to argue but what absolute prohibition of alcohol for beverage purposes would be an excellent condition. But prohibition which prohibits is one thing and prohibition which maintains a great army of bootleggers and produces a crop of corrupt officials is quite another.

It seems a pity that men cannot be found who can enforce laws, but after six years of prohibition in Michigan one feels at times that too long a step was made without the backing of proper public enlightenment, that too drastic a law was put on the books before the people were ready to receive it.

One thing is certain, that man or woman is a traitor to better government, who ostrich-like, with head in the sands, refuses to face the conditions as they exist, not only in the urban centers, but in the rural sections of Michigan.

There are those who believe temperance and moderation can be taught, whereas prohibition can never be enforced. One thing is certain, the present intolerable disregard of a constitutional law cannot continue without proving a menace to the very foundation of our government.

## WHY TAX THE AUTOMOBILE BUYER?

THE automobile manufacturer is putting up a just fight for discontinuance of the five per cent excise tax which the buyer of a new automobile must pay in addition to the manufacturers price.

This excise tax on automobiles was imposed, as we understand it, during the time of a national emergency, when the purchase of a new car

was by some considered a luxury and a source of taxation revenue which was entirely justified. The times which made this excise tax practical under such conditions have passed long ago and that Secretary of the Treasury Mellon should not have recommended the abolition of this unjust tax on the citizens of this country in his recent proposal is to be regretted.

The farmers of the United States will buy more than half of the automobiles purchased in this country in 1924. It is mighty important to them that this tax be removed, and if some of their would-be sponsors in Congress will take enough time from their wallings over "our pitiful plight" to remove this tax, they will receive the undying gratitude of their farmer constituents.

The average farmer has driven his old Lizzie just as long as he proposes to, and this year with conditions looking better he is going to trade it in for a new model and perhaps a truck too, so it is mighty important to him that this direct tax on his progressiveness be removed.

## WELL, NOW, MR. PESSIMIST!

WE recognize that there are still any number of farmers, and friends of the farmer, who do not believe that cooperative marketing can ever be made a success in these United States. They remind us of the man who saw the giraffe in the circus menagerie and said "I don't care, there ain't any such animal!"

The facts are, that the cooperative farmers organizations in America did a business of over two billion dollars last year. Reports to the Department of Agriculture from 2600 grain organizations show business totaling \$490,000,000; 1841 dairy products organizations, \$300,000,000; 1182 livestock shipping associations, \$220,000,000; 856 fruit and vegetable associations, \$280,000,000; 78 cotton cooperatives, \$100,000,000; and 14 tobacco organizations \$132,000,000.

Only 8313 of the 10,000 organizations have reported, of which 90 per cent were engaged primarily in selling farm products, and 10 per cent in collective purchasing of farm supplies.

## THE RETURN OF THE PRODIGAL!

WE saw a cartoon the other day that was a clear exposition of the happy return to the farmer of his wayward daughter, Prosperity, who has been absent from the old farm these past few years.

Prosperity has come back to the farm. In some sections she is more worn from her trials and tribulations during the sojourn away from home than in others, but in those sections which are not dependent on any one crop, where diversified agriculture has been practiced as it has in Michigan, for instance, her return is spirited and easily apparent.

Many of the farm homes to which this wayward daughter would now return and settle down in the peace and comfort of former years have been boarded up and their once proud possessors have flown with other moths who have been drawn by the flame of the city lights. Fain now would she help in the planning of this year's crops, in the upbuilding of the herds and flocks, but no, like rats from the ship in distress, these weak ones of the farm, are now standing in lines to catch the street-car to their work, punching the time-clock and returning to their homes after dusk with scarce enough from their high-sounding wages to pay the land-lord, the gas-bill, the butcher, the baker and the hoard of city vultures who prey on their daily stipend.

Back on the farms of Michigan, the sterling men and women who have stuck to the ship, while the winds of adversity howled through the rigging and when it seemed as though the harbor of safety would never be reached before dire calamity would send them to the bottom of despair; these sturdy souls are looking forward to a year which promises a further return to the days of normalcy.

Natural conditions have brought about a cleaning-out of the laggards, the mis-fits, the ne'er-do-wells on the farms of the United States. To-day we have left as our legacy the cream of the farming population and with them, we face the tomorrow with upturned faces and high hopes.

Welcome home, Miss Prosperity, we've kept the chair at the right-hand of dad, always waiting for you and altho the fatted calf may have already been shipped to a market that paid a fair price this year for him, have another helping of chicken and biscuits, we want you to know we're glad to have you home, and we'll never again mention how long you stayed away, if you'll just take your old room upstairs and make this your home for ever-more!



## PUBLISHER'S DESK

### BE A FINGER PRINT SPECIALIST

THE old saying goes "Do one good act every day," and if I do nothing else today I will save one reader sixty dollars because I have just advised him that I do not believe there is a very good opening for a finger-print expert at Moscow, Michigan.

There seems to be no end to these correspondence school games, and you will always find them tied up with a five-dollars down and a five-dollars-a-month proposition, as this one was. Their circular matter is sometimes so plausible that unless you had stones in your pocket you might be wafted away in the exuberance of the man who wrote it.

I see by the papers that a Harvard professor is making a rocket which he hopes to shoot to the moon and I fully expect to find the circular matter for a moon-shooting correspondence school guaranteeing to teach you how to make a rocket to hit the moon for five dollars down and five dollars per before many more issues go to press. If you see one tell me about it.

### DETROIT AIR COOLED CAR COMPANY

A READER writes to find out if the hundred dollars which he paid for one share of preferred and one-quarter share of common stock in the Detroit Air Cooled Car Company has been lost. I am given to understand that this company is still in operation but that manufacture on a profitable basis has not begun yet. While there is life there is hope!

### THE ART WORK SCHEME

"Dear Mr. Slocum: I would like to ask you a few questions on which I would like to get your idea as to what can be done. Now, in regard to the Underwood Art Goods Company, Portsmouth, Ohio, the manager is Ruth E. Underwood. I saw her ad. in a paper of where she wanted ladies to do fancy work at home, so I wrote her and she said that she would send me a finished article, for which she charged a price of \$1.00 and she sent me a free try-out for me to make and send back for inspection.

"The finished article was a hand-made handkerchief and she was to pay me 25 cents apiece for making them. And when I had done work enough to amount to \$12.00 she was to refund my dollar.

"So she accepted my work and sent me a quarter of a dozen to make. I made them and sent them back, for which she agreed to send my pay as soon as she received the goods. I sent the work back to her but have never heard from her since, and that was the latter part of May 1923. I wrote her in regard to the work and have heard nothing. I also had a return on the outside of the package.

"Now I would like to know if there is any way of getting my dollar back or the pay for the work or stopping her from swindling others out of their dollars?"

I HAVE advised our reader who wrote the above that she should send a registered letter to this company, stating her claims, and keep a copy of that letter. If she does not receive a satisfactory reply I will take it up with the proper authorities to see that justice is secured, and I would be glad to hear from any others of our readers who have had experience with the above company.

### I. R. HOUGH FUR COMPANY

THROUGH this department we have continuously advised fur trappers in Michigan to insist upon the company to whom they ship furs holding their shipments separate until the price has been quoted and made satisfactory. If there is any business in which there are more crooks than in the buying of raw furs we do not know what it is. This morning on my desk I find a letter from a reader at Charlevoix, as follows:

"I have just read in The Business Farmer of another person who shipped furs to the I. R. Hough Fur Company, Meriden, Connecticut, and

got skinned as I did but worse. I sent three good mink all prime and should have been classed as large and four rats, large, for which I should have gotten \$25.00. I had them insured for \$20.00 and got a check for \$2.30 for summer caught furs, none gotten before November 1. I sent check back and wanted furs returned but they said they were nearly rotten, green, mildewed, and burnt—some classification for summer caught furs. I can give exact dates of sending and receiving checks as I had them registered. This letter can be published and I would like the address of the other party who sent the other letter on page 15, issue of February 2, 1923."

These letters hardly bear out the high-sounding circular matter which this company sends out, from which we quote as follows: "Why you should ship to the Hough Fur Company, Inc. We are recognized as the most liberal and expert graders. We quote the very highest prices. And we do absolutely guarantee to pay you every cent your furs are worth. Fictitious high prices mean nothing to you—it's the liberal grading that counts every time. Remember our quotations are net to you. I pay all express charges and refund parcel post charges on all shipments. Goods are held separate upon request and we charge no commission."

Compare these printed claims with what our readers have been reporting of their dealings with this Company. Can you beat it?

Fur trapping is a profitable side line for men and boys in most sections of Michigan. It is a stable employment and there is always a good market for all kinds of furs, but the most important thing is to know they are being sold through a responsible house that will give you a fair grading, and it is well to pay no attention whatsoever to fly-by-night concerns that make especially high prices in the circular matter which they send by mail. This type of house cannot advertise in high-grade publications, which attempt to protect their readers.

### PAID UP RIGHT WAY

ABOUT two weeks ago I sent an account to you for collection. It was for milk sold to the — Creamery Company. Would say I have had a local attorney trying to collect this account since the last of August but was unable to collect it. I received my check yesterday. This shows they were glad to settle when they found you were after them.

I am very thankful to you for this service and wish you would write me as to the amount I am in your debt for same.

I will ever be a booster for the Michigan Business Farmer for the amount saved me on this one instance would pay many years subscription to M. B. F. Again thanking you I remain W. M., Berville, Mich.

### OUR BOOK REVIEW

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

**Good Health.**—How to get it—how to keep it, by Alvah H. Doty, former health officer of the port of New York and author of "Prompt Aid to the Injured." It is published by D. Appleton and Co., New York, and the price is \$2.00.

**The Eighth Wonder.**—and other stories, by A. S. M. Hutchinson, author of "If Winter Comes."—"The Eighth Wonder" which gives the book its name, is a story of love glorified; "Some Talk of Alexander" the tale of a spiritual awakening; "The Rough Little Girl and the Smooth Little Girl" as fine a picture of the temper of a real aristocrat by birth and breeding as has been drawn; "The Swordsman" a dramatic account of an ancient British revenge; "The Grim Test" a charming and humorous modern love story; "A Magdalen of the Soil" a tragedy of present-day France. In "There Still are Fairies" a workmen's strike is handled with a light humorous touch, and "In Evening Bells" is an allegory which closes the book on a high spiritual level. The stories are altogether different but promise excellent entertainment and need no other introduction to a public already acquainted with this author's work. Little, Brown and Co., Boston, Mass. (\$2.00.)

## First Mortgage Real Estate Gold Bonds

Farmers accustomed to appraising real estate appreciate most highly the conservative procedure of the Federal Bond & Mortgage Company in restricting each issue to a moderate portion of the rock-bottom value of the security.

Write for Booklet AG1090

Tax Free in Michigan  
Free from Federal Income Tax of 4%

7%

## Federal Bond & Mortgage Company

(1177)

FEDERAL BOND & MORTGAGE BUILDING, DETROIT



**10,000 miles guaranteed  
and yet you save 1/3**

## Riverside<sup>OVERSIZE</sup> CORD Tires

Riverside Oversize Cord Tires are guaranteed for 10,000 miles and in actual performance give up to 18,000 miles. Can any other tire do more?

So why not save one-third and use Riverside Cords? What more will any other tire do? Then why pay more?

And this 10,000 miles service is backed by a guarantee that has stood for fifty-one years. Does any other tire carry a better guarantee?

**Quality is built into Riverside Cords**

This guaranteed mileage is built into Ward's Riverside Cords. High treads, thicker and stronger, of tough, live rubber.

This exceptional quality of Ward's tires alone has made us the **largest retailers of tires in the country.** The tires themselves have convinced thousands that Riverside Cords are best.

**You Don't Risk One Cent**

Before you buy any tires send for Riverside. Inspect them. Compare them with tires selling for \$5.00 or \$15.00 more.

Send them back if you do not find them the equal of any first-quality oversize cord made. We will refund your money. These prices buy 10,000 miles of service—and more.

CATALOGUE No. 464M00—Be sure to give size.

SIZE	PRICE	POSTAGE	SIZE	PRICE	POSTAGE
30x3 1/2	\$ 9.75	28c	32x4 1/2	\$20.95	45c
32x4	16.95	42c	34x4 1/2	21.95	48c
33x4	17.45	43c	33x5	28.75	58c
34x4	18.25	43c	35x5	29.95	61c

"I have used two Riverside Cords on the rear wheels of my car for two years. They have gone over 12,000 miles now and have never been off the wheels—and they still look fine."

August Wm. Schmitt  
B-56-R-2  
Van Horn, Iowa

Wire your order. Orders received by telegraph will be shipped the same day C. O. D.

**Free** Write today to our house nearest you for free Auto Supply Book. Address Dept— 11-T

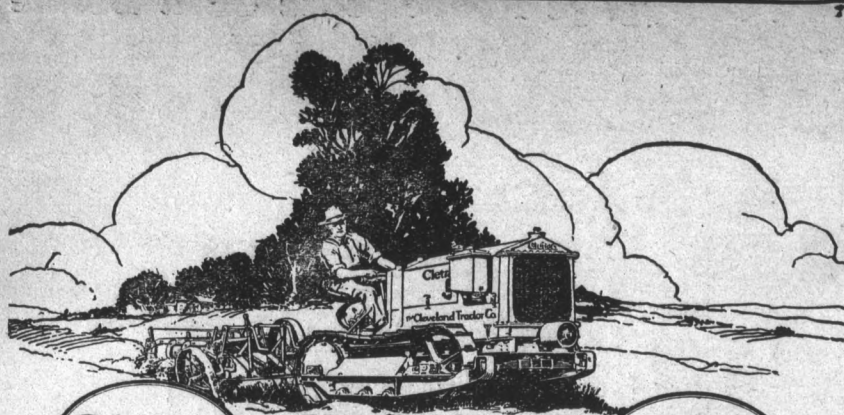
**Auto Supply Book**



## Montgomery Ward & Co.

Chicago Kansas City St. Paul Portland, Ore. Oakland, Cal. Ft. Worth New York Atlanta, Ga.





**Cletrac**

**A Better Tractor  
A Lower Price**

**\$1270**

**F. O. B. FACTORY**

**12-20  
H-P**

CLETRAC'S crawler construction, its suitable size, great pulling power, simplicity and economy of operation all appeal to the farmer. The broad tracks with which Cletracs are equipped furnish plenty of traction in any kind of soil—no miring down, no "digging in."

Cletracs, because of the broad tracks on which they travel, are noted for their splendid work in seed-bed fitting. Cletracs do not pack the soil.

The purchase of a Cletrac is an investment in a crawler tractor of a size best suited to the all-round power requirements on the farm.

Five millions of dollars in equipment and a big factory constituting upwards of five acres of floor space under roof signify the element of permanency back of Cletracs.

Cletracs, with these and many other advantages of crawler construction, are now offered at the above new low price.

Write for catalog and let us tell you more about the use of Cletracs.

**THE CLEVELAND TRACTOR COMPANY**  
Cleveland, Ohio

BRANCH OFFICES:

New York	Chicago	San Francisco	Minneapolis	Oklahoma City
Detroit	Atlanta	Los Angeles	Windsor	Portland

**The New Improved Walsh NO-BUCKLE HARNESS**  
No Buckles To Tear  
No Rings To Wear

**\$5 After 30 Days Trial**

Send for my big new free harness book. Tells how I send Walsh No-Buckle Harness on 30 days free trial. Use it—prove for yourself that it is stronger, easier to handle. Outwears buckle harness because it has no buckles to tear straps, no rings to wear them, no buckle holes to weaken them. Amazing success—thousands in use in every state.

**Costs Less—Wears Longer**  
Saves repairs. Walsh special 900 steel test leather, which is explained in big free book. Easily adjusted to fit any size horse. Made in all styles: back pad, side backer, breechingless, etc. \$5 after 30 days trial—balance is paid monthly. Return to me if not satisfactory. Write today for my big free book, prices, easy terms. Sold direct to you by mail only.

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**WALSH HARNESS CO.**  
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**Walsh's Harness Book**  
Tells the Why and How  
WRITE FOR IT TODAY

**Implements  
Cost Less  
under the  
MOLINE  
Plan**

because all wastes are cut out. See your Moline dealer or write to us

**NEW MOLINE PLOW CO.**  
Moline, Ill.

TOBACCO

**HOMESPUN TOBACCO, FIVE POUNDS**  
Chewing, \$1.75, ten, \$3.00, twenty, \$5.25;  
Smoking five pounds, \$1.25, ten, \$2.00, twenty, \$3.50. Pipe and Recipe free. Send no money. Pay when received. KENTUCKY TOBACCO CO., Paducah, Ky.

**Aspirin**

Beware of Imitations!



Unless you see the "Bayer Cross" on the package or on tablets you are not getting the genuine Bayer Aspirin proved safe by millions and prescribed by physicians over twenty-three years for

Colds	Headache
Toothache	Lumbago
Neuritis	Rheumatism
Neuralgia	Pain, Pain

Accept "Bayer Tablets of Aspirin" only. Each unbroken package contains proven directions. Handy boxes of twelve tablets cost few cents. Druggists also sell bottles of 24 and 100. Aspirin is the trade mark of Bayer Manufacture of Monaceticacidester of Salicylicacid. (2)

**PATENTS**

Send sketch or model today for examination and report. Record of Invention blank on which to disclose your invention and NEW guide book, "How to Obtain a Patent" sent free. Promptness assured. Highest references. Write today. CLARENCE A. O'BRIEN, Registered Patent Lawyer, 1551 Security Savings & Com'l Bank Bldg., directly across street from Patent Office, Washington, D. C.

WHEN WRITING TO ADVERTISERS PLEASE MENTION THE MICHIGAN BUSINESS FARMER

# RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS

## HOW TO BUILD A SIMPLE RECEIVING SET

SINCE writing the first part of this series of "How to Build" articles I have constructed a simple receiving set exactly as described in the preceeding article, with the exception that a rheostat was added to control the "A" battery should I desire to use some other kind of tube than the one mentioned. This set cost less than the figures given previously and in every way is satisfactory. With it I have heard broadcasting stations during the daytime that with my larger set and amplifiers I could not hear.

It is possible that the beginner may have some trouble in "tuning-in" at first. Just have patience and keep trying, making all adjustments very slowly and carefully. When you once hear a broadcast and realize just what you have done the "tuning-in" will come easier each time you try it. After having used your set for several nights you will be able to listen-in without much preliminary adjusting.

Be sure that when you once have got a station in clear to write down on a memorandum at just what points you had the dials set. This will make it easier for you the next time that you want to hear the same station.

Be sure to disconnect your "A" battery as soon as you are through listening for that time. The longer your battery is used the shorter the life. The most satisfactory results with a WD-11 (or WD-12) tube will be had if you will use two or three No. 6 batteries connected in parallel; that is with all the carbons connected together and all the zincs connected together; this will add many times the life of one battery alone, as dry batteries will give a longer service for the less current that you use. The additional cost of one or two extra dry cells at first is small and will mean that you will more than get your money back in increased life.

Sometimes when your set is connected up it will not work, and this may be due to the fact that if the wires from the rotor (moving part) of the vario-coupler are connected in one way that the set will not regenerate or oscillate, but by simply reversing the connections of these two wires you will find that the set works fine. Therefore it is advisable not to solder the connections on these two wires until you have tried out your set and found that it works.

A rheostat in the "A" battery circuit will give you slightly better control on clearing up the voice in what you hear. It should be connected as shown in Fig. 4, and can either be connected on your panel or be connected just to your wires between the A battery and your set. In either place the results will be the same. It will save your battery also as you will then only have to use just the exact current necessary to receive well. This will cost you from 60c up.

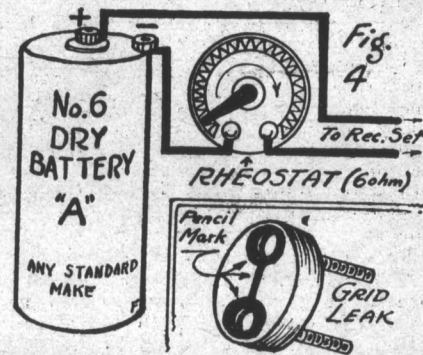
Should you have a car with a starter and so can have a 6 volt storage battery to use will find that with a UV-201A or a C-301A tube, which costs the same as a WD-12, you can use your storage battery for receiving instead of buying dry batteries, but you must then use a 30-ohm rheostat to control the current for the tube which then will give you practically a whole month of receiving for three hours a night, on one charge.

In handling these vacuum tubes, no matter what make, be sure that you place them down carefully and gently, remembering that they cost you \$6.50 each and if the filament is broken that the tube is no longer of any use as a detector. They should also be carefully watched to see that by mistake you do not short-circuit your "B" battery across the filament which will burn it out.

The list of parts given did not mention dials for either the vario-coupler or the variable condenser. These were figured in on the price given and unless you wish to spend more you will not have to. Always remember that the prices given are for low priced parts, and you can

always buy better parts for higher prices. Yet at double the prices given you will not get enough more satisfaction or service out of your set to warrant your spending the money.

The grid condenser has a important function to perform and should be short circuited (or shunted) with the grid leak. This grid leak, unless you buy a complete mounting and leak, will only be a piece of hard rubber, thru which two screws project. It will be necessary for you to remove these screws and place a piece of strong letter paper on the rubber and then replace the screws which will have to pass through the paper. Before screwing them down all the way, take a soft lead pencil and blacken the paper around each hole and under the screw head, only blacking out a little farther than the heads will cover. Now when your screw heads are down tight and the set is ready to test take your pencil and make a mark connecting the screw heads. This is to let excessive charges that collect on the grid of the bulb leak away. Sometimes you have to use a heavier or lighter mark. Take



Rheostat to control "A" battery.

an eraser and after trying a heavy mark erase a part of it and try till you get the best results. These final adjustments should not be made until you are listening-in to a broadcast at which time you will be better able to tell if the heavy or light line is giving you the best results.

Whenever you have finished listening-in, cover your set with a piece of paper or cloth to keep out the dust. It will make a lot of difference in the reception if you get dust particles between the plates of your condenser.

Do not place your set where the baby, or young children can play with it, nor do not permit strangers or even friends to turn the knobs just to see what it will do. Only the maker and the older members of the family should handle the set at all; the builder should be the one who first tries to make it work as he knows just how it was connected up.

After a time of using your set you will possibly want to get the music and talking a little louder so that several people in a room can hear all the good things; then you will want what is called an "amplifier." This will bring in the signals so that a "loud talker" can be used and heard by either a roomful or a large crowd depending upon the number of "steps" or "stages" of amplification that you use. We will now tell you how to build a "one step" or a "two step" amplifier.

## PICKED OUT OF THE AIR

Radio is rapidly becoming more interesting and of more importance to the farmer. Hardly a week passes that one does not read of another station devoting certain nights to broadcasting programs of particular interest to farmers. It is getting so that a farmer can "tune-in" nearly any night of the week and find at least one station broadcasting a special farm program.

Have any of you heard station WKAR? It is the station of our Michigan Agricultural College, and they are in the air each Wednesday evening during the winter months. The station has a sending range of 3,000 miles and they are planning some good programs. They broadcast on a 280-meter wave length, and they start at 8 o'clock, Central



Standard time. Be ready for them next Wednesday evening.

A broadcasting station has just been constructed for Sears-Roebuck Agricultural Foundation, of Chicago. It is to be an exclusive agricultural broadcasting station and will operate on a wave length of 448 meters.

If you want to hear an old fashioned dance concert listen to WOS, Missouri State Marketing Bureau, Jefferson City.

One Farm Bureau program a month will be broadcasted from WGY. This program is broadcasted the last Monday of each month at 7:15 P. M. E. Victor Underwood, Secretary of the New York Farm Bureau Federation will speak the last Monday in February.

#### POTATO MARKET IN HEALTHY CONDITION

POTATO prices are improving. Returns on the 1923 crops are averaging a little better than a year ago, according to late figures. The average planted in 1923 was about 10 per cent smaller than the previous year due to disastrous returns on the 1922 crop. The estimated yield is around 412,392,000 bushels or 14 per cent less than a year ago. With a smaller crop and a brisk demand due to the buying power of the consuming public potato distributors are optimistic. This year's crop will equal practically the same as the 1917-1921 average of 288,000,000 bushels. On a per capita basis the crop will be about 15 per cent smaller than in 1923 or 3.75 bushels. The average in the last 20 years has been 3.6 bushels while last year it was 4.1 bushels. Usually a yield of less than 3.6 bushels per capita results in higher price, or if the yield is more than the average, the price usually drops in proportion. This was true last year when the 1922 crop yielded 60,000,000 bushels above the average consumption. Prices went so low through the fall and winter that many of the growers left their fields undug. This year the crop is almost a normal yield on a per capita basis, the result is stronger prices.

Compared with last year, the crop is larger in the intermediate states of Ohio, Indiana, Illinois, Missouri, Kansas and Kentucky. In New Jersey and Virginia there is a big reduction. Of the 18 late potato states the most important ones are New York, Michigan, Wisconsin, Minnesota, North Dakota, Nebraska, Colorado and Idaho and in these states the crops are from 10 to 35 per cent less than a year ago. Maine is an exception, with an increase of more than 50 per cent. The crop in the late potato states is altogether about 40,000,000 bushels less than in 1922. The carlot shipments for the season up to December 22, 1923, comprised 90,477 cars as compared with 90,387 cars during the same period of the previous year. The car lot movement for the two years is approximately the same. From the minor late crop states 13,924 cars were moved against 25,010 cars in 1922. Most of this decline is in shipments from New Jersey, which shipped only 6,245 cars this year as compared with 18,030 cars in 1922. Shipments from the early producing states totalled 33,147 cars in 1923 as compared with 40,870 cars in 1922. Since the 1923 crop is considerably smaller than the crop of the previous year and shipments to date have totalled practically the same, the conclusion may be drawn that the marketable supply still to be shipped is smaller than it was a year ago.

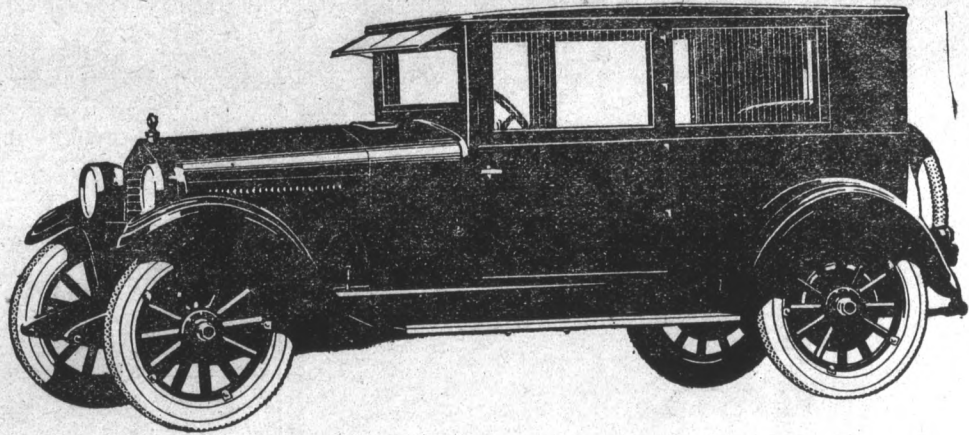
Within the last few weeks the potato market has slightly strengthened. Carlot shipments have declined. They are now but little above normal for this season. Demand should remain strong for the rest of this year as industrial prospects are favorable. With indications pointing to a smaller commercial movement the prevailing level should remain considerably higher than for the ten months ending October 31, 1923. Exports during the past year have been about normal, while the imports have been less than the average, due to unattractive prices here and to tariff restrictions.

(Editor's Note: The above information was secured through courtesy of the Sears-Roebuck Agricultural Foundation.

# The New ESSEX

## A SIX

Built by Hudson under Hudson Patents



### A 30 Minute Ride Will Win You

Essex closed car comforts now cost \$170 less than ever before. Also with this lower price you get an even more attractive Coach body and a six cylinder motor built on the principle of the famous Hudson Super-Six.

It continues Essex qualities of economy and reliability, known to 135,000 owners. It adds a smoothness of performance which heretofore was exclusively Hudson's. Both cars are alike in all details that count for long satisfactory service at small operating cost.

#### Gives Ideal Transportation

You will like the new Essex and its nimble ease of operation. Gears shift quietly. Steering is like guiding a bicycle, and care of the car calls for little more than keeping it lubricated. That, for the most part, is done with an oil can.

The chassis design lowers the center of gravity, giving greater comfort and safety at all speeds, on all roads. You will be interested in seeing how this is accomplished.

Greater fuel economy is obtained. The car is lighter, longer and roomier. You will agree that from the standpoint of appearance, delightful performance, cost and reliability, the new Essex provides ideal transportation.

The  
Coach  
\$975

Touring Model - \$850  
Freight and Tax Extra.

## ESSEX MOTORS

DETROIT, MICHIGAN



**DIRECT TO YOU AT MAIL ORDER RATES**  
For healthy orchards plant handsome, thrifty, Michigan-grown trees, grape vines, berry bushes, roses and shrubs. Raised in Kalamazoo County—famous for hardy, well rooted stock. **Guaranteed healthy and true to name.** Buy in your own State and insure prompt arrival in vigorous condition. Special prices on orders sent now. Ask for our handsome catalog of dependable trees—it's free.

**Celery City Nurseries, Box 210, Kalamazoo, Michigan**

**Purchase Celery City Trees**  
**Direct from Grower to Planter**



### STRAWBERRY PLANTS

**\$2.50 Per 1000, and up.** Our strong, healthy, tremendous bearing plants guarantee big crops of luscious berries. Best varieties for all kinds of soils. Many new varieties such as Eaton, Bun Special, Premier, Marvel and Cooper. The world's greatest new everbearing Strawberry CHAMPION. Full line of Raspberries, Blackberries and Asparagus. **GLADIOLI-ROSES-ORNAMENTALS**  
Greatly Reduced Large Stock of good Grape Plants at \$30.00 per thousand  
Prices. Beautiful new color catalog free. Write Today.  
**BRIDGMAN NURSERY CO., Box 64 Bridgman, Mich.**

**STRAWBERRIES \$3.00 per 1000 and up.** Raspberries, Grapes, Gooseberries, Currants, Dewberries. Stock guaranteed. Prices right. Catalogue free.  
**HELLENGA'S NURSERY, Three Oaks, Michigan.**

**SPECIAL OFFER—200 DUNLAP 200 GIBSON**  
Strawberry Plants and 25 Black Raspberry Plants  
Post Paid \$3.00. Fred Stanley, Bangor, Mich.

### \$1 Advertising Bargains

12 Dewberry Plants for \$1.00; 12 Concord Grape Vines for \$1.00; 20 Apple or Pear grafts ready to plant, make 6 ft. trees in one season for \$1.00; 4 peach trees for \$1.00; 20 flower bulbs for \$1.00; 8 Iris clumps for \$1.00. All postage paid. Get my list of other bargains.

**MARSHALL VINEYARD**  
Ben L. Marshall, Paw Paw, Michigan.

### Strawberries 25% Off

Prices slashed on Raspberry, Blackberry, and Grape plants. Stock guaranteed. 30th year. Catalog free.  
**J. N. ROKELY & SON, R. 20, Bridgman, Mich.**

**STRAWBERRY PLANTS FOR SALE—PREMIER**  
60c per hundred, \$4.50 per thousand. Senator Dunlap, Gibson and Dr. Burrill 50c per hundred, \$3.50 per thousand, postpaid.  
**ROBT. DE GURSE, Ovid, Michigan.**

**ALL WOOL YARN FOR SALE—FROM MANUFACTURER.** 75c up per lb. Also socks. Free sample.  
**H. A. BARTLETT, Harmony, Maine.**

### GOOD SEEDS

**Grown From Select Stock**  
—None Better—54 years selling good seeds to satisfied customers. Prices below all others. Extra lot free in all orders I fill. **Big free catalogue** has over 700 pictures of vegetables and flowers. Send your and neighbors' addresses.  
**R. H. SHUMWAY, Rockford, Ill.**

### KNIGHT'S PLANTS

**Strawberry—Raspberry—Blackberry**  
**Currant—Gooseberry—Grape—Asparagus**  
25% reduction in price on some varieties  
No reduction in quality. Our catalog describes Champion, The Best Everbearer and other best standard varieties. It tells you how to grow berries successfully; contains information to be had from no other source. Worth much to you, but is free.  
**DAVID KNIGHT & SON, Box 27, Sawyer, Mich.**

### PROFITS FROM YOUR CORN CROP

Glazed tile, wood and cement stave silos. Glazed and unglazed hollow building tile and **MAT FACE RESIDENCE BLOCKS.** Early buyers discount. Write for special agency proposition. National Clay Products & Silo Co., Dept. 16, Neely Block, Muncie, Indiana.



# Financial Statement as of December 31, 1923

Cash in banks and office.....	\$309,271.06
Municipal Bonds .....	28,947.45
Building and real estate.....	27,727.44
Furniture and equipment.....	12,000.00
Salvage .....	9,350.00
Accounts Receivable .....	6,662.25
Accrued Interest .....	3,725.35

**Total Assets .....\$407,683.55**

Total Assets, December 31, 1921 \$137,392.51  
Total Assets, December 31, 1922 226,499.45  
**Total Assets, December 31, 1923 407,683.55**

During the year 1923 the assets of the company increased \$181,184.10.

The total claims paid for the year 1923 amounted to \$402,422.11. The total claims paid since organization amount to \$1,664,120.10.

The company made a state-wide record for the year 1923, writing and renewing 46,050 policies. With a state-wide organization to write insurance and adjust claims the company is prepared to continue to give efficient service for 1924. No automobile owner should drive a day without insurance. Select a well established company that is prepared to stand the test of the serious claims and that has had experience in handling the complicated automobile claims.

Ask any sales agency and they will name you the agent for this company. The rate is very reasonable and you can obtain any kind of policy that you may desire to meet your needs. Insure today; tomorrow may be too late.

## Citizen's Mutual Automobile Insurance Company

HOWELL, MICHIGAN



## The Children's Hour

DEAR girls and boys: Washington's birthday is but a few days off and many of you will observe at school by speaking pieces, holding a party, or in some other way quite as suitable. Thoughts of George Washington bring to my mind many of his sayings. Some of them you have heard while others you have not, but I am going to give you some of them and hope you will remember and think of them during your daily work or play. They are:

Think before you speak.  
Speak no evil of the absent, for it is unjust.

Let your conversation be without malice or envy.

Show not yourself glad at the misfortune of another, though he were your enemy.

Associate yourself with men of good quality if you esteem your reputation.

If a man does all he can, though he succeeds not well, blame not him that did it.

Be not hasty to believe flying reports to the disparagement of any one.

Aren't these fine sayings? We should remember them in our daily life.—UNCLE NED.

### THE HEIGHT OF RIDICULOUS.

By Oliver Wendell Holmes.

I WROTE some lines once on a time,  
In wondrous merry mood,  
And thought, as usual, men would say,  
They were exceedingly good.

They were so queer, so very queer,  
I laughed as I would die,  
Albeit, in the general way,  
A sober man am I.

I called my servant, and he came,  
How very kind of him,  
To mind a slender man like me,  
He of a mighty limb!

"These to the printer," I exclaimed,  
And in my humorous way,  
I added (as a trifling jest),  
"There be the devil to pay."

He took the paper, and I watched,  
And saw him peep within;  
At the first line he read, his face  
Was all upon the grin.

He read the next; the grin grew broad,  
And shot from ear to ear;  
He read the third; a chuckling noise  
I now began to hear.

The fourth he broke into a roar;  
The fifth; his waistband split;  
The sixth; he burst five buttons off;  
And tumbled in a fit.

Ten days and nights, with sleepless eyes,  
I watched that wretched man,  
And since, I never dare to write,  
As funny as I can.

Sent in by Berenice Brockway, R. 3,  
Jackson, Michigan.

### OUR GIRLS AND BOYS

Dear Uncle Ned:—This is the first time in my life that I have written to M. B. F. We live on my grandfathers sheep ranch, 96 acres of wild land. My mother has lots of pretty flowers, which makes the place look homelike. I am deaf and go to the Michigan School for Deaf at Flint. I want to get an education so I can help my parents because my father is not well. I have one sister and one brother. I am the oldest. Last August, on Sunday afternoon I went over to my friends house, and they took me to Mud Lake to swim, but I can't swim as I am not able to use my arms good, but my girl friends all swim. I had a good time though. I can't do things like girls and boys who are strong, but don't take any back seat when it comes to dancing any fancy steps. I can enjoy a dance or movie. There is none nearer than 14 miles so I cannot go much. I read all the letters the boys and girls write in the M. B. F. and one time last summer I read one written by Bernice Kimball. She goes to Flint school too. She is also deaf. I receive a great many letters from the deaf boys and girls who were the pupils at Flint school, and I sure am interested in them. From your niece,—Alvina Lucille Hains, R. 4, Box 40, Harrison, Michigan.

Dear Uncle Ned:—I have been a silent reader for about three years. I would never miss the girls and boys page. I wrote two letters before to Uncle Ned but I never saw them in print. I would like to see this one in the M. B. F. I saw only one letter on the children's page that was from Provemont, so that put this notion in my head. My age is between 14 and 20 years old. All that guess my age correctly will get a long letter from me. I passed my eighth

grade this last spring and now I would like to go to the Ferris Institute next winter. I will close with a riddle. What is the difference between the North and South pole? Answer: the World. Now don't forget to guess my age.—Mary Ziets, R. 1, Box 31, Provemont, Mich.

Dear Uncle Ned:—I have been a silent reader of the Children's Hour for some time. Well, I must describe myself. I am twelve years of age, and in the 7th grade at school. I will close with some riddles. What is over the water, under the water, and always with its head down? Why is a goose like a cows tail? Why is the home of an old man easy to enter? What kind of business neyer progresses? What relation is the door to the door mat? I will close now. I hope that Mr. Wastebasket does not get this letter. I wish some of the girls and boys would write to me. With love to Uncle Ned and cousins.—Gladys Trace, R. 1, Palms, Michigan.

Dear Uncle Ned:—I was just reading the M. B. F. and found so many nice letters that I thought I would write a few lines for the children's page. I am 15 years old and have 1 sister married. My father owns 80 acres of land. We have 2 horses, 7 cows, 3 yearlings and 3 calves. We live about 20 rods from the school. The school teachers stay at our place. Well I will close hoping to see my letter in print in the next issue, and wishing to receive many letters from the children that read the M. B. F. I will answer every one of them. From your nephew,—D. O. Ball, Maple City Mich., R. 2. P. S.—I will take a guess at Veda Wheaton's age. I will say that 13 years is the age.

Dear Uncle Ned:—We have been taking your paper, and I always like to read it. I have never written you before, so will take the pleasure of dropping a few lines too. I am ten years old. My birthday is May 9th. Have I a twin? I am in the 4th grade at school, and we live on an 80 acre farm. We have 3 horses and 12 head of cattle. We have pigs, and 100 chickens. We have 6 cats, and we live 4 miles from Traverse City. When I was reading your last paper, I found some riddles of Miss Imogene Hilberd about the green, white and red house. The answer is a watermelon, isn't it? Another riddle I saw by Miss Gladys Carlson: What grows in the summer and dies in the summer? The answer is an icicle, isn't it? Well, as I like to hear riddles, I think I will put in some too: Where was old Uncle Moses when his lamp went out? There are two brothers, Joe and Tommy. Each of them had a flock of sheep. If Joe would give Tommy one of his sheep, they would have the same amount of sheep, but if brother Tommy had to give his brother Joe one of his sheep, brother Joe would have three times as many as brother Tommy. How many sheep did each brother have at first? My next riddle is. I went through an orchard and picked some apples. On the way home I met my friend No. 1. I gave him half of the apples and a half of an apple more than half. The balance I kept. On the second road I met my friend No. 2. I gave him half of the balance, and a half apple more than half, and the balance I kept. On the third road I met my friend No. 3. I gave him half of the balance and a half apple more than half, and I only had one apple left. How many apples did I pick up, and I never cut or broke one apple, and gave each friend a half apple more than half? Well as my letter is getting long I will close hoping to get an answer from some cousins. Good-bye Uncle Ned, until the next time.—Miss Martha Hermann, R. 2, Box 37, Traverse City, Michigan.

### A BREED OF PUPS



Add and subtract the names of the objects, and have, as a result, the name of a breed of dogs. What it is? Answer to last puzzle: CLARA and IDA.



## FARMERS' WEEK AT M. A. C. IS A SPLENDID SUCCESS

(Continued from Page 6)

the infantry, coast artillery, and cavalry units of the college regiment. Next came floats representing departments of the college and following these were prize winning livestock from the splendid flocks and herds of the college. The whole parade gives to the visitor a moving picture of M. A. C. and demonstrates something of the size of the college institution.

### Seven Big Exhibits

The exhibits held in connection with the Farmers' Week programs form one of the big attractions of the week. The Poultry Show, held at the poultry plant brought together the winning birds from the various poultry shows of the state for a final competition. The entries in the rabbit classes were also extensive and this section of the show was held in the Veterinary building.

The Animal Husbandry Department exhibit was held in a building joining the Judging Pavilion. This exhibit illustrated the results of various feeding experiments and also featured the M. A. C. winnings at the International Livestock Exposition.

At the new Home Economics building interesting exhibits of clothing and textiles claimed the attention of the women visitors. Proper combinations of foods for the various meals formed a large part of the nutrition exhibit. Proper home furnishings were also displayed. The work of the co-eds with nutritional experiments was illustrated by many cages of white rats upon which the several diets are being tried.

The Engineering building contained the exhibit of the Engineering Department. A miniature power station and transmission line was shown, together with extensive exhibits of metals. The big broadcasting station of the college was also a center of attraction. This station is WKAR and broadcasts at 280 meters. Several of the talks given during Farmers' Week were broadcasted for the benefit of those not able to attend.

The Farm Crops exhibit, consisting of splendid displays of grain and potatoes, was located on the second floor of the new Library which is just being completed. A display of landscaping and design was also made in this building.

The 15th Annual Horticultural Show was held in the college Armory. This show brought out excellent exhibits of apples from different counties of Michigan. Always artistically arranged, this display of flowers and fruit attracts many visitors.

### Entertainment

The musical organizations of M. A. C., such as the orchestra, glee clubs, and quartette of the college, added much to the programs. Motion pictures, and comedy plays lightened up the programs while the U. of M.-M. A. C. basketball game added the sport feature.

Special sales of Holstein cattle and Shorthorn cattle attracted many followers of those breeds. Livestock judging contests proved a big source of interest.

The main part of the programs, given at the general sessions in the afternoons, was made up of short talks given by the heads of different college departments. These talks, while interesting, were especially valuable in that each professor outlined the work which his department proposes to do, out through the state, in helping the industry which he represents.

Professors Brown of the Animal Husbandry Department, Foreman of the Poultry Department, Reed of the Dairy Department, Cox of the Crops Department, McCool of the Soils Department, Chittenden of the Forestry Department, and Gardner of the Horticultural Department, were those who presented plans for extending the work of their respective departments out to the people of the state.

Other speakers who featured the programs were H. R. Smith, Commissioner of the National Livestock Exchange at Chicago; E. L. Ewing, Traffic Counsel for the Michigan State Farm Bureau; J. W. Nicholson, Manager of the State Farm Bureau's Seed Department; Verne Branch, Director of the Detroit Municipal Markets; J. T. Horner, Associate Professor of Economics at

M. A. C., and Dr. Hugh Cabot, Dean of the University of Michigan's school of Medicine.

The conclusion of the whole matter is that nowhere else in Michigan can the farmer and his family find such a source of entertainment, enjoyment, information, and inspiration as that afforded by the Annual Farmers' Week at the Michigan Agricultural College.

## "A STITCH IN TIME SAVES NINE"

(Continued from Page 7)

seed, making repairs on gates, as well as many other operations could be gotten out of the way before the rush season, for the work performed now on such operations will pay big in the increase of crops produced or sowed.

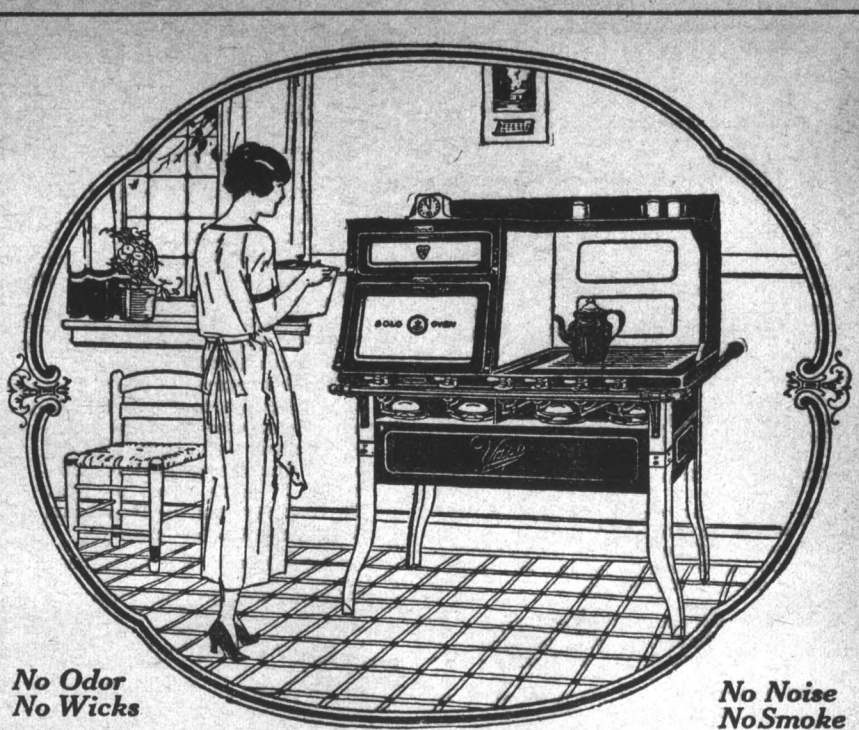
Not only can time be used profitably and crop production increased by having everything in readiness at the proper time but the life of farm machinery can be greatly prolonged by keeping it properly housed and repaired at the right time. The average life of a grain binder according to Minnesota Bulletin No. 117 is 7.41 years. If properly cared for and kept in good state of repair when used under normal conditions it should last much longer than this. The manure spreader no doubt receives as hard abuse as any machine on the farm due to the exposure and type of work it has to perform. The apron fails to work satisfactorily but instead of properly repairing it, at once, the farmer hastens to devise some means of getting by, by wiring up the broken part with hay wire; something else calls the farmer's attention and the next time the machine is used more difficulties arise and finally a breakdown about the time the load is one-fourth off, thus meaning a waste of time and costly repairs that could have been avoided if the machine had been cared for in the proper manner at the right time instead of decorating it with hay wire. Don't delay repairing your machinery until the last moment when you are rushed and then attempt to get by with the use of hay wire. For a machine that only half performs the job is not only expensive but takes the joy out of life and leads one to use profane words when with a little forethought in replacing broken parts and making the necessary adjustments at the right time would avoid all unpleasant moments and have saved time and money as well. Sometimes it takes days and even weeks to get repairs which if delayed too long might mean the purchase of a new machine or the hiring of the neighbor's machine or poorly performing the operation which in any case is expensive in the end.

It may mean only tightening or applying a little oil paint to the proper places or perhaps the adjustment of the equipment which is inexpensive but if delayed will result in the weakening of more expensive parts. So remove the hay wire, tighten up the bolts, repair the slats, and be ready for operations when the zero hour comes.

A good plan is to make a note of the condition of the machine at the end of the season or at the time it is last used. A convenient way is to use a tag system writing on the tags the parts that need repairing and then attach the tag to the machine. In this way when the farmer finds time to make repairs he knows at once what is wrong and does not have to waste time in finding out what to do.

If the machinery that needs repairs is placed in a convenient place in the shed, so as to be reached easily, it will facilitate matters very much, for lots of times the hay loader or binder is stored in the rear of the shed or an inconvenient place to get at, and repairs are neglected and postponed until it is time to use the machine or not at all.

Not only can the farmer utilize his time to a profit in getting his machinery in readiness but he can also utilize his time to a very great advantage in having his seed selected, tested, and cleaned, gates made, and posts sharpened. These and many other operations can be taken care of during the winter months thus in the end helping to make farming more profitable and enjoyable.



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## GEORGE WASHINGTON

ONLY a baby, fair and small,  
Like many another baby son,  
Whose smiles and tears came swift  
at call;  
Who ate, and slept, and grew, that's all—  
The infant Washington.

Only a boy, like other boys.  
With tasks and studies, sports and fun;  
Fond of his books and games and toys;  
Living his childish griefs and joys—  
The little Washington.

Only a lad, awkward and shy,  
Skilled in handling a horse or gun;  
Mastering knowledge that, by and by,  
Should aid him in duties great and high—  
The youthful Washington.

Only a man of finest bent,  
Hero of battles fought and won;  
Surveyor, General, President,  
Who served his country, and died content—  
The patriot Washington.

Only—ah! what was the secret, then,  
Of his being America's honored son?  
Why was he famed above other men?  
His name upon every tongue and pen—  
The illustrious Washington.

A mighty brain, a will to endure,  
Passions subdued, a slave to none,  
A heart that was brave and strong and sure,  
A soul that was noble and great and pure,  
A faith in God that was held secure—  
This was George Washington.

## VALUE OF SALADS IN THE DIET

SOME of us went and heard all about it and some of us staid at home.

Well it was a very fine lecture and demonstration, and important. Salads do have a place in our diet; and altho some of us feel that it is one of those extra fussy dishes that the men folks do not care for, it should be eaten in some form at least once a day.

Miss Hughes, Asso. Prof. Home Economics, brought out the thot that the dressing for salads should be appropriate for the combination you are serving and made to be good tasting. A great many of us just throw a few ingredients together and think that it is going to taste alright. It is not true with any cooking. Thot and care has to be exercised in making any dish.

It took me a long time to convince my husband of the fact that he should eat salads and how much they meant to his health.

At first he would say, it was just like eating a lot of grass. I had become careless and thot that plain lettuce with dressing was all that he needed. I soon discovered that the lettuce was alright but the dressing was all wrong. I made my French dressing too sour and the vinegar taste was too strong. I soon learned by experience the right amount to use and also that he tired of the same dressing. I found he liked a very inexpensive boiled dressing and I alternated with it.

Salads don't necessarily have to be expensive and extravagant. Some very simple combinations will give you the right amount of iron that comes with this class of food.

At this time of the year, when our blood is thick and heavy with the winter cold and lack of exercise that comes with the summer in being out-doors, it is very important that we watch our diet and not let it be too heavy and rich. Lots of vegetables and salads will help keep us in good condition.

I remember last year receiving so many letters telling about eczema. I sort of felt that these folks had all let their blood get sluggish with lack of green food stuffs in their diet.

Let us not allow this condition to exist this spring, but start right now and eat the right foods and drink lots of water. Remember the lovely vegetables you put up last summer? Eat them up. Leave out some of the meat and use more vegetables and eat moderately.

Below is a list of salad combinations that were given all those who heard the lecture and are very fine. Use some of the more simple combinations that you no doubt have on your own shelves. I agree with Mrs. Campbell State Home Demonstration Leader when she says the nuts found right here in Michigan make an excellent substitute for the walnuts and pecans that are imported from California. Can you imagine a nicer nut meat than our own native hickory?

## Salad Combinations

1. 1 c apples, 1 c celery, ½ c walnuts (Waldorf Salad).

The Farm Home  
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—All I lack is the room to print the many splendid letters that you sent to me. They speak for themselves in our columns below. We all seem to feel the same about reading and I too feel that sometimes we try to make our children read what is not interesting to them and then think it is the child's lack of wanting to read.

Send for the "Bok Peace Plan" and read it thru. This subject is too big and fine a thing to let go by and say it is something we do not understand.

Maybe some of you mothers have some special sandwich filling that appeals to your kiddies. Let the rest of us have it and share with you. One of our readers asked for new fillings other than egg and in this issue I have put a few. These may not be new but they are wholesome.

Your Friend,  
Mrs. Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

2. 1 c pineapple, 1 c bananas, ½ c cherries.
3. Banana rolled in chopped nuts.
4. Prunes stuffed with pecans, whipped cream.
5. 1 c celery, 1 c apples, green peppers.
6. 1 c grapefruit, 1 c marshmallows, 1 c white grapes, ¼ c nuts.
7. 1 c pineapple, 1 c marshmallows, 1 c white grapes, ½ c nuts.
8. 1 c oranges, 1 c Bermuda onions.
9. 1 c oranges, 1 c dates.
10. 1 c chicken, an equal amount of celery (1 or ½ c), ¼ c olives, ½ c nuts.
11. 1 c peas, 1 c cheese cut in small cubes.
12. 1 cooked chicken, 1 cucumber, 1 c walnuts, 1 c peas.
13. Sweet breads, 1 pint, equal amount of cucumbers.
14. 1 c olives cut lengthwise, 1 c almonds, cut lengthwise.
15. Canned pears cut in halves, shredded almonds in center of pear. Serve with cheese straws.
16. 2 c salmon, 1 c celery cut fine, ½ doz. sour pickles.
17. Head lettuce and requefort cheese.
18. Cooked asparagus, rings of green peppers, slices of pimientos.
19. Sliced hard-boiled eggs, cucumbers, celery and lettuce.
20. 2 c cold string beans, 1 t onions cut fine, ½ doz. radishes, sliced thin.
21. 1 can strained tomatoes, 2-3 box gelatine soaked in ½ c cold water, 1 t salt, 1 t powdered sugar. Make a jelly, put into molds, serve on lettuce.
22. Dressing for head lettuce: t parsley—chopped very fine, 1 egg hard boiled, cut fine, 1 t cooked beets, chopped fine, 1 t vinegar, paprika, 1 T chili sauce, add to ¼ c mayonnaise dressing.
23. Unsweetened prunes stuffed with cream cheese. Garnish with pimento or green pepper. French Dressing or Mayonnaise.
24. Tomato—moulded in gelatine.
25. 1 slice pineapple on lettuce. Garnish with 1 T pimento and 1 T grated cheese.

## THE CHILDREN AND SHUT-IN DAYS

TO my mind the subject you have chosen for discussion in your Woman's Department in the January 19th issue is one of most vital importance, and interesting to all of us mothers everywhere, for not only are the childhood years of our little ones affected, but their characters throughout life may be made or marred by the tenor of their home life.

I have two children, a boy and girl, aged seven and nine, respectively, and I know by experience that it takes a great deal of one's time to keep them contented and out of mischief, especially as you say on shut-in days. But I find these days can be the happiest periods of our lives if we seek to interest our children in worthwhile things, and keep their little minds and hands occupied. I believe the whole keynote of the situation can be found in the word "busy," not necessarily busy in work, though each have their little chores to do, but busy also in their play. They love to

read, and I try to supply them with good books suited to their age and they pass many a pleasant hour reading aloud to each other or to me. On Sundays we have a Sunday school class, and I teach them bible stories, prayers and graces, each taking turns in asking the blessing at table. Frequently we sing songs, and it is surprising how quickly they will learn a tune. Here is where their choice of good music as well as good books rests with the Mothers, and how truly applicable is the old bible verse: "Teach thou thy child in the way he should go, and when he is old he will not depart from it."

Again they spend many a pleasant hour sorting their flower and garden seeds which they collected, or making picture books. Just now their evenings are taken up making valentines. I try to teach them to play quietly in the house. They have the whole out-of-doors to play in when their pent-up energy must escape, and, of course, Baby Brother comes in for a share of their time.

Surely the aim of a mother can be none higher than to be such a companion to her children that they would rather be home with her than anywhere else in the world.—M. G. F., Cheboyban County, Mich.

## NOT A DULL DAY SO FAR THIS WINTER

WINTERY days do not seem to be lonely ones for us so perhaps I have some ideas to pass along. My three little girls of 5, 4 and 2 years have been taught to depend upon themselves considerably and very seldom do they say "Mamma, what shall I do?" They play with picture puzzles, their spelling board and other toys, play house with their dolls, the rockers are their cars at times and they go traveling and amuse themselves while mother gets a lot of work done. They also help by running small errands about the house. The eldest often helps with the dishes and just this morning proudly announced that she had made up her bed before coming down stairs.

Once in a while for variety they have a party with "eats" that have been made in their aluminum play dishes, a tiny loaf of bread, a dainty little cake, cocoa made in a tiny kettle, etc. Of course I bake these things when I am doing my baking. Once this winter when they wondered what to do we had a taffy pull, each child of course pulled taffy and it was such fun that we are going to do it again soon.

One thing the two older girls love to do is make kindergarten things. We save the pretty colored paper that comes into the house and I help them make paper lanterns, and other things. They are never so happy as when making something. The only materials I have purchased is a box of crayolas and they amuse themselves for a long while coloring pictures.

I tell them stories and was very much surprised one day to see them act out one of the stories. (I had never mentioned to them that it was possible to "play" the stories.) The baby soon left them and went to play by herself, but that didn't matter to the other two, they doubled up on their parts and their play went along uninterrupted. Since

then they have dramatized a number of stories by themselves and seem to enjoy it immensely.

One must be careful to choose the right kind of stories for children. The girls are now beginning to make up stories suggested to them by pictures on the magazine covers or in advertisements. These little stories they tell aloud to the others.

There are very few days when the children don't get out of doors for a while at least and we haven't had a lonely day this winter, and do not expect to.

Do not misunderstand me—my children are healthy, normal youngsters and disagree and quarrel at times as all normal children do, but we do not have time hanging heavy on our hands. By keeping the children happy and contented I have more time to work and read, and sew, and study, and these wintry days seem all too short for all we'd like to do, and this in spite of the fact that a few weeks ago we moved to a new neighborhood where we are among total strangers—Mrs. W. E. Fitzgerald, Kent County, Mich.

## THE AMERICAN PEACE AWARD

A GREAT many brilliant minds have been working for a solution for world peace and I know you all have heard it discussed. Whether it is the right step or whether it is the wrong step has been one of the perplexing questions that even our great men have been unable to solve.

The "Bok Peace Plan" is now opened for discussion and if there are any of the women readers of this page that are interested as voters and want to know more about what these men and women are doing, send for the printed "Winning Peace Plan." Address your letter to the "American Peace Award," 342 Madison Ave., New York City, N. Y.

## Personal Column

**Making Textile Leather and Wood Art Products at Home.**—As you know we farm women are interested in making money at home; some thing as a side issue. I have a chance of getting textile leather and wood art products stamped for painting, but have to pay \$7.75 first as a membership fee to insure them for their stock material as they are to furnish everything. Now could you kindly write me as to their reliability and whether it would be wise to send the money. I know nothing about this company but want to earn the money yet I do not want to be a loser. The company I refer to is "The Nile Art Co., Fort Wayne, Indiana."

—Perhaps some of our readers have had some experience along this line and can help or suggest a way for our reader.

## —if you are well bred!

**The Reply.**—The reply to a birth announcement must be prompt. A short, warm note of congratulation, not too conventional, best answers the purpose. Gifts of flowers, jellies or any little article for the child are a graceful courtesy; but not imperative, since the note of congratulation answers the needs of the occasion.

## Menu for February 16th

Onion Cocktail  
Roast Mutton, Currant Mint Sauce  
Okra and Tomatoes  
Jellied Salad  
Butterscotch Pie  
Coffee

**Onion Cocktail.**—Two cups diced apples, one cup diced onions, one cup seeded raisins. Fill glass with onions, apples, raisins. Pour over a sour dressing made as follows: One-fourth cup each of vinegar and water, one tablespoon lard, salt and red pepper to taste, and two teaspoons sugar. Place in small sauce pan over fire until lard melts; then stir in well beaten yolks of two eggs, stirring constantly until thick. Place in ice box to cool before using.

**Butterscotch Pie.**—One egg, one cupful dark brown sugar, one cupful milk, three tablespoons flour, two tablespoons lard, three tablespoons water, one-fourth teaspoon salt, one tablespoonful powdered sugar, one teaspoon vanilla, one baked crust.

Put yolk of eggs into saucepan, add brown sugar, milk, water, lard, salt, and vanilla. Stir over fire until it thickens and comes to boiling point. Pour into baked pie shell. Beat up white of egg, then beat powdered sugar into it. Spread on top of pie and brown lightly in oven.



## RECIPES

**Sandwich Fillings.**—To keep sandwiches, place them in a bowl and cover with a cloth wrung out of hot water. Sandwiches thus treated may be made in the morning and used in the evening. The possible filling for sandwiches are unlimited. The ingenious housewife can always find some tasty combination from her pantry for the emergency afternoon or lunch box sandwich. Sandwiches also supply a wonderful source for using up "odds" and "ends" or "left-overs" such as bits of meats, vegetables, etc. They can so readily be mixed with salad dressing or other seasonings and so form tasty fillings. Always remember that sandwiches to be pleasing should be dainty and attractive.

1. Minced ham with shredded lettuce, onion and mayonnaise.
2. Dutch cheese mixed with chopped stuffed olives or pickle, green pepper and chili sauce.
3. Dutch cheese mixed with walnut or hickory nut meats, olives, paprika and cream.
4. Peanut butter mixed with chopped dates and a bit of orange juice.
5. Figs chopped with crystallized ginger and a bit of rind and juice of lemon.
6. Chicken or veal minced with mayonnaise.
7. Pimientos, green peppers and celery shredded and mixed with mayonnaise.
8. Tongue, minced with India relish or chopped pickle.
9. Apple butter mixed with chopped nuts.
10. Tuna fish or salmon mixed with celery, nut meats and salad dressing.
12. Minced hard boiled eggs, melted butter, seasonings, onion and mayonnaise.

**Candied Citron.**—Cut the citron, which should be fully ripe, into very large pieces and peel, using only the hard part

outside. To each four pounds of citron allow two pounds of sugar, one lemon and one-half pound ground ginger, one-half teaspoon ground cloves and allspice, mixed. Put the citron in a kettle and pour the sugar over it and let it stand all night. In the morning add the lemon cut fine and the spices in a bag. Work until the citron is clear and tender and the syrup is quite thick. Take it out and drain well and spread in a single layer on a large agate tray in a place where the wind will blow over it, but not in the sun or oven. Turn occasionally and keep the tray tilted so that any syrup that drains off may be readily dipped out with a spoon. When partly dry roll in granulated sugar and spread again. Repeat until well crystallized. Then pack away for winter. The syrup is fine for pancakes.

**Nut and Rice Loaf.**—Three cups chopped peanuts, three cups cooked rice, one teaspoon celery salt, one teaspoon onion juice, three teaspoons salt, two beaten eggs, one cup sweet milk. Mix thoroughly. Bake half hour in a slow oven.—Alma B., Augusta, Michigan.

## The Runner's Bible

(Copyright by Houghton Mifflin Co.)

He that goeth about as a tablebearer revealeth secrets, but he that is of a faithful spirit concealeth the matter.—Prov. 11:13.

The malicious tablebearer is an anomaly in nature. All other animals which thrive upon corruption, because they devour it, are benefactors. But through the scandalmonger, corruption is nourished and increased a thousand fold. The one who has the love of God in his heart never discusses the errors and sins of another; on the contrary, he does his best to conceal and to destroy them.—(Luke 6:13; Ps. 32:1.)

## AIDS TO GOOD DRESSING

BE SURE AND SEND IN YOUR SIZE

## FASHION BOOK NOTICE

Send 10c in silver or stamps for our UP-TO-DATE-SPRING AND SUMMER 1924 BOOK OF FASHIONS, showing color, and containing 500 designs of Ladies', Misses' and Children's Patterns, a CONCISE and COMPREHENSIVE ARTICLE ON DRESSMAKING, ALSO SOME POINTS FOR THE NEEDLE (Illustrating 30 of the various, simple stitches) all valuable hints to the home dressmaker.

**4629. A Set of Attractive Sleeves.**—No. 1 is a new two-piece model suitable for cloth, velvet or silk. No. 2 will be pretty in crepe, silk or chiffon. No. 3 is very stylish and pleasing. It is a good model for combinations of plain and figured materials. The Pattern which includes the three styles illustrated, is cut in 4 Sizes: Small, Medium, Large and Extra Large. To make No. 1 will require 1/2 yard of 40 inch material. No. 2 will require 1 1/2 yard and No. 3, 1 1/2 yard. For band cuff and cap on No. 3 of contrasting material 1/2 yard is required.

**4619. A Neat and Comfortable Play Suit.**—This model provides a separate blouse. The Overalls are sleeveless, and the body portion of the back is buttoned to the waist portion. Sersucker, denim, or gingham could be used for the overalls, and cambric for the blouse, or the entire suit may be of one material. The Pattern is cut in 4 Sizes: 2, 3, 4 and 5 years. A 4 year size requires 1 1/2 yard for the Overalls, and 1 1/2 yard for the Blouse.

**4631. A Popular "Play" Costume.**—Dotted percale and white lining are here combined. This style is also for gingham, wool jersey, wool rep, and pongee. The Pattern is cut in 4 Sizes: 4, 6, 8 and 10 years. A 6 year size requires 2 1/2 yards of 36 inch material. For collar and cuffs of contrasting material 1/2 yard is required.

**4638. A Serviceable Set of Bloomers and Brassiere.**—For the growing girl comfort and freedom in movement and breathing is very desirable. The brassiere may be of satin, jean, drill or strong muslin. The bloomers are nice for cambric, sateen, serge or flannel. This Pattern is cut in 4 Sizes: 12, 14, 16 and 18 years. A 14 year size requires 2 1/2 yards of 36 inch material.

**4612. A Pretty "House" Frock.**—Household duties will be lightened when one is attired in so comfortable and pretty an "apron frock" as is here portrayed. The closing is at the left side, and the right side, boasts of a very convenient pocket. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. The width at the lower edge is 2 yards. A Medium size will require 5 1/2 yards of 27 inch material.

**4637. A Jaunty Up-To-Date Model.**—Here we have the latest expression in blouses, coupled with a smart skirt in wrap effect. This style is especially suited to growing girls. It may be developed in wool rap, jersey, serge or broadcloth. Braid or binding, or a simple finish of machine stitching is nice for decoration. The Pattern is cut in 5 Sizes: 12, 14, 16, 18 and 20 years. A 10 year size requires 2 1/2 yards of 54 inch material.

**4617. A Popular Style for Stout Figures.**—The plait fullness and "v" neck line are new and attractive style features. In black satin or blue serge this design will make a good serviceable day dress. It is also good for crepe weaves or wool rep. The Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 40 inch size requires 4 1/2 yards of 40 inch material. The width at the foot with plaits extended is about 2 1/2 yards.

**6420. A Popular Blouse or Smock Suit for Small Boys.**—This is a good model for twill, serge, corduroy, velveteen and for all wash materials. The Pattern is cut in 4 Sizes: 3, 4, 5 and 6 years. A 4 year size requires 3 1/2 yards of 27 inch material.

**ALL PATTERNS 12c EACH—3 FOR 30c POSTPAID**

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THE BUSINESS FARMER  
Mt. Clemens, Mich.



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If you are curious about the results that come from using Calumet—bake a cake and use some other baking powder, then use the same recipe and employ

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Compare the texture of the two cakes—the way they look—the way they taste. The difference will cause you to join the millions who use Calumet daily. You will then realize why it is called the most economical of all leaveners.

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### Our Spring Sewing Book

is just out. It contains new designs for women's and children's dresses, aprons, undergarments, hats, etc., also attractive and original ideas for utility articles and household decoration. All these can be made quickly and economically with

### WRIGHT'S BIAS FOLD TAPE

which comes in a variety of fast color wash fabrics and in fine taffeta silks. You can find them at notion counters in best stores everywhere.

Send 10 Cents in Stamps for copy of book and 3-yard sample of tape in fast color percale in any one of the following colors: Gray, Pink, Light Blue, Brown, Reseda, Navy, Lavender, Linen Color, Old Rose, Alice Blue, Red, Black, Yellow. WM. E. WRIGHT & SONS CO. Mfrs. Orange, N. J. Dept. 454



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Has been on market 62 yrs. Absolutely guaranteed. Easy to clean—no wear out to it. We give FREE with each churn a practical Dairy Thermometer and strong 3 legged milking stool. Get Free trial offer today. THE BLUST CHURN CO., Mansfield, Ohio

## Croup at Night



No longer causes alarm

WHEN the child seems croupy in the evening apply Vicks over throat and chest. It usually averts a night attack. If croup comes on without warning, use of Vicks often brings relief in 15 minutes—eases rough breathing, subdues the brassy cough. Vicks is ideal for all children's cold troubles—it avoids so much dosing. Just as good for grown-ups' colds, and for cuts, burns, bruises, stings and skin itches

Write to Vick Chemical Co., Box B-83 Greensboro, N. C., for a test sample.

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OVER 17 MILLION JARS USED YEARLY



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**SCOTT'S EMULSION**  
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To a nursing Mother

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**SCOTT'S EMULSION**

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Royal Fence pays for itself many times over in stock and property protection. Its better galvanizing means longer life; its sturdy dependability means satisfactory service.

Arrow T-Steel Posts are built like a railroad rail—the strongest construction known. Large Anchor Plates lock each post firmly into the ground; frequent notches provide easy means for attaching every, or any, line wire.

Ask your dealer.

**AMERICAN STEEL & WIRE COMPANY**  
Chicago New York Boston Denver San Francisco

## SECOND ANNUAL SALE.....

## Duroc Jersey Swine

### 35--BROOD SOWS and GILTS--35

Tuesday, March 4, 1924

12.30 p. m. in heated pavilion at the farm.

Herd Sires, "Rice's Valley Colonel," 3rd Prize Aged Boar Detroit, 1923, "Sensation Marsi" sired by "Marsi," Reserve Grand Champion, 1922 National Show. Write for catalog.

**SCHAFFER BROS., R. 4, Oxford, Mich.**

EARN \$110 TO \$250 MONTHLY. EXPENSES paid on Railway Traffic Inspector. Position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for Free Booklet, 3-165 STAND. BUSINESS TRAINING INST., Buffalo, N. Y.

WE ARE IN POSITION TO SUPPLY YOU at all times with good second-hand egg crates, including fillers and covers, complete for shipping at the following rates: Carload lots, F. O. B. Detroit, 74c each; less than carload lots, 16c each. WM. SPITZ & SONS, 2645 Chene St., Detroit, Michigan.

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Learn How to Heal It  
**FREE**

Ruptured people all over the country are amazed at the almost miraculous results of a simple Home System for rupture that is being sent free to all who write for it. This remarkable invention is one of the greatest blessings ever offered to ruptured persons, and is being pronounced the most successful Method ever discovered. It brings instant and permanent relief and does away with the wearing of trusses forever.

Thousands of persons who formerly suffered the tortures of old-fashioned steel and spring trusses are now rejoicing in their freedom from the danger and discomfort of rupture after a brief use of this remarkable System. There is nothing like it anywhere and hosts of ruptured persons are astounded at the ease with which their ruptures are controlled.

For a limited time only, free trial treatments of this Muscle Strengthening Preparation are being mailed to all who apply. It is an original painless Method. No operation, no danger, no risk, no absence from daily duties or pleasures. Send no money; simply write your name and address plainly and the free treatment with full information will be mailed you in sealed package.

Send now—today. It may save the wearing of a torturing truss for life.

## FREE TREATMENT COUPON

Capt. W. A. Collings, Inc.  
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Send Free Test of your System for Rupture.

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CREAM SEPARATORS, ENGINES, MANURE SPREADERS, etc. are 5 leaders that make my challenge airtight. I know there are no better products made. I have seen and tested them all. No price lower than mine, so term a dealer. Investigate, compare, just thoroughly on my Trial Plan. Then decide whether you keep mine or the other. Write for big 90-Day Sale Bargain Circular.

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World's Largest Makers of Clipping and Shearing Machines. Complete catalog on request.



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"HOOSIER SILOS" are proof against wind, fire, frost and decay. Reinforced every course of tile with galvanized steel cables, equipped with continuous doors with double sealing clamp. Doors set flush with inside wall allow even settling of ensilage. HOOSIER silos also in wood, splendid value. Good sales territory open. Get our prices.

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Dept. MB-17 Albany, Ind.

## CHICKEN BROODER STOVES

COAL BURNING—REAL ONES, BIGGER, better and cheaper than you can buy elsewhere. 1000 chicks size \$16.68. All cast iron stove, 52 in. galvanized cover. Shipped promptly from warehouse in Ill. Satisfaction guaranteed. Order from this adv. or write for folder. GEORGE J. WETTSCHURACK, Lafayette, Ind.

## GAS AND INCOME TAXES URGED BY LINTON

THE proposed gas tax and the income tax amendment were named by William S. Linton, chairman of the state tax commission, as the two most immediately available remedies for the oppressive real estate taxes that are being carried by the taxpayers of the state especially the farmers, in an address recently at Saginaw.

"There is no question about it," said Mr. Linton, "Taxes are oppressive. Workers everywhere today give one day out of their week to pay the expenses of government. The burden is great, and others besides the farmers are loaded down. This situation has been brought about largely on account of the world war.

"Tax exempt bonds have taken from the state tax rolls a great amount of wealth. An interesting point in this connection is that almost the first municipal tax exempt bond ever issued in Michigan was a Saginaw City bond, issued under a special legislative act years ago.

"Farmers should in some practical way be relieved from their excessive realty tax burden. The state portion of the taxes is small, however, as compared with the local share, the state receiving only about 10 cents out of every dollar of the taxpayer's money. Most of the money paid by many counties to the state is returned again in the primary school and road funds.

"Real estate is too heavily burdened. This includes the farm, the home and business places. The laws of the state require that a great amount of the taxes come from real estate. We will have to look to other lines also to help out this condition.

"A gas tax is now in force in 36 states. Under such a law the persons who actually use the highways would pay for them in a fair proportion. Tourists, it is estimated, would bring in more than \$1,000,000 to the state under such a tax.

"The income tax amendment if passed would require each person whose income was more than \$4,000 per year to contribute his full share toward the up-keep of the state. This tax would undoubtedly take care of all the state's expenses, and real estate would then have to care for local taxes only.

"The farmer today is up against it. In many of the counties of the state farmers are abandoning their farms because of insufficient revenue, and with present expansion maintenance, they cannot even keep up their taxes. As this condition grows a serious question arises. Where is our food supply going to come from unless the soil is worked to the limit, and the farmer is made contented and prosperous by fair and liberal treatment?

"I am in favor of eliminating the state taxes collected from real estate entirely by getting this support from some proper source."

## GETTING OUT FIREWOOD

FIREWOOD has never been in such great demand as during the past two or three years. Shortage and high price of coal, of course, has been the reason. And as usual when something is urgently needed, labor to produce it is hard to find.

Necessity, the mother of invention, taught me a quick and easy way of splitting logs. I will describe it briefly:

Taking as an example, a log four feet in diameter and fourteen feet long. An auger hole was bored two thirds of the way through near either end. It is desirable to have both holes as nearly as possible in the same grain of the wood. One and one-quarter pounds of forty per cent straight nitroglycerin dynamite was loaded in each hole and well tamped in with damp clay. The charges were fired with cap and fuse. Electric blasting caps would have been better to insure the charges going exactly together.

Cost was 75 cents for explosives and I figure 75 cents more for one hour's time. The labor charge can be considered or not as the operator prefers. Usually such work is done by farm help in slack time and no real extra labor cost is incurred.

—C. G. S.

## "NOT A KICK IN A MILLION FEET"



If

You Want  
Longer Wearing  
Asphalt Shingles  
or Roll Roofing

Make Sure

that this  
trade mark is on  
the package

Manufactured by  
**THE LEHON COMPANY**  
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## BREEDERS' DIRECTORY

Ads under this heading 30c per agate line for 4 lines or more. \$1.00 per insertion for 3 lines or less.

## 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

February 20—Angus and Poland Chinas, E. A. Clark, St. Louis, Michigan.  
February 20—Holsteins, Forest Deutsman, Lake Odessa, Michigan.  
Feb. 20—Durocs, Detroit Creamery Farm, Mt. Clemens, Michigan.  
Feb. 25—Chester Whites, Detroit Creamery Farm, Mt. Clemens, Michigan.  
March 11—Poland Chinas, Detroit Creamery Farm, Mt. Clemens, Michigan.  
March 25—Holsteins, Fred H. Lee, Plymouth, Michigan.

## CATTLE

## HOLSTEINS

## FOR SALE

## My Entire Herd of Holstein Cattle

One 31 lb. herd sire, 10 females. Among them are two A. R. cows, a 20 lb. 2 yr. old and a show cow, and a 19 lb. 3 yr. old. 4 cows are just springing. The herd is free from T. B. and sold under a retest. If interested write or call for pedigrees. Time will be given for one year.

H. W. MOHR, Pigeon, Michigan.

## HEREFORDS

## HEREFORDS

Registered Breeding Cattle, T. B. Tested at practical prices for production of Hereford Baby Beeves profitably all ages.

T. F. B. SOTHAM & SONS.  
(Herefords since 1839.)  
St. Clair, Mich.

## Steers For Sale

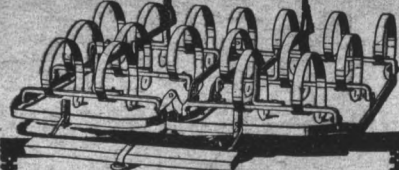
72 Herefords 750 lbs. 76 Herefords 660 lbs.  
86 Herefords 550 lbs. 48 Herefords 500 lbs.

Can also show you other choice quality bunches. All are dehorned, deep reds, good stocker order. Well marked and show their breeding. If in the market for real quality, one car load or more your choice. Write stating number and weight preferred.

V. V. BALDWIN, Eldon, Wapello Co., Iowa.



## Digs Deep Kills the Weeds Makes a Fine Seed Bed



### JOHN DEERE-SYRACUSE Spring-Tooth Harrow

This harrow's sharp-pointed, penetrating teeth work the seed bed from the bottom to the top, tearing out the underground roots of weeds, bringing them to the surface.

It is a non-clogging harrow—the frame between the sections has a small opening in the front which widens toward the rear—there is no loading or choking at this point. The frames are also slightly raised at the rear inner ends, and the teeth are spaced so that trash naturally works toward the center and through the opening.

Both you and your horses will appreciate this harrow—it has direct draft—no side motion.

Frames, tooth bars and teeth are highest quality steel—extra strong and durable. Teeth have no bolt holes to weaken them. Your John Deere dealer can furnish any number of sections you require; also tractor hitch.

Get ahead and keep ahead of the weeds by using a Syracuse Spring-Tooth Harrow. Write today for free booklet describing it. Address John Deere, Moline, Ill., and ask for Booklet DJ 733



**BREED HEREFORDS THAT FATTEN QUICKLY.** Eleven choice two-year-old heifers and several yearling bulls sired by International Prize Winners for spring sale. Write us for information. Breeders of Herefords since 1860. **CRapo FARM, Swartz Creek, Michigan.**

### AYRSHIRES

### AYRSHIRES

To make room for winter we are offering bred cows and heifers also some well bred young bulls. Look up our winnings at leading state fairs. **W. T. SHUTTLEWORTH, Ypsilanti, Michigan.**

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

### ANGUS

**WE HAVE SOME FINE YOUNG ANGUS BULLS** from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

### RED POLLED

**FOR SALE—REGISTERED RED POLLED** Cattle. Both Sex. **PIERCE BROS., R. 1, Eaton Rapids, Michigan.**

### JERSEYS

**REG. JERSEYS, POBIS 99th OF H. F. AND** Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description. **GUY C. WILBUR, Belding, Mich.**

### SHORTHORNS

**RAISE SHORTHORNS WITHOUT HORNS** Like Kelley does. U. S. Accredited Herd No. 28946. For description and price write, **L. C. KELLY & SON, Plymouth, Michigan.**

### GUERNSEYS

**GUERNSEY BULL CALVES \$50. A. R. BREED-** ing. 50% to 75% breeding of Norman's Milwaukee Red Rose. Bull soon ready for service \$100. **A. M. SMITH Lake City, Michigan.**

**GUERNSEY—PURE BRED BULL CALVES** from 4 to 6 months old for sale. Priced for quick sale. Herd T. B. tested. **H. F. NELSON, R. 1, McBrides, Michigan.**



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**FOR SHROPSHIRE RAMS WRITE OR** CALL ON **DAN BOOHER, R. 4, Evart, Michigan.** 10 Head Registered Shropshire Ewes, Exceptional quality, bred for last of March and April. **C. LEMEN & SONS, Dexter, Michigan.**



### SWINE

### O. I. C.

**O. I. C'S: 75 LAST SPRING PIGS, PAIRS** not akin. From 3 good strong sires. Also fall pigs. Recorded free. 1/4 mile west of depot. **OTTO SCHULZE & SONS, Nashville, Mich.**

### DUROCS

**DISPERSION SALE! MICHIGANA FARM MUST** sell all Durocs. We are offering bred sows and gilts, also fall pigs, either sex at bargain prices. Write your wants. **MICHIGANA FARM, Pavilion, Michigan.**

### HAMPSHIRE

**HAMPSHIRE—BRED GILTS AND BOARS** at bargain prices. Write your wants. 12th year. **JOHN W. SNYDER, St. Johns, Mich., R. 4.**

## MICHIGAN BREEDERS FAIL TO BID AT POLAND CHINA SALE

ON February 5th the Detroit Creamery Farms held the first of a series of late winter sales of high grade hogs. Some of the finest Poland Chinas ever bred in this state were sold at this sale and the cream of the stock offered was purchased by breeders from out of the state. It was enough to make one wonder as to what is to become of the Poland China hog in this state when Michigan breeders failed to bid very high on the quality stock. Michigan breeders must keep this fine stock in the state if they want to retain their position as a livestock state. They will have another opportunity March 11th when the Detroit Creamery Farms will sell another fine lot of Poland Chinas. The attendance was fair considering the weather. Following is a list of the numbers of animals sold, name and address of purchasers and prices paid:

No. 1, J. H. Ganahl, St. Louis, Mo., 225.00; 3, Arlington Place Farms, Indianapolis, Ind., 120.00; 4, Arlington Place Farms, 120.00; 5, Arlington Place Farms, 255.00; 6, Arlington Place Farms, 140.00; 7, Fred Smith, Roseville, Mich., 80.00; 8, Oscar Blythe, Grove Hill, O., 50.00; 9, Arlington Place Farms, 120.00; 10, Dewey Nash, Fairfax, Oklahoma, 80.00; 11, Emil Rosell, Mt. Clemens, Mich., 32.50; 12, Arlington Place Farms, 50.00; 13, Arlington Place Farms, 210.00; 14, G. A. Shepard, Modock, Ind., 45.00; 15, G. R. Doemling, Mt. Clemens, Mich., 60.00; 16, E. W. Goddard, Laurence, Ind., 50.00; 17, Louis Priehs, Mt. Clemens, Mich., 50.00; 18, Emil Rosell, Mt. Clemens, Mich., 32.50; 19, Emil Rosell, 27.50; 20, Albert Gaskel, New Haven, Mich., 35.00; 21, Fred Smith, 35.00; 22, W. H. Powell, Ada, Ohio, 60.00; 23, Maurice Lonergan, Omaha, Neb., 125.00; 24, E. W. Hamman, Manzanola, Colo., 95.00; 25, Arlington Place Farms, 115.00; 26, Emil Rosell, 32.50; 27, Emil Rosell, 37.50; 28, Fred Smith, 35.00; 29, Fred Smith, 35.00; 30, Arlington Place Farms, 140.00; 31, Cass Patterson, Mt. Clemens, Mich., 35.00; 33, E. W. Hamman, 150.00; 34, R. L. Goddard, Lawrence, Ind., 47.50; 37, J. Wm. Fox, Newport, Mich., 37.50; 38, Bert Coulin, Mt. Clemens, Mich., 37.50; 39, Bert Coulin, 37.50; 40, Ed Krushell, Birmingham, Mich., 40.00; 41, Ed Krushell, 40.00; 42, R. L. Goddard, 50.00; 43, V. E. Howell, Otter Lake, Mich., 50.00; 44, Bert Coulin, 32.50; 45, Fred Smith, 65.00.

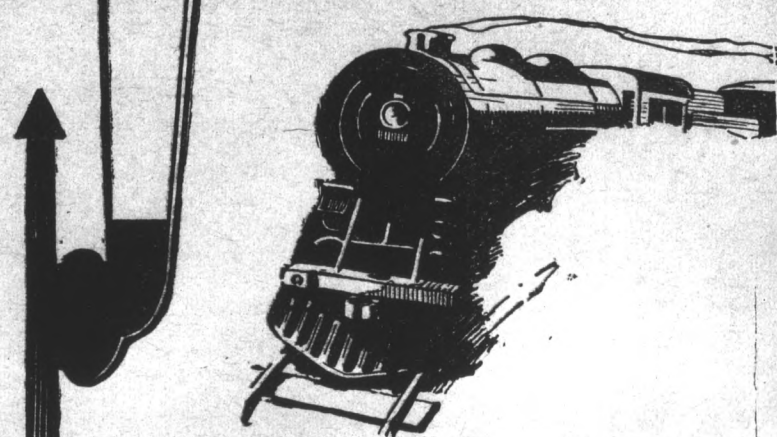
## FARMERS SOLVING FARM MAN- AGEMENT PROBLEMS

**T**HOUSANDS of farmers in all parts of the country are reorganizing their business to bring about a better balance between their crop and livestock enterprises, the United States Department of Agriculture declares. Through the farm management extension work of the department, livestock growers particularly are appreciating the importance of producing on the farm a properly balanced livestock ration instead of purchasing feeds in the open market. Farmers are also becoming more self-sufficient in the matter of food for the family whereas formerly much of the food consumed has been purchased, it is said.

The basis for the reorganization program is the keeping of simple farm accounts that reveal at once the weak spots in the business such as poor crop and livestock combinations, waste motion and inefficient use of labor, the department says. Mass meetings at which farmers are being impressed with the need for more efficient farm management to combat the high costs of production and marketing are being held wherever farmers can be assembled by the extension workers connected with State agricultural colleges and Federal Department of Agriculture. The teaching of farm bookkeeping in rural grade schools so that the growing generation of farm boys and girls may have a better understanding of efficient farm management has been one of the striking developments of the movement.

A recent directory of the cow-testing associations in the United States compiled by the Department of Agriculture shows the sections that have made the greatest progress in this work. Wisconsin leads with 151 cow-testing associations, Minnesota is second with 55, Michigan is third with 53, Iowa is fourth with 47, and Pennsylvania and Ohio tie for fifth place with 36. The total number of associations in the United States is 627. There are 277,010 dairy cows in these organizations.

## Signs of Safety



# Larro

The Safe Ration for Dairy Cows

Just as the railway semaphore prevents disaster, so does LARRO insure safety for your herd.

**Safe**—because Larro has just the right amount of protein from the right sources. More is often dangerous. Less is not enough.

**Safe**—because the quantity and high quality of each ingredient *absolutely do not change*. No variations to throw cows off feed. Larro-fed cows are always in best of health. It means much.

**Safe**—because a powerful electro-magnet prevents the slightest bit of iron and steel from getting into finished Larro. Absolutely no nails, wire or junk in Larro.

**Safe**—because it is free from adulteration and fillers. It contains nothing but clean, wholesome, milk-making, profit-making ingredients.

Read "Feeding the Fresh Cow" in *The Larro Dairyman*, our free, quarterly magazine for cow owners. Send us your name and address today if you are not receiving it.

The Larro Milling Co., 54 Larro Bldg., Detroit

MICHIGAN BUSINESS FARMER  
"The Farm Paper of Service"  
TELL YOUR FRIENDS ABOUT IT

## Sale of Worlds Grand Champion

# Chester White Sows

A WONDERFUL LINE OF SOWS WILL BE SOLD AT  
YOUR OWN PRICE

## Monday, Feb. 25, 1924

This is without a doubt the greatest bunch of sows and gilts that probably was ever sold in any one Chester White Sale.

**PATHMASTER** is conceded by many of the world's greatest breeders, to be the most sensational Chester White boar ever produced. The entire offering will be bred to him. All showing heavy with pigs, some with pigs at side. Write for catalog.

## Sale will commence at 1 o'clock

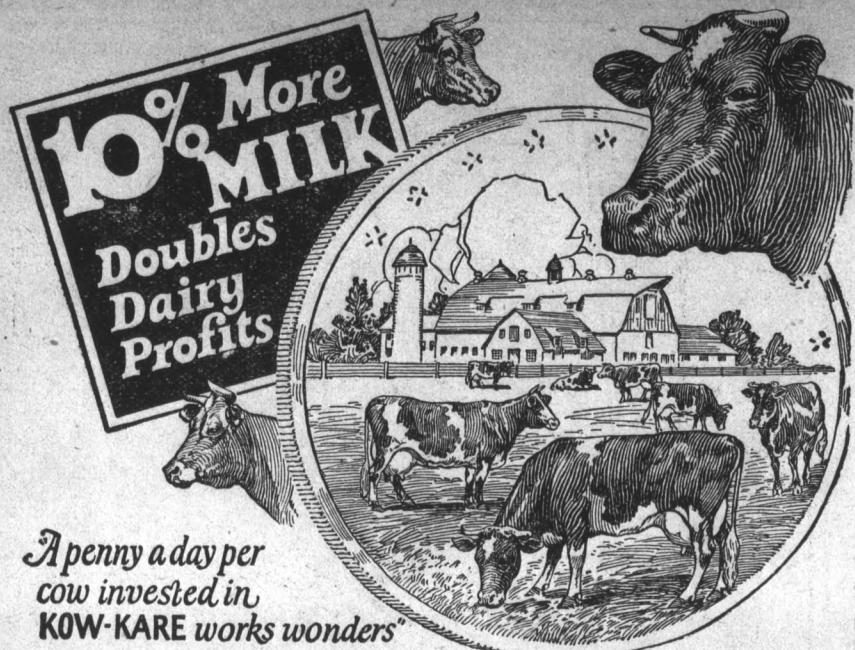
in a heated pavilion at Farm No. 3, Corner Gratiot and Nunneley Roads, 1 1/2 mile south of Mt. Clemens. Come early inspect the offering and enjoy a good lunch at noon.

# Detroit Creamery Farms,

Mt. Clemens, Mich.

A. A. Schultz, Sup't.





**10% More Milk**  
**Doubles Dairy Profits**

*A penny a day per cow invested in KOW-KARE works wonders*

A poor milker costs just as much to house, feed and care for as a good producer. For this reason just a slight increase in the milk yield makes a big difference in the net profit. Dairy experts say an increase of 10% in the milk yield will double the profit.

How important it is, then to get from your cows every pint of milk of which they are capable.

The chief cause—almost the only cause—of poor milkers is the condition of their health. Particularly the health of the milk-making organs.

Kow-Kare, the famous cow medicine and conditioner, acts directly on the milk-producing organs. It tones up the genital and digestive functions, makes them sturdy and active. More milk and better health must result. Feed Kow-Kare one week out of each month (a tablespoonful twice a day) and the result will surprise you.

For the treatment of Barrenness, Abortion, Retained Afterbirth, Scours, Bunches, Milk Fever, Lost Appetite, etc., Kow-Kare has a well-earned reputation. No dairy barn should be without it. For twenty-five years it has been the chief reliance of thousands of dairymen, when cows are sick.

Feed dealers, general stores and druggists sell Kow-Kare; \$1.25 and 65c sizes. Write for our free book, "The Home Cow Doctor." It is full of information valuable to cow owners.

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Makers of Grange Garget Remedy, Bag Balm,  
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*Unprofitable Cows are often sick with-out appearing so!*

Watch the milk pail closely. The rise and fall of the yield indicates the health condition of the cow. A cow may look well, yet be suffering from sluggish digestive or genital organs. Kow-Kare acts directly on these organs. Its use restores normal milk yield and enables the cow to throw off disease.




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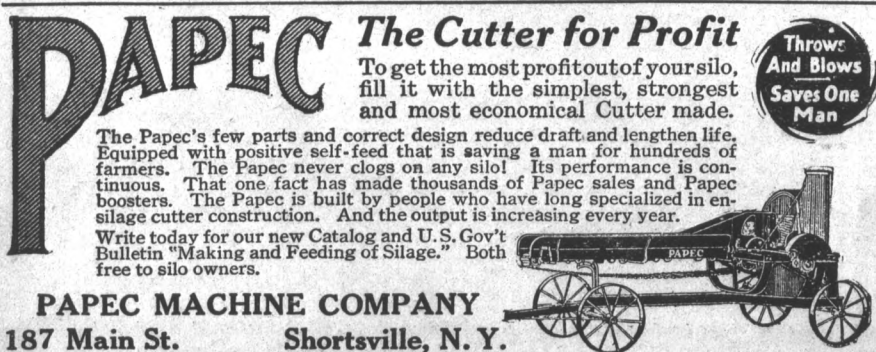
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### GREATEST NEED OF PURE BRED SIRE

THE greatest need for more profitable dairying in Michigan is better herd sires. This does not apply particularly to the farmer or breeder who has a large herd of cows, but more particularly to the farmers who are milking a half dozen cows or less. These small herds are producing the great bulk of the dairy products that are sold on the market today. In many herds the cows are of no particular breeding and show all colors from common red to black and white, brindle, yellow, blue, roan and black. Some of the individual cows in these small herds are exceptionally good producers but they are accidents in most cases. These occasional good cows rarely produce a good daughter because they are bred to a scrub or grade sire. It is a well known fact that the individual farmer cannot afford to own a well bred pure bred sire when he has a herd of only six to a dozen grade cows—simply because the cash outlay would bring the service fee to high for the calves he obtains.

Every farmer knows this, and that is the reason he uses a scrub or grade bull—usually one out of his own cows. The only remedy for this condition is for several or many farmers in a community, township, or county to decide on one breed and then buy the best bull or bulls of that breed they can afford, and use this bull as a community sire. Such a plan will do more than anything else to place the cow business on a more profitable basis.

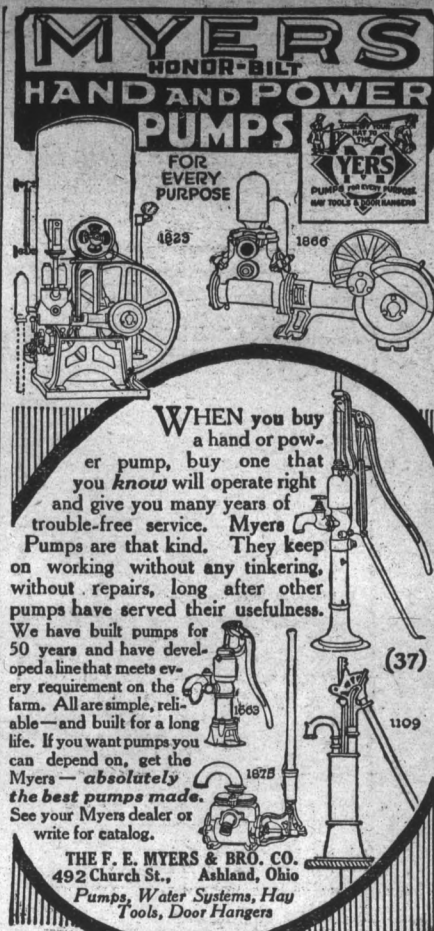
In Alpena County, Michigan, thirty farmers adopted a plan similar to this some twelve years ago and they have used three herd sires in as many communities for several years. They have figured it out from their records that the service fee per heifer calf obtained in this association has cost them less than one dollar and while this co-operative plan was established only a few years ago, today they can boast of 800 offsprings of these bulls. They have more than doubled the value of the cattle they are milking and the community has built up such a reputation for the breed of cattle they are handling that they have no trouble in selling their surplus stock at good prices. Any one wishing detailed plans for organizing a bull association should apply to the Agricultural College.—O. E. Reed, Professor of Dairy Husbandry, M. A. C.

### WORK OF COW TESTING ASSOCIATION

AN indication that cow testing association work is helpful to promote better sires is shown in that 189 purebred sires were purchased among the association members. Twenty-eight associations are listed with all members either owning or using purebred sires, while 92.7 per cent of all the C. T. A. members are either using or own purebred sires. It is interesting to note that there are 876 purebred Holstein, 284 purebred Guernsey, 235 purebred Jersey bulls and a small number of other breed sires in use by the members of sixty-two associations we have reporting out of seventy operating. There the 42 grade Holstein, 30 grade Short-horns, 24 grade Jersey and 11 grade Guernsey bulls in use among these sixty-two associations reporting.

Occasionally the argument is presented by the farmer when the cow testing association work is mentioned to him, that it is only for purebred cows. This argument is untrue. Two-thirds of all the cows listed in the Michigan C. T. A. are grade cows. On a basis of sixty-two associations that have reported there are 12,318 grade cows and 5,373 purebred cows among the association membership. Of this number 6,849 are grade Holsteins, 2,134 grade Guernseys, 2,104 grade Jerseys and 988 grade Shorthorns, while 3,824 are purebred Holsteins, 83 are purebred Jerseys and 532 are purebred Guernseys, plus a small number of representatives of minor breeds.

In a report for the year 1923 the number of cows under test in the cow testing association work in Michigan is shown to have increased from 4,973 to 20,314. The average production per day for all cows in the Michigan cow testing associations was found to be 20.9 pounds of milk and .83 pounds of fat. Allow-



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## RHEUMATISM

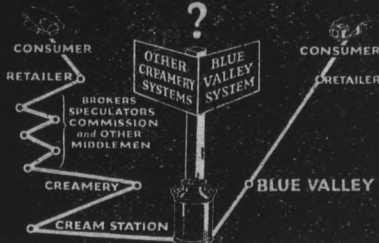
I have returned home after 2 years' service in France with the A. E. F. While in France I obtained from a noted French physician a prescription for the treatment of Rheumatism and Neuritis. I have given it to thousands with wonderful results. The prescription costs me nothing. I ask nothing for it. I will mail it if you will send me your address. A postal will bring it. Write today.

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ing a ten months' milking period this would make the average production of the Michigan C. T. A. cow 6,357 pounds of milk and 252.5 pounds of butter fat. The 1920 United States census credits the average of the Michigan cow with 3,750 pounds of milk and 150 pounds of butter fat.

To prove that the cow testing association work sends "visitor" cows to the butcher—it was found that a total of 714 cows were sold as undesirable, unprofitable individuals during the year.—A. C. Baltzer, Extension Specialist in Dairying, Michigan Agricultural College.

## FEEDING VALUE OF WHITE AND YELLOW CORN

Would you please let me know if there is any difference in the feeding qualities of the white and yellow corn?—L. M., Sterling, Mich.

—From the standpoint of the chemical composition, there is no difference in the feeding value of white and yellow corn and under average farm conditions where good rations are being fed and some leguminous hay forms part of the ration, there would be absolutely no difference in feeding value between white and yellow corn.

The white corn, however, is lacking one of the vitamins which is absolutely necessary to the proper functioning of the digestive tract in the digestion and absorption of minerals. This vitamin, which is lacking in white corn, is found abundantly in either clover or alfalfa hay. Where livestock is on pasture there is, therefore, no difference in white and yellow corn. Neither is there any difference in their value during the winter if the stock have a small amount of either clover or alfalfa.

Even hogs will eat a sufficient quantity of alfalfa or clover to give them all of the required vitamin.—Geo. A. Brown, Professor of Animal Husbandry, M. A. C.

## COW HAD MILK FEVER

We have a cow that freshened October, 1923, and got down with milk fever for about 3 hours. Since then she gave only about one-quarter as much milk as other years. Also garget part of the time. What can I give her? Would this come all right at next calving?—B. V., Remus, Michigan.

—It is not an uncommon occurrence for a cow to become affected with garget after having an attack of milk fever. I am afraid that there is very little that you can do to bring this cow back to her full milk at this lactation period. She will very likely be all right again at her next lactation period. Two tablespoonfuls of artificial carlsbad salts given on the cows feed night and morning for three or four weeks may bring favorable results.—John P. Hutton, Veterinary Division, M. A. C.

## KITTEN EATS LITTLE

I have a half blood Angora kitten weaned about five months ago which never has eaten as a kitten should. It seems hungry and cries for food and then eats very little. It does not grow and is so poor and lately will not play. It has so little life, but its mate eats and grows and is so playful and lively. I've been told it may have worms. Could you judge? If you could and would suggest a remedy I would greatly appreciate it.—Miss P., Ingham Co., Michigan.

—Give the cat one grain of calomel and one grain of sodium bicarbonate at one dose. Then give night and morning one drop of tincture of nux vomica and five drops of water, and continue for several weeks.—John P. Hutton, Veterinary Division, Michigan Agricultural College.

Corn prices made appreciable advances during the past year, says the United States Department of Agriculture. Low receipts at primary markets and the low visible supply of corn have resulted in rising prices despite large farm stocks and heavy production during the three years 1919-1922. It is pointed out, however, that the price of hogs must always be considered in connection with that of corn, inasmuch as approximately 80 per cent of the corn crop is sold "on the hoof."



## Dr. LeGear's Stock Powders

You ought to see the hundreds of letters that people write in, like this:—"One of my cows in her last milking period produced less than 40 lbs. of milk daily. This year she was started on Dr. LeGear's Stock Powders and is making over 60 lbs. daily." Frank J. Swantner, Valley Park, Mo.

The reasons for such results now are easy to understand. In spring and summer, green pasture gives cows, in natural form, the laxatives, tonics and purifiers needed to turn the most feed into milk.

Small, medium and large packages. 25 lb. pails. 100 lb. drums.

In winter, dry feed lacks these elements and much feed goes into waste, instead of milk.

DR. LEGEAR'S Stock Powders give cows just what their winter feed lacks. Tonics to sharpen appetite, aid digestion and purify the blood. Laxatives to correct bowel troubles. Vermifuges to expel worms. Minerals for milk, bone and blood tissues.

Every hog, horse and sheep, too, as well as your cows, need this helpful conditioner now. Get it! Satisfaction guaranteed or money refunded.

## FREE Sample Coupon

Hand this coupon to my dealer in your town and get FREE Sample of Dr. LeGear's Stock Powders. [Also my 128 page Stock and Poultry book free.] Use sample, then buy the size package you need. If dealer is out of samples, send us 10¢ to mail sample and book to you. Dr. L. D. LeGear Medicine Co., St. Louis, Mo.



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**Self-Centering Bowl.** The De Laval Bowl is so designed as to center and balance itself when it attains separating speed, which causes it to run smoothly, without vibration, and adds to the efficiency and life of the machine.

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### DETROIT CREAMERY HOLSTEIN MAKES GREAT RECORD

AN excellent record for the production of butter was made recently by Elmiland Jewel De Kol Cornucopia of the Detroit Creamery Co. Holstein herd at Mt. Clemens, according to the advanced registry department of the Holstein Friesian Association of America. At the age of five years and nine months this cow produced in one year under the supervision of the State Agricultural College 21,700.4 pounds milk and 720.30 pounds butterfat—equal to 900.3 pounds butter.

Nearly 97,000 Holstein cows and around 6,750 bulls have been admitted to entry in the Advanced Register up to the present time. The increased value of a cow tested for advanced registration depends upon the production shown. It is usually considered that the increased value is not less than \$100 a cow.

### CANNOT MAINTAIN GASOLINE PUMP ALONG TRUNK LINE

(Continued from Page 8)

papers on me before they can make me move it? And if they do serve papers how long are they supposed to give?—G. W. H., Corunna, Mich.

The state Administrative Board recently passed a resolution prohibiting the maintenance of any gasoline filling station on any state trunk line in the state.

The maintenance of any part of the gasoline filling station within any part of the right-of-way of a highway is an obstruction and the authorities having control over the highway in question may compel the removal thereof.

If the pump mentioned in your communication is within the limit of this trunk line highway either the State Highway Commissioner or the Board of County Road Commissioners of the county in which the road is situated, if it be a county road, may compel the removal thereof. The statute does not prescribe the proper notice to be given, but thirty days notice would undoubtedly be sufficient.—H. Victor Spike, Assistant Attorney General.

### NEXT OF KIN IS HEIR

If a person who has no children and no brothers or sisters, dies leaving no will, would the first cousins inherit the property. If so, suppose one cousin is dead, could the children of this cousin share in the property?—P. Q., Jackson County.

If the deceased had neither wife nor mother or father at the time of his death the next of kin would inherit the property in the following order of priority: uncle or aunt, then first cousins. The heirs of a deceased cousin would be entitled to their parent's share.—Asst. Legal Editor.

### ALLOWANCE FOR DRAIN

A county drain is being surveyed across my farm. The drain will be 400 rods long. I put in 120 rods of 10-inch tile five years ago, which is sufficient for that drain in my farm, located near the lower end of the drain and which they plan to leave in. There are eight farmers interested besides myself. Would like some idea of what I have a right to expect from the 120 rods of tiles toward my share of the expense.—E. S., Pettsford, Mich.

You should have an allowance for the drain put in by you, to apply on your share of the expenses. The allowance should be based on the actual value of the drain. The value could be estimated upon the actual cost of putting in the same drain now, including labor and material, less depreciation.—Asst. Legal Editor.

### LAW PROHIBITS MARRIAGE OF COUSINS

Give the law in full of Michigan and nearby states on cousins marrying. Does it make a difference if the people are past middle age and not liable to raise a family?—Mrs. W. V., Ortonville, Mich.

Compiled Laws, 1915, Sections 11364 and 11365 prohibit the marriage of first cousins in Michigan. Most states have similar provisions against this kind of marriage. Such laws are by no means economic regulations, but follow the general policy of the law of the various states in which they have been en-

# RHEUMATISM

## A Remarkable Home Treatment Given by One Who Had It.

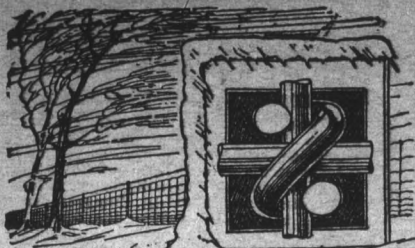
In the year of 1893 I was attacked by Muscular and Sub-acute Rheumatism. I suffered as only those who are thus afflicted know, for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely, and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism, to try the great value of my improved "Home Treatment" for its remarkable healing power. Do not send a cent; simply mail your name and address and I will send it free to try. After you have used it and it has proven itself to be that long-looked-for means of getting rid of such forms of rheumatism, you may send the price of it, one dollar, but understand, I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when relief is thus offered you free? Don't delay. Write today.

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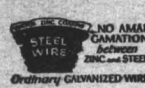




## New Rust Resisting Fence Wire

"Galvannealed"—newly discovered rust-proof fence wire, insures many years longer service than you have ever had before from any kind of fence.

In "Galvannealed" wire an extra heavy coating of rust-proof zinc is amalgamated INTO the body of the steel wire. In ordinary galvanized wire a thin coating of zinc is merely laid ONTO the steel body of the wire.



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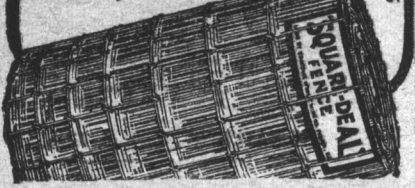
## Square Deal Fence

is now made from rust-proof, high test "Galvannealed" wire or from standard quality galvanized wire. Square Deal leads with its stiff, picket-like stay wires that make fewer posts necessary. Its well crimped line wires spring back into place after every shock and strain. Famous Square Deal Knot can never slip. Square Deal stands tight and trim, looks better, wears longer, therefore costs less.

### 2 Books FREE

Ropp's New Calculator (worth 50c) figures grain and livestock profits; measures capacities of cribs, wagons, silos; figures interest, wages; contains commercial law, parcel post rates, etc. Sent free with Square Deal catalog that tells all about "Galvannealed"—the Triple-Life Wire. Both books free to land owners.

**Keystone Steel & Wire Co.**  
4834 Industrial St.  
PEORIA, ILL.



## POULTRY BREEDER'S DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. 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.

High Grade, Utility Cockerels For Sale—April hatched—White Wyandottes, Barred Rocks and White Leghorns. C. W. Heimbach, Big Rapids, R. 5, Michigan.

**S. C. ANCONA** COCKERELS FROM SHEP-PARD'S best, \$3 to \$7 each.  
H. CECIL SMITH, Rapid City, Mich., R. 2.

Single Comb Rhode Island Whites. Winners At Holland Show, hundred birds competing of first old pen and three other firsts. Eggs \$2 per 15. Write John A. Hartgerink, Zeeland, Michigan.

**WHITE ROCK** COCKERELS FOR SALE.  
Fishes Strain.  
G. F. PETERS, Big Rapids, Michigan.

**FOR SALE—THOROUGHbred TOULOUSE** Geese and Buff Rock Cockerels. Blue ribbon prize winners. Baldwin & Nowlin, Laingsburg, Mich., R. 4.

### LEGHORNS

**TANCRED, HOLLYWOOD AND WYCKOFF** Males—head my carefully selected breeding pens. Choice eggs \$3.00 and \$2.00 per 15. My stock is of the very best. Write me.  
F. ARTHUR MARTIN, Indian River, Michigan.

**HIGH GRADE ROSE COMB BROWN LEGHORN** Cockerels, for sale. Price \$2.00 to \$3.00.  
JOHN NEWMARCH, Kingsley, Mich., R. 2.

### RHODE ISLAND REDS

**RHODE ISLAND REDS TOMPKINS STRAIN** to make room for young stock. I will sell after November 1, 1923, 50 2 year old hens at \$2.00 each; 25 1 year old hens at \$3.00 each; cockerels at \$2.50 and up. All these cockerels are from my best 3 year old hens that laid 205 eggs or better in their pullet year. Quality breeder of Rhode Island Reds.  
WM. H. FROHM, New Baltimore, Mich., R. 1.

**CRyder's S. C. REDS, ONE OF LEADING** Red pens in Michigan egg contest. Bred for color, shape, and heavy production. Write for prices on hatching eggs.  
EDW. H. CRyder, Alamo, Michigan.

**S. C. R. I. REDS, MANHOOD STRAIN.** Fine dark birds. Price \$3 apiece or two for \$5. **ALFRED DEICKMANN**, Pigeon, Mich., R. 3.

**S. C. R. I. RED PURE BRED EGGS FOR** setting. 15-\$1.25 or 100-\$8.00.  
LOUIS MORRIS, Mt. Morris, Michigan, R. 1.

### ORPINGTONS

**WHITE ORPINGTON** COCKERELS FOR Sale, \$3 each.  
James McCoy, 115 Prospect St., Mt. Clemens, Mich.

### BRAHMAS

**A FEW FINE LIGHT BRAHMA COCKERELS** for sale \$5.00 each, while they last.  
DR. E. R. FENN, V. S., Pottersville, Mich.

acted, and have for their purpose the protection of the health and general welfare of society. So when two people go into another state for the express purpose of contracting a marriage which is forbidden by the laws of their own state they not only commit an offence against the dignity and honor of their own state, but against society in general.—Asst. Legal Editor.

### NO RIGHT TO PAY LOSS

A man whose cyclone insurance dues were to be paid in November neglected to pay, and in August a cyclone passed through that section blowing down his barn and after this happened he sent in his back dues to the company and the company paid the loss. Had the board of directors a right to pay this loss?—J. E., Washtenaw County, Mich.  
—The Board of Directors would have no right to pay a loss on a policy, after the policy had lapsed.—Asst. Legal Editor.

### HUSBAND WOULD GET HALF OF PROPERTY

Will you please tell me, where a man and wife own a farm and there are no children and no joint or no will made, in case the wife should die, would the husband get all property or would he have to share it?—F. P., Coral, Mich.

—Upon the death of the wife without surviving children and without having made a will, the property would descend as follows: One half to the husband and the other half to the father and mother of the wife, or to her brothers and sisters or nephews and nieces.—Asst. Legal Editor.

### MUST PAY DOG TAX

Is it a state law that compels you to pay a dog tax. If a person's dog kills another man's sheep and he finds it out, can he kill the dog or make the owner pay for the sheep that he has killed?—H. L., Mt. Morris, Mich.

—A state law requires the owner of dogs to pay a tax on them, except in cities having ordinances providing for such tax.

Any person may kill any dog which he sees pursuing, worrying or wounding any live stock. If any of your live stock have been injured by the acts of any dog, you may report the matter to the local justice of the peace, whose duty it is to investigate the matter and summon the owner to show cause why the dog should not be killed. You may also sue the owner for damages, and make him pay for the sheep killed or injured.—Asst. Legal Editor.

### SUE MAN WHO SOLD COW TO YOU

On November 5th, 1923, I bought a cow, not milking at time and supposed to freshen in December. I paid cash for the cow. Now this cow was bred December 31 instead of freshening and is standing dry all this time. What can I do? Can I hold the seller for discount or return of cow? If he says the bank held a mortgage on the cow and took the money, can I collect from the bank?—E. R., Gladwin, Mich.

—You would have to sue the man who sold the cow to you, for damages for misrepresentation. You would have this right of action against him if he falsely misrepresented that the cow would be fresh when he knew she would not. If you obtained judgment, you would levy on any of his property, and the bank would have nothing to do with it.—Asst. Legal Editor.

The purebred Holstein cattle which farm boys and girls of Delaware have fed and cared for as a part of their dairy club work constitute 19 per cent of the purebred Holsteins in that State, according to a recent report received by the United States Department of Agriculture.

### FREE BOOK ABOUT CANCER

The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper. (Adv.



## Farmers! Here Is Your Own Borrowing and Investing System

THROUGH the twelve Federal Land Banks, farmers own and operate a huge national co-operative borrowing and investing business. Already, these Banks have resources of over \$880,000,000! They are supported by more than 4,500 local National Farm Loan Associations with a membership of nearly 300,000 farmers.

After paying the costs of operation and setting aside necessary reserves, all profits are returned to the borrowing farmers through their local associations. To date, over \$7,000,000 has been paid as dividends.

A Federal Land Bank mortgage need never fall due. It is gradually retired by the semi-annual payment of a uniform sum, equal to the interest on the amount borrowed plus 1/2 of 1% of the loan. For example, the farmer with a mortgage of \$1,000 at 6% pays \$35 every six months. This includes the interest and a payment on the principal sufficient to cancel the loan in about 33 years.

### When You Have Money To Invest

Every farm family should support their co-operative Farm Loan System by investing in Federal Land Bank Bonds. This can be started with a single Bond—\$40, \$100, \$500, \$1,000, \$5,000 or \$10,000—and increased as the money can be spared. These bonds are safe. No investor in them has ever lost a dollar. They are free from all taxes, except inheritance taxes. This applies to both principal and interest.

Should you need money quickly, these Bonds command a ready market, or your banker will accept them as security for a loan.

You can buy these Bonds from any Federal Land Bank or from the Fiscal Agent at Washington, D. C. The Bonds will be sent by registered mail. All correspondence confidential. Remember that the words "The Federal Land Bank" appear at the top of every Bond issued by a Federal Land Bank.

Write today for "Federal Farm Loan Board Circular No. 16." It's free.

If you desire a Federal Farm Loan, apply to the Secretary-Treasurer of the nearest National Farm Loan Association. Ask your County Agent for his address.

### The Federal Land Banks are located at

Springfield, Mass.  
New Orleans, La.  
Wichita, Kansas

St. Louis, Mo.  
Berkeley, Cal.  
Omaha, Nebr.

Louisville, Ky.  
St. Paul, Minn.  
Baltimore, Md.

Columbia, S. C.  
Houston, Texas  
Spokane, Wash.

### Fiscal Agent

**FEDERAL LAND BANKS**  
Washington, D. C.

**140 Egg Incubator \$13.25**  
30 Days Trial

Freight Paid east of the Rockies. Hot water, copper tanks—double walls—dead air space—double glass doors—easy to clean or prevent. "The Lee Way" Book, 64 pages, by GEO. H. LEE, tells about poultry ailments, how to detect, what to do, etc. Germozone (75c and \$1.50 sizes) and this FREE book at drug or seed stores, or postpaid from GEO. H. LEE CO., Omaha, Nebr.

Shipped complete, set up ready to use.

140 Egg Incubator and Brooder	\$17.75
180 Egg Incubator Alone	15.75
180 Egg Incubator and Brooder	22.00
250 Egg Incubator Alone	22.75
250 Egg Incubator and Brooder	31.00

Made of California Redwood—lasts 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 new 1923 catalog. (3)

**WISCONSIN INCUBATOR CO.** Dept. 138 Racine, Wis.

## For Sick Chickens

Don't let COUP, COLDS, CANCER, SORREHEAD, BOWEL TRUBBLE, etc., take your profits. Easy to cure or prevent. "The Lee Way" Book, 64 pages, by GEO. H. LEE, tells about poultry ailments, how to detect, what to do, etc. Germozone (75c and \$1.50 sizes) and this FREE book at drug or seed stores, or postpaid from GEO. H. LEE CO., Omaha, Nebr.

**GERMOZONE**  
GOES TO THE SPOT

### WYANDOTTES

**White Wyandotte Cockerels, \$3 each**  
Wayne Chipman, R. R. 2, Washington, Mich.

**For Sale—Several Beautiful Barred Rock Cockerels.** Also a few Mammoth Pekin Ducks and Drakes.  
Mrs. O. Terpening, Ithaca, R. 1. Phone.

**WHITE WYANDOTTES, REGAL STRAIN.** Eggs for hatching, \$1.50 per 15; \$7.00 per 100.  
F. W. ROBERTS, Salem, Michigan.

### PLYMOUTH ROCKS

**COCKERELS, THOMPSON STRAIN BARRED** Rocks, dark matings, April Hatched, weight 7 lbs. from good layers, \$3.50, 2 or more \$3.00 each.  
MRS. FRED KLOMP, St. Charles, Michigan.

**BARRED ROCK COCKERELS BRED FROM** Holtermans Pedigreed Aristocrats direct. Both Light and Dark. Price \$4.00, two for \$7.00.  
N. AYERS & SON, Silverwood, Michigan.

### BARRED ROCKS

**BARRED ROCK COCKERELS AND PULLETS** from America's best prize-winning laying strains. Winners of 18 first prizes at Detroit and M. A. C. the last two seasons. Low prices.  
TOLLES BROS., R. 10, St. Johns, Mich.

**BARRED ROCK COCKERELS FROM BRUM-** mer's trap nested stock, all nice, well marked birds. \$3.50 each, \$3.00 each for three or more.  
REESE BROS., Williamston, Michigan.

### TURKEYS

**BOURBON RED TURKEYS, LARGE VIGOROUS** birds, sell breeding stock of 1 yr. old Tom and 9 Hens at reasonable prices or separately. Tom \$15, Hens \$8 and \$8. Making room for other poultry.  
REESE BROS., Williamston, Mich.

Michigan's Best Giant Bronze Turkeys. America's best strains vigorous breeders, both utility and fancy. Extra good values in young toms.  
N. Evalyn Ramsdell, Ionia, Michigan.

**FOR SALE—PURE BRONZE TOMS \$10.00** and \$12.00. Hen Turkeys \$6.00 and \$7.00, also some fine pure old stock. Some nice Toulouse Geese. Mrs. Thomas E. Wilson, Plymouth, Mich., R. 4.

**MICHIGAN'S BEST GIANT BRONZE TOMS** for sale. Large beautifully marked birds. Price reasonable. Write MARY A. JOYNT, Omena, Mich.

Pure Bred Mammoth Bronze Turkeys, Champion Strain. Large and vigorous. Unrelated stock.  
Mrs. B. Smatts, R. 1, East Jordan, Michigan.

**LARGE VIGOROUS BOURBON RED STOCK** Turkeys. Axtell Strain.  
MARY BEACON, R. 4, Marquette, Michigan.

Pure Bred Mammoth Bronze Toms One 2 Year old hardy beautiful well marked birds. Write for prices. Mrs. F. Griffin, Riverdale, Michigan.

**MAMMOTH BRONZE TURKEYS, LARGE** beautiful birds. Write for prices.  
MRS. BEN JOHNSTON, Onaway, Mich., R. 1.

Mammoth Bronze Turkeys. Goldbank Strain. Unrelated stock. Vigorous healthy birds. Write for prices. Mrs. Perry Stebbins, Saranac, Mich.

**WHITE HOLLAND TURKEYS BARGAIN** PRICE.  
MRS. ELLA CLEVELAND, Millersburg, Mich.

**White Holland Turkeys** ALDEN WHITCOMB, Byron Center, Michigan.

**HIGHEST PRICES PAID FOR LIVE AND** Dressed Poultry, Veal, Rabbits, etc. A square deal always. Write to  
C. E. McNEILL & CO.  
325 W. South Water St., Chicago

**HAVE YOU POULTRY FOR SALE?**  
AN AD IN M. B. F. WILL SELL IT.





## HUNDERMAN'S

FIRST-CLASS CHICKS

\$10 and UP

We are heavy producers of first-class chicks. Flocks on free range. Culled by expert. 100% Live Delivery Guaranteed. Order today on this ad and get chicks when you want them.

English S. C. White Leghorns.....	\$6.50	\$12.00	\$36.00	\$57.50
Barred Rocks.....	8.50	16.00	48.00	77.50
Single Comb R. I. Reds.....	9.00	17.00	50.00	82.50

Mixed Chicks.....\$10.00 per 100 straight

Blue Hen Incubators. Reference: Zealand State Bank. Order today. You take no chances. Catalog Free. HUNDERMAN BROS., POULTRY FARM, Box 30, Zealand, Michigan.



## 400,000 CHICKS

BIG, STRONG, FLUFFY CHICKS hatched from well-bred and well kept, heavy laying hens insuring good growth and PROFITS.

White, Brown or Buff Leghorns.....	\$7.00	\$13.00	\$62.00	\$120.00
Barred and White Rocks, S. C. and				
White Wyandottes, Buff Orpingtons.....	8.00	15.00	72.50	140.00
Barred Rocks, R. I. Reds.....	8.50	16.00	77.50	140.00
White Wyandottes.....	9.50	18.00	87.50	170.00

Mixed, \$12.00 per hundred, straight. Postpaid. 100% Live Arrival Guaranteed. Order right from this ad. Best Bank Reference. You take no chance. Free Catalog. Member I. B. C. A. and Ohio Assn. MODERN HATCHERY, Box 62, Mt. Blanchard, Ohio.

## BABION'S QUALITY CHICKS

Prices quoted are for Chicks Hatched from OUR GOOD UTILITY FLOCKS.

White, Brown or Buff Leghorns.....	\$4.00	\$7.00	\$18.00	\$60.00	\$120.00
Barred and White Rocks, S. C. and					
White Wyandottes, Buff Orpingtons.....	4.00	8.00	15.00	70.00	140.00
Barred Rocks, R. I. Reds.....	5.00	9.00	17.00	80.00	160.00
White Wyandottes and Orpingtons.....	5.50	10.00	19.00	92.50	180.00

Chicks from our EXTRA SELECTED FLOCKS will be \$3.00 per 100 higher, and Postpaid 100%. First hatch off February first. You cannot go wrong. Order from this adv. Thousands satisfied. Ten years experience. Our Slogan: The Best Chicks are Cheapest, Not the Cheapest Chicks Best. Bank references.

BABION'S FRUIT AND POULTRY FARMS, Flint Michigan.

## LARGE, HUSKY CHICKS

Purebred, high quality chicks from certified, tested flocks on free range.

White, Brown or Buff Leghorns.....	\$3.50	\$6.75	\$13.00	\$62.50	\$120.00
Barred Rocks, R. I. Reds.....	3.75	7.25	14.00	67.50	130.00
Assorted Chicks.....	4.50	8.50	16.00	77.50	150.00
Extra Select Stock \$2.00 per 100 higher. Well hatched in modern machines. Each order carefully packed under our personal attention. Postpaid. 100% live delivery. Bank reference. 1924 catalog ready.					

Winstrom Poultry Farm and Hatchery, Box A-5, Zealand, Mich.

## SUNBEAM HATCHERY

Chicks are produced under my personal supervision. Hatched from select, pure bred, heavy laying hens, well kept to insure vigorous Chicks.

White, Brown or Buff Leghorns.....	\$7.00	\$13.00	\$62.50
Barred Rocks, R. I. and S. C. Reds, Anconas.....	8.00	15.00	72.50
White and Buff Rocks, White Wyandottes, Black Minorcas.....	8.50	16.00	77.50
White and Buff Orpingtons, Silver Wyandottes.....	9.00	17.00	82.50

Mixed, all varieties, \$12 per 100 straight. 100% Live Delivery Guaranteed. Postpaid. Order from this Ad. Bank references. There is no risk. Free Catalog. Member I. B. C. A. H. B. TIPPIN, Box E, Findlay, Ohio.

We can save you money on

## Ancona and White Leghorn Chicks

Send at once for catalog and prices. We insure your chicks for one week.

M. D. WYNGARDEN

Route 4, Box 81

Zeeland, Mich

## CHICKS - Investigate

Our chicks are the kind that make good. Every flock is carefully culled and mated. We have been in business seven years and have been building carefully and consistently to a place where we can offer chicks more than worth the money we ask. SINGLE COMB, ENGLISH STRAIN, WHITE LEGHORNS, BARRED ROCKS, ANCONAS. 100% live delivery guaranteed. Investigate our proposition before buying. A postal will bring full information.

STAR HATCHERY, Box 23, Holland, Mich.

## Pure Bred Chicks

February and March Prices.

Broiler Chix.....	12c	W. Wyandottes.....	18c
W. or B. Leghorns.....	14c	White Rocks.....	18c
B. Rocks or Reds.....	17c	Buff Orpingtons.....	18c
Sheppards Anconas.....	16c	Black Minorcas.....	16c

Extra selected standard bred chicks \$4.00 per 100 more. Add 35c if less than 100 ordered. Good bank reference. Circular free.

Lawrence Hatchery, Box 1, R. 7, Grand Rapids, Mich.

## TESTED BABY CHICKS

February, March prices. Heavy broiler chicks 12c. Barred Rocks or Reds 17c. Anconas Black Minorcas 16c. White or Brown Leghorns 15c. White Rocks 14c. White Wyandottes, Buff Orpingtons 17c. Extra selected chicks built directly from contest winners. 4c per chick more. Add 30c if less than 100 wanted. Hatching eggs. Catalog. Good reference. Beckmann Hatchery, TMBF. 26 Lyon St., Grand Rapids, Mich.

## Select Quality Chicks

from America's best winter-laying purebreds. Closely culled, properly mated, thrifty flocks of White and Barred Rocks, White and Brown Leghorns, Rose Comb Reds, Wyandottes. 14 years experience. Prices right. Free catalog. References. HAIGHT HATCHERIES, Cedar Springs, Michigan.

**CHILSON BARRED ROCK-HATCHING** Eggs and Baby Chicks. Winning pens all heavy breeds Mich. international egg contest 1923. Nugan's greatest eggs and color strain. Write for price list today. Mr. and Mrs. W. H. Chilson, R1, Grandville, Mich.

**BEFORE BUYING ELSEWHERE GET OUR** prices on White and Brown Leghorns and White Rocks. Prepaid Parcelpost. Satisfaction Guaranteed. De Koster's Hatchery, Box B, Zeeland, Mich.

Whittaker's Red Chicks and Eggs for Hatching. Rose and Single Combs. Bred from Fourteen Generations of Winter Layers. Write for Free Catalog of Michigan's Greatest Color and Egg Strain. Interlakes Farm, Box 4, Lawrence, Mich.

**BABY CHICKS-REMARKABLE FOR SIZE** and strength. Reasonable prices. Leghorns, Anconas, Rocks, White Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas. TYRONE POULTRY FARM, Fenton, Michigan.

**S. C. WHITE LEGHORN CHICKS FROM** demonstration farm flock, under the supervision of Extension Department M. C. Price \$15.00 per 100. Ralph S. Totten, Pittsford, Michigan.

**PUREBRED CHICKS: BARRED ROCKS, BUFF** Orpingtons, White Wyandottes and Rhode Island Reds. Satisfaction guaranteed. Write for reduced prices. Joseph Amster, Paw Paw, Mich.

**BABY CHICKS FROM BRED TO LAY S. C.** Buff Leghorns. First hatch March 3rd. J. W. WEBSTER, Bath, Michigan.

**68 VARIETIES OF** Fine pure-bred chickens, ducks, geese, turkeys, fowls, eggs, baby chicks. Large catalog 5c. A. A. ZIEMER, Austin, Minn.

## Baby Chicks

From Best Egg Laying Strains in the World. Tancred, pedigree-sired and Tom Barron, S. C. White Leghorns, S. C. & R. C. R. I. Reds, Parks' Barred Plymouth Rocks.

Our flocks are all on free range, closely culled, inspected and approved by Michigan Baby Chick Association. Every bird is healthy, has size, type and color.

**Hatched in World's Best Incubator** Our chicks are strong, sturdy and healthy. They live and grow because they are hatched in the best incubator made. 100% live delivery to your door. Illustrated catalog sent FREE.

LAKEVIEW POULTRY FARM, R. 8, Box 9, Holland, Mich.

## Early Maturing Baby Chicks

These chicks are from flocks headed by cockerels of high producing blood lines. Culled by experts. Each chick personally supervised. Pure bred. \$13.00 per 100 and up. Special: We have a limited number of superior grade chicks from special matings. Write for description and prices. 100% live delivery. Ref. Milan State Savings Bank.

MILAN HATCHERY, Box 5, Milan, Michigan.

## CHICKS: HOGAN TESTED GUARANTEED

Our Chicks are from flocks on free range. They will live and grow and make a profit. ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy laying Extra Good BARRED ROCKS. Postpaid to your door and full live delivery guaranteed. Our flocks are carefully supervised and Hogan tested. Bank reference furnished. Write for prices and descriptive matter.

HILLVIEW HATCHERY, C. Boven, Prop. Box H. R. 12, Holland, Mich.

## Chicks With Pep

Try our lively and vigorous chicks from bred-to-lay and exhibition hens. They will make you money for they have the quality and egg laying habit bred into them. A trial will convince you. All leading varieties. Safe delivery. Prepaid. Prices right. Bank reference. Big illustrated catalog free.

Holgate Chick Hatchery, Dept. B, Holgate, Ohio.

## BABY CHICKS

Our Own Breeding flock of large type American White Leghorns. Laying and standard qualities combined. 13 years experience in hatching and marketing. Also, Barred Rocks and R. I. Reds High Quality. All flocks culled and inspected. Modern hatching plant, 2 hatches weekly. Quality chicks at commercial prices. Order early and get chicks when wanted. Write for prices and circular.

DEAN EGG FARM &amp; HATCHERY at Big Beaver. Mail address Birmingham, Mich. R.F.D. 4.

**64 BREEDS** Most Profitable pure-bred ducks, geese, turkeys. Fowls, eggs, incubators. Reduced prices. 31st year. Largest plant. Large variety book and catalog free. R.F. NEUBERT Co., Box 991, Menasha, Wisn.

## FEEDING THE CHICKS

Idle chicks will soon form the habit of toe-picking and cannibalism. It is a natural habit for the chicks to pick at something, and if there is nothing else in sight for them to pick at, they will pick each others' toes. Of course, they cannot be fed until they are at least forty-eight hours old, but do not put them under the hover or into the brooder until there is something ready for them to pick at. This may be grit or oyster shell, and should be placed in several shallow pans and a little may be scattered in the litter to provide something for the chicks to scratch for.

It is well to remember that grit is a chicken's teeth, and they should always have access to plenty of it. The commercial grit may be used, or the grit may be ground or crushed at home, from broken crockery and glassware. Sods dug up with an axe and brought into the brooder house while the biddies are confined contain grit, and help to bring out-of-doors conditions inside, on cold days. If this is practiced faithfully you will have no trouble with leg weakness, as it is not only confinement, but lack of access to Mother Earth that causes leg weakness in young chicks.

Finely chopped vegetables, such as mangels, beets, potatoes, etc., provide the much needed succulent material in the chicks' diet, and much healthful exercise is obtained by chasing one another about with the vegetable scraps. Busy chicks are contented chicks, and their running about develops sturdy legs.

Milk will provide the necessary animal protein and help with the rapid development of the chicks. If you have not the time properly mix a dry mash, buy some good commercial brand. Balanced rations are just as necessary for chicks as for mature fowls. Fed in self-feeding hoppers, near the brooder, it provides every thrifty chick with an equal opportunity to grow and develop.

## ANIMAL PRODUCTS AND EGG YIELD

A GREAT increase in our annual egg production may be expected when poultrymen and farmers in general recognize the importance of animal feeds in the fall and winter rations for the laying flock. The demonstration of the superiority of feed combinations containing meat scrap, milk and its products, tankage, or fish scrap is one of the most valuable additions to our knowledge of poultry management contributed by the United States Department of Agriculture and various experiment stations.

Practically all experimental tests have shown these feeds will greatly stimulate egg production, especially during the fall and winter months. The fact that many farmers get no eggs at all during this period may usually be attributed to a lack of essential animal feed. The addition of from 10 to 25 per cent of one of those named would in most cases make a remarkable difference. Which one of these feeds should be used depends upon local conditions and prices. They are of about equal value when the protein content is taken into consideration. The fish meal and tankage have given just as good results as meat scrap. Milk is just as good when available at a low cost, and fresh buttermilk and skim milk produce good results. In some sections condensed buttermilk and semi-solid buttermilk have been fed with success.

In a test extending from November 1st to July 10th on the government farm at Beltsville, Md., 30 hens on a ration without meat scrap or any animal feed averaged 74 eggs each. Another flock of 30 hens of the same breed during the same period laid an average of 113 eggs each, the difference of 39 eggs being attributed to the ration which contained meat scrap. Both flocks were out on range whenever the weather was favorable, which made the difference less than it would have been had the birds been kept in pens. In a test made by Purdue University Agricultural Experiment Station animal feeds were shown to have a decided value in the ration of laying hens and pullets. The pullets fed skim milk averaged 140.2 eggs in a year; those fed meat scrap, 135.9 eggs; and those in the check pen that received no animal

## BOWERS Colony Brooder

Burns any fuel—costs less

This brooder raises more and better chicks at lowest cost. Stove is sturdy, safe, air-tight, self-regulating—best in world to hold fire. Burns soft coal—cheapest brooder fuel—perfectly. Also hard coal, wood, etc. Automatic regulator maintains uniform heat night and day. Canopy spreads heat evenly over chicks; gives pure air, ample room. 500 and 1,000 chick sizes. Guaranteed. Lowest prices.

Express prepaid E. of Rockies. FREE—\$3.00 stove pipe outfit sent free with brooder if you order NOW. F. M. BOWERS & CO. 1416 W. Wash. St. Indianapolis, Ind.

## PURE-BRED CHICKS

Tom Barron Imported and Hollyweird strains S. C. White Leghorns, Sheppard's Famous S. C. Mottled Anconas and Park's Bred to Lay Barred Rocks. All Free range flocks, carefully culled and certified by experts and bred many years for high egg production. Fed-grown males from 250 to 280 egg strains and from hens that produced leading pen in Michigan's International Laying contest, head our flocks. Eggs from these famous strains hatched with scrupulous care in our Modern Mammoth Incubators produce strong, husky, peppy chicks that are easy to raise and become marvelous layers. Chicks are shipped postpaid. 100% live delivery guaranteed. Write for our big free illustrated catalog.

Silver Ward Hatchery, Box 30 Zealand, Mich

## Improved S. C. White Leghorns

BRED FOR EGG PRODUCTION SINCE 1910

CHICKS from this high grade egg laying strain will give you a bigger profit, and absolute satisfaction. They have 13 years of careful selecting and breeding direct behind them, and mature in the shortest possible time. You benefit by our 13 years in hatching and shipping chicks. These chicks possess great vitality and grow up uniform in size. 100% safe arrival guaranteed. Let us mail you our catalogue with prices.

WOLVERINE HATCHERY, Zeeland, Mich., R. 2

## Pure Bred Baby Chicks

We have been carefully developing our flocks for eight years. Every chick pure bred and from stock carefully culled, for type and production. Our chicks give satisfaction. Order today and get chicks when you want them.

W. Leghorns.....	Prices on 50	100	500
B. Rocks, R. I. Reds.....	\$7.00	\$13.00	\$62.00
W. Wyandottes, W. Rocks.....	8.00	15.00	72.00
Postpaid. 100% live delivery. You take no chances. Ref. Farmers & Mechanics Bank, this city. No Catalog. Order from this ad.			

WASHTENAW HATCHERY

Geddes Rd, Ann Arbor, Mich.

## RELIABLE CHICKS

S. C. English White Leghorns and Barred Rocks. Every chick from carefully mated, culled, pure-bred flocks owned and developed by us for 15 years. Leghorn males from trapped 280 egg hens. Free catalog. Write for prices.

**Reliable Hatchery and Farms,** Route 3 Holland, Mich

## BABY CHICKS

Send now for descriptive matter and price list of our PURE BRED PRACTICAL POULTRY

10 LEADING VARIETIES. Some fine breeding this year in improved egg quality stock; customers' egg records from stock last year.

**COCKERELS**—A few unsold in Barred Rocks White Wyandottes, and R. C. Reds. \$3.00 and \$4.00.

STATE FARMS ASSOCIATION, Masonic Temple, Kalamazoo, Michigan.

## BEST CHICKS at Low Prices

Send for free catalog describing best bred chicks in the country. Tom Barron and Tancred White Leghorns, Michigan's Champion Winter Laying Barred Plymouth Rocks and S. C. R. I. Reds. No better chicks anywhere at any price. Satisfaction and 100 per cent live delivery guaranteed.

Brummer-Fredrickson Poultry Farm, Box 26 Holland, Mich.

## HUSKY CHICKS

PURE BRED CHICKS PAY BEST. My heavy laying, personally inspected, Hogan tested flocks, most profitable leading varieties, produce chicks that pay you big profit. Only one grade the best. Low prices. 97% live delivery guaranteed. Catalog Free. Write today.

SIEBS HATCHERY Box 518 Lincoln, Ill. (Member S.C.A.)

## ELGIN CHICKS

Barron Strain, Selected English White Leghorn Chicks. Produced under my personal care. They are full of Pep as customers report and have re-ordered. They are carefully packed for shipping. 100% Live Delivery Guaranteed. Write at once for catalog and Price list.

ELGIN HATCHERY, Box 317-A, Zeeland, Mich.

## QUALITY Chicks & Eggs

45,000 PURE BRED BREEDERS. 15 varieties. Best laying strains. Incubate 25,000 eggs daily. Catalog Free. Free live delivery.

Missouri Poultry Farms, Columbia, Mo

**WEBER'S BEST** laying, BEST paying chickens, ducks, geese & turkeys. Fine pure-bred quality. Fowls, Eggs, Incubators at new low prices. 42 years poultry experience, and my 100 page Catalog and Breeder's Guide Free. W.A. Weber, Box 43 Mankato, Minn.



## Get My Special Low Price —

On This Wonderful Incubator

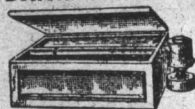
Hatches a Chick From Every Fertile Egg

Freight pre-paid east of Rockies and allowed to points beyond

The DETROIT is scientifically constructed to give big batches of luscious, fast growing chicks. Temperature is automatically regulated by a Miller type trip burner that acts directly on the flame. Heat is held in and cold kept out by double walls having dead air spaces between them. Every part of the hatching chamber is evenly heated—the hollow square hot water tank has rounded elbows that prevent cold corners. These are only a few of the features that make the Detroit such a big hatching incubator. Write for catalog giving full and detailed description and get the almost unbelievable bargain price.

### Big Combination Offer

Detroit - Alliance Incubators and Brooders



Keeps 140 chicks comfortable and warm. Insures maturity of your flock. Same efficient durable construction as in the Detroit incubator. The most practical brooder built.

My record smashing combination offer is the talk of the country. Write for it today and learn what tremendous savings you can secure by ordering both machines at one time. Read my unconditional guarantee. Complete satisfaction or your money back is the only basis upon which I make a sale. Drop me a card tonight. I'll answer by return mail.

Wm. Campbell, President  
Detroit-Alliance Incubator Co.  
Dept. 10 Alliance, Ohio

## MEADOW BROOK

HENRY DEPREE & SONS.

One of the Founders of the Chick Industry  
21 Years in Business

Pure-bred stock carefully developed for years. Order from this ad and get chicks just when you want them. Prepaid prices on 50 100 500  
White and Brown Leghorns \$7.00 \$13.00 \$62.50  
Rocks, Reds, Buff Leghorns 8.00 15.00 72.00  
White Wyandottes 11.00 20.00 95.00  
Mixed Chicks (all varieties) \$10.00 per 100

You take no chances. Ref: First State Bank, Holland. 97% live delivery guaranteed. White Leghorns headed by male birds of 285-303 egg record strains. Other breeds highly bred. Circular free.

MEADOWBROOK FARM, HOLLAND, MICH. 1-H

## B & R CHICKS ARE THE GOOD KIND



We hatch chicks from flocks which have had our own personal attention. Every bird is carefully selected by us for best production. A pure-bred chick from us has the breeding to grow into a fine money making fowl. Send for full information. 100% live delivery guaranteed. All popular breeds. We hope you will give us a trial order for that will mean a permanent customer, we are sure. Write today.

Borst & Roek, Box 10, Zeeland, Mich.

## WYNGARDEN'S "EGG-BRED" BABY CHICKS

Best laying strains on earth. e. e. e. fine Barron, English, White Leghorns and Anconas. Backed by 19 years' actual breeding on our farms. 30,000 active, healthy, well hatched chicks weekly. Hundreds of our customers in a line big profits. You ought to buy our "Egg-Bred" varieties. Write at once for handsome 1924 catalog—it's free. WYNGARDEN HATCHERIES & FARMS, Box "B", Zeeland, Mich., U. S. A.

### BUSINESS FARMERS EXCHANGE

Ads Under this Head 10c per Word, per Issue

#### MISCELLANEOUS

**ROUP—QUICKLY CURED BY USING** Shuey's Roup Remedy, and will keep it out of your flock. Send 50c for regular size bottle. Money back if not satisfactory. THE SHUEY REMEDY CO., 68 W. Main St., Springfield, Ohio.

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

**AGENTS SELL WOLVERINE LAUNDRY** Soap. Wonderful repeating and good profit maker. Free auto to hustlers. WOLVERINE SOAP CO., Dept. B32, Grand Rapids, Mich.

**FOR SALE MOLINE TRACTOR AND PLOWS** nearly new. Also imported Percheron Stallion weight one ton. Write for particulars to S. A. LETSON, Lake, Michigan.

**MAN AND WIFE WITHOUT CHILDREN** for farm near Detroit, man to help on farm, wife for housework. Modern improvements—steady work. Box No. 236, care of Michigan Business Farmer.

**PRICES WANTED AT ONCE ON A FEW** cars strictly first class alfalfa hay. R. D. BAILEY, County Agricultural Agent, Grayling, Mich.

#### FARM LANDS

**110-ACRE MICHIGAN FARM WITH 11** horses, cattle, automobile, furniture, hogs, poultry, full implements, tools, beans, potatoes, hay, oats, straw, winter's wood, etc.; on improved road; near R R town; 90 acres loamy tillage, 15-cow pasture, woodland, 300-tree bearing apple orchard, 40 cherries, acre grapes and berries; excellent 8-room house, furnace; overlooking beautiful river; 76-ft. barn, silo. Owner left alone cannot operate, all only \$6300 if taken now. Part cash. Details page 36 Illus. Catalog Bargains—many states. Copy free. STROUT FARM AGENCY, 427 E. Marquette Bldg., Chicago, Ill.

**100-ACRE FARM FOR SALE WITH GOOD** improvements. FRANK GLAWE, Oqueoc, Mich.

feed of any kind laid an average of only 61.2 eggs.

It has been shown that it is impossible to judge the value of a hen as a layer unless she has been fed a ration that would give her an opportunity to demonstrate her capacity. Pullets that have not yielded profitably because of a ration lacking in animal matter have become profitable layers when the defect in the ration was corrected.

### LAZY HENS TRAPPED; CAN'T LOAF ON JOB

**E**VEN barnyard hens will have to punch time clocks if an invention now being exhibited at a London, England, poultry show finds favor with the farmers. An ingenious Dutchman is suspecting some of his hens of loafing on the job. He has accordingly evolved a system by which, fitted on the back of each of his chickens, a leather strap is attached with a piece of colored chalk at the end.

Above the door of each trap nest he places a paper and a memorandum. The door is so constructed that the hen can not enter the nest without making a mark on the paper. As he uses different colored chalk for each chicken, he is now jubilant at having been able to rout the unproductive hens from his flock.

The inventor alleges he has not yet discovered a way to register the fraudulent entering of nests—that is the hen chalking up a mark without laying any eggs.

### IMPROVING THE OAT CROP

(Continued from Page 6)

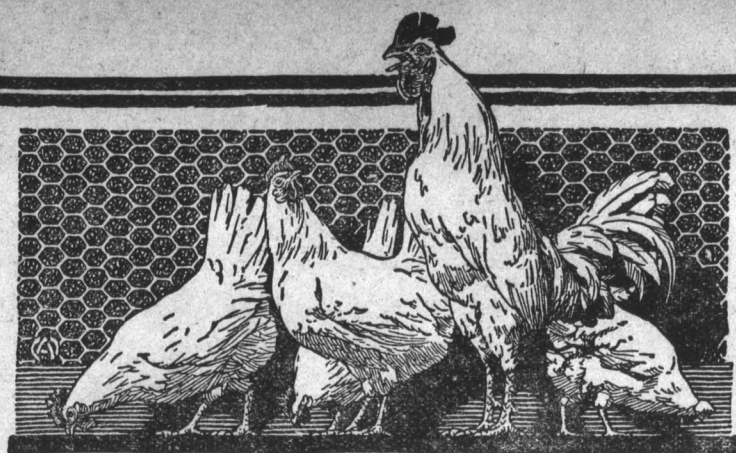
Michigan have a number of old stand-by varieties that should be replaced with caution if at all. Many a farmer has seen some big advertisement and at once got enough of that seed to plant his entire acreage, only to discover in the fall that he had been a sucker. But that was not the worst part of it. He had fed out his old variety, and he did not know where he could get any more seed. He would not grow his purchase another year, and had to look again.

A far better method is to test the new variety of oats side by side with the old variety in the same field. Be sure that they are not planted in separate fields, but side by side in the same field. Leave an alley wide enough to walk in back and forth between the two varieties. Get yields on them in the fall. Examine the seed that you thus obtain. If you are then convinced that the new variety is superior to your old variety, grow some more of it. If not, grow your old variety. Keep looking for a variety that, under your soil and conditions, will produce more bushels of grain per acre when planted side by side with your old variety in the same field. This is safe in the case of oats as they do not cross. Be careful that you don't mix them mechanically.

The desire of M. A. C. is that each farmer may have the best variety for his soil and conditions. Then if he will also be a good farmer and give the seed a chance, the problem is solved. Unfortunately only a few farmers will do that, and the problem remains.

The Michigan Agricultural College has now spent over twenty years improving varieties of oats. Several new improved varieties have been distributed, and from the list two varieties have stood the test of time. These are the Worthy and Wolverine. They are both stiff straw varieties. The hope now is, that Michigan farmers will generally take advantage of the work of their agricultural college, and will try the Worthy, or Wolverine, either one or both of them along-side of their old variety in the same field. There the farmer must be the judge. If the work at M. A. C. means anything, it means that many of these farmers, will vote in favor of one of the improved varieties, for these strains mean greater yields and better quality at no greater expense. The work of growing the crop is the same regardless of the variety, but a good variety gives greater returns for this effort.

All correspondence on this matter should be sent directly to the Secretary of the Michigan Crop Improvement Association, East Lansing, Michigan.



## VIGOROUS BREEDERS STRONG CHICKS

Mating time is the time that your breeders should be in the pink of condition

—so that they can impart health and vigor to their offspring—the chicks.

Begin now to condition your breeders.

### Feed

## Dr. Hess Poultry PAN-A-CE-A

Then you get chicks that are strong and livable.

Chicks that can resist the attacks of disease—the little-chick ailments.

Pan-a-ce-a is not a stimulant, mark you—it's a tonic that does its good work nature's way. It insures fertile eggs for hatching.

Tell your dealer how many hens you have. There's a right-size package for every flock.

100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pkg.  
60 hens, the 5-lb. pkg. 500 hens, the 100-lb. drum

For fewer hens, there is a smaller package.

GUARANTEED

DR. HESS & CLARK Ashland, O.

## Dr. Hess Instant Louse Killer Kills Lice

### HIGHEST QUALITY CERTIFIED BABY CHICKS



Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State. Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds, Strong, Well-hatched Chicks from tested Hogenized Free-range stock that make wonderful winter layers. Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order.

HOLLAND HATCHERY & POULTRY FARM, R. 7, Holland, Mich.



### Great Northern Hatchery

Strong sturdy northern grown Chicks. Selected, pure bred stock. Healthy flocks on free range insure strength in every Chick. Order from this Ad. Varieties Prices on 50 100 300 500 1000  
Leghorns (S. C. White and Brown) \$7.00 \$13.00 \$38.00 \$62.00 \$120.00  
Barred Rocks 8.00 15.00 43.00 72.00 140.00  
White Rocks 9.50 18.00 53.00 85.00 165.00  
Mixed Broiler Chicks \$10 per 100 straight  
Hatched under best conditions in Newton incubators. Every Chick carefully inspected. 100% live delivery guaranteed. Reference State Commercial Savings Bank, this city. Write for prices on special matings. GREAT NORTHERN HATCHERY, Box 50, Zeeland, Michigan.

## GET YOUR CHICKS



**FROM AN OLD RELIABLE HATCHERY**  
We have been in the chick business for 12 years and raised chickens for 20 years and know how to produce Chicks of the very best quality. Our chicks are hatched in Blue Hen incubators. We carefully inspect all chicks. No cripples. Flocks are carefully culled and developed on free range, insuring strength and health. World's Greatest Layers. Tom Barron Strain WHITE LEGHORN. Heavy Dutch Type BROWN LEGHORNS. Rose and Single Comb R. I. REDS. Park's BARRED ROCKS. Order now at new low prices. Catalog free. We Guarantee 100% Live Delivery.

KNOLL'S HATCHERY, R. 12, Box 25, Holland, Michigan.



### Certified Pure Bred Baby Chicks

Trapped direct from world champion layers; the famous Tom Barron and Hollywood strains of White Leghorns. Order these chicks from pedigree stock now at bargain prices! Hatched in the largest and finest hatchery in Michigan at the rate of 150,000 eggs to a setting. Also get our prices on Barred Rocks and other popular breeds. Satisfaction guaranteed or money back. Write for FREE illustrated catalog and special DISCOUNT PRICES—today.

SUPERIOR POULTRY FARMS  
Box 201 Zeeland, Mich.

## DUNDEE CHICKS

### PURE BRED CULLED FLOCKS

Our chicks are from pure bred flocks carefully culled by experts. Anconas are direct from Shepard. Leghorn flocks headed by males from Michigan Ag. College. Rocks are from a 250-302 egg strain. Reds are Liddicoat's best. Write for catalogue and price list. It will save you money. Reference, Dundee State Savings Bank, this city. Dundee Hatchery, Box B, Dundee, Mich.

### Quality Chicks at Reasonable Prices

English White Leghorns, Parks' Strain Barred Rocks, S. C. Black Minorcas, Reds and Anconas. My pen (18) at the 1923 Mich. Contest finished third among all heavy breeds, four hens making records over 200 eggs each, and one with a record of 264 eggs was seventh highest individual for the entire contest. 290 birds competing. Catalog free.

PINE BAY POULTRY FARM,  
Holland, Michigan.





# MARKET FLASHES



## FOOTE'S MARKET LETTER

BY W. W. FOOTE

### The Farmer's Outlook

THIS depends very greatly on where the farmer lives and how his farming is conducted. The newspapers are devoting much space to the bad farming conditions, but these reports come largely from the northwest and parts of the middle west where farm lands were boomed beyond all reason during the war; and small farmers who have not branched out and contracted for more acres than could be paid for are getting along very well as a rule. Just now the bad conditions existing in South Dakota are causing the federal government much concern, and hopes are entertained that legislation will be enacted which will bring relief to the large wheat growers and arrest the great fall in prices for that important farm product. In addition to needed financial relief for these farmers, who have been depending wholly on raising wheat, it is planned for them to diversify their productions so as not to depend upon a single crop. It is hoped to reach definite conclusion on these matters in time to lower the wheat acreage the coming spring. Already a hopeful feeling prevails throughout the country, and wheat prices have had a fair advance, despite the lack of anything like a normal export demand. Foreign business conditions are still far from normal, and European countries are unable to buy our products in anything like pre-war volume. Meanwhile, we are getting along quite comfortably, business moving smoothly in most channels, wheat and hogs being the important exceptions because of overproduction. There is no overproduction of cattle, however, and there is a serious underproduction of sheep, although this important industry is steadily growing in Michigan and several other middle western states. Mutton is far more popular than it used to be, and stockmen owning flocks of sheep and lambs are getting along extremely well on the whole. The cattle industry never looked more promising than now, high prices prevailing in the markets of the country, while dairy men have every reason to be satisfied. Deflation has about run its course, the banks are in fine shape, and the Chicago banks are making loans at 5 to 5½ per cent.

### Important Change in Wheat

Only a few weeks ago it looked next to hopeless for wheat prices, with nearly everyone talking bearish and farmers hardly daring to expect much of a change for the better. It is still a little early to talk intelligently about the future, but public sentiment has changed to such an extent that leading speculators in wheat hesitate about going much "short" of the Chicago market. Prices have advanced to the highest point of the season, and although the visible wheat supply in this country is still much larger than a year ago, it is steadily decreasing, notwithstanding unusually small exports of wheat and flour from our shores. A short time ago it was said that wheat held in the interior by farmers for \$1 a bushel was well cleaned up. This has reduced the offerings until a new high level is reached, those who have taken profits looking for a temporary break. Leading conservative traders predict that the deferred futures of wheat will receive excellent support on breaks. Of course, it is obvious that the higher wheat sells, the worse will the export demand become, and from now on we must depend mainly on domestic consumption. There is a prospect of radical measures by Congress, with a probability of a higher wheat tariff, and much reliance is placed on the promise of a reduced spring wheat acreage. It is an important fact that the winter wheat acreage is much lowered, and it is startling to learn that the two Dakotas had around 11,000,000 acres of spring wheat last year out of a total for

## MARKET SUMMARY

Wheat unchanged. Coarse grains quiet and steady. Beans steady. Butter in demand. Receipts of eggs exceed demand. Potatoes quiet. Poultry firm and supply small. Cattle trade slow and prices lower. Sheep active. Although the hog market is active prices are lower.

(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.)

the United States of 18,800,000 bushels. Our foreign outlet for breadstuffs is so much lowered that during a recent week exports of wheat from North America were only 2,422,000 bushels, comparing with 6,151,000 bushels for the corresponding week last year. The visible supply of wheat in this country is decreasing every week, but it is still large, being about 67,000,000 bushels, comparing with 46,776,000 bushels a year ago. The late rise saw May wheat sell in the Chicago market as \$1.13, a new high price for the season, with a subsequent reaction. A year ago May wheat sold at \$1.21½.

### Corn at New High Level

Corn has advanced within a short time to the highest prices of the season with large speculative and legitimate buying and no excessive offerings, although larger shipments from farming districts are being made. Large amounts of corn and oats are being fed on farms, and the visible corn supply increases slowly, while light exports are going forward. Some farmers are marketing part of their corn surplus, believing that later marketings will be large enough to weaken prices materially. Corn for May delivery is up to 82 cents, compared with 76 cents a year ago; oats selling at 49½ cents, comparing with 88½ cents a year ago.

### Shortage of Seed Corn

There is a shortage of good seed corn throughout a large portion of the corn belt states, the result of unfavorable weather conditions last year. Much of the corn harvested in 1923 in Illinois, Indiana, Iowa and Missouri was soft, and farmers who failed to have early maturing corn may expect to get thin stands. Seed crop experts suggest that farmers owning cribs of old as well as early maturing corn make germination tests as early as possible. Only corn that shows a germination test of 90 or more should be saved for seed.

### Co-Op Increases Price

In a report published in the Chicago Tribune, it is shown that farmers in Carroll county, Ill., received from 4 to 5 cents per pound more for their butter fat last year by selling it through their own organization than they were offered by local creamery stations. They sold approximately \$116,000 worth of poultry, butter and eggs in 1923 through the Mount Carroll Cooperative Creamery Company, Inc., which was established two years ago. This is a \$30,000 increase over the first year. The company paid a 7 per cent dividend to its stockholders at the end of the year and voted a patronage dividend of ½ cent on each pound of butter fat delivered to the creamery. The dairymen brought in 160,000 pounds of butter fat during the twelve months and received an average of 46.8 cents a pound for it, or 4 to 5 cents more than the local creameries offered them. The patronage dividend amounted to about \$800.

### Illinois Orchards Cooperate

Six hundred carloads of fruit and vegetables were shipped to ninety-eight towns in twenty states from Illinois orchards and gardens last year through the Illinois Fruit exchange, a cooperative organization of farmers with headquarters at Centuria, Ill. The products of this organization are distributed through the Federated Fruit and Vegetable Growers, Inc. Both organizations are fostered by the farm bureaus.

There is such a marked scarcity of well finished beef cattle, both

long-fed heavy steers and yearlings, that sellers can depend upon obtaining fancy prices. The bulk of the steers offered on the Chicago market recently found buyers at \$8 to \$10.35, but a late sale was made of two car loads of 1493-pound steers to a New York shipper at \$11.50, being 15 cents above any previous sale of heavy steers for 1924. The best yearlings have been taken at \$10.50 to \$11.50, while only a few heavy steers sold as high as \$10.50 to \$11. No steers that were good went below \$9, and low grade steers sold at \$4.50 to \$7. Butcher cows and heifers were good sellers at \$3.50 to \$8.25 mostly, canner and cutter cows selling at \$2 to \$3.40, bulls at \$3.50 to \$7.50 and calves at \$5 to \$14. A limited business is seen in stockers and feeders at \$5 to \$7.50, a few fleshy steers suitable for a short finish bringing \$7.75 to \$8.25. A year ago the best beef steers sold at \$11, two years ago at \$8.90. Cattle not good in quality have sold 25 to 75 cents lower, the consumption of beef having fallen off. Compared with normal years, fat cattle are selling at high prices.

### The Hog Traffic

So long as supplies of hogs sent to market foot up such remarkably large numbers there will be great difficulty in placing prices on a much higher level; but it is surprising how well values have ruled under such big receipts in Chicago and other western markets. Hogs on the Chicago market average up well in quality, the bulk selling within a range of 30 cents and heavy butchers going at the top, being 10 cents above the best bacon hogs. Late Chicago receipts averaged in weight 232 pounds, being five pounds less than a year ago. The consumption of fresh and cured hog products is the largest ever known, and exports of provisions are enormous. Fresh pork sells extremely low, and it is largely substituted for other meats. Hogs have sold recently at \$6 to \$7.20.

### High Prices for Lambs

At times prices for lambs suffered declines, but whether the market happens to be up or down, values are very high, and the sheep industry is on a good paying basis. Late sales of lambs were made in the Chicago market at \$13.50 to \$15.00, with feeders bringing \$13.00 to \$13.75. Eight years ago the best lamb brought \$11.50.

## WHEAT

The general outlook for the wheat market shows little change and a firm tone is favored. Milling demand is good as millers are buying our wheat to mix with Canadian wheat. Millers say that Canadian wheat is not grinding well and requires a mixture of American to make good flour. Bulls are making much over expected help from the government and bears are not inclined to consider fighting an advance that has the government back of it.

## CORN

Corn is not coming to market very fast at the present time as farmers are holding their surplus to feed to farm animals or to sell next summer when they expect much higher prices. Those who are forced to sell are about the only ones sending to market at present. There are many believers in higher prices in the corn market during the next few months and all receipts of good corn are promptly taken. Chicago dealers state they expect the amount of receipts to decline soon.

## OATS

There has been little doing in the oat market and an easy tone prevails.

## RYE

Rye is inactive failing to follow the leading grains.

## BEANS

The bean market at Detroit is in about the same condition as it was two weeks ago and prices are unchanged. Eastern dealers report large receipts of foreign beans. At New York and other large markets in the east consumption is said to be fair and the market inactive. Heavy advertising done by the canners recently is helping to keep up the demand.

## POTATOES

A steady to firm tone is noted in the potato markets of the country. Although the trade has not been especially active there has been a steady demand for good grade stock and dealers are expecting this to continue.

## HAY

Unfavorable weather conditions have caused a somewhat firmer tendency. Country loadings have been interfered with and the movement has been light. Demand has been slow at some eastern markets but at the close the demand has increased somewhat and a better feeling is shown. As a whole markets are steady to firm.

## MARKET QUOTATIONS

### Wheat

Detroit—Cash No. 1 red, \$1.16½; No. 2 white, \$1.16½; No. 2 mixed, \$1.15½.

Chicago—Cash No. 2 red, \$1.14½; No. 2 hard, \$1.12½.

Prices one year ago—Detroit, Cash No. 2 red, \$1.39; No. 2 white, \$1.39.

### Corn

Detroit—Cash No. 3 yellow, 86c; No. 4, 84c.

Chicago—Cash No. 2 yellow, 79c. Prices one year ago—Detroit, Cash No. 2 yellow, 80½c; No. 3, 79c.

### Oats

Detroit—Cash No. 2 white, 54c; No. 3, 52½c.

Chicago—Cash No. 2 white, 49½c.

Prices one year ago—Detroit, Cash No. 2 white, 50c; No. 3, 48½c.

### Rye

Detroit—Cash No. 2, 74c.

Chicago—Cash No. 2, 73c.

Prices one year ago—Detroit, Cash No. 2, 90c.

### Beans

Detroit—C. H. P., \$5 per cwt.

Prices one year ago—Detroit, C. H. P., \$7.60 per cwt.

### Potatoes

Chicago—\$1.20@1.40 per cwt.

Prices one year ago—Detroit, \$1@1.10 per cwt.

### Hay

Detroit—No. 1 timothy, \$23@25; No. 1 clover and No. 1 clover mixed, \$20.50@21 per ton.

Chicago—No. 1 timothy, \$25@27; No. 1 clover, \$22@23; light timothy & clover mixed, \$24@25 per ton.

Prices one year ago—Detroit, No. 1 timothy, \$16@16.50; No. 1 clover mixed, \$14@14.50 per ton.

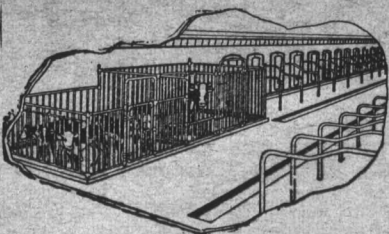


### Week of February 17

The first half of this week in Michigan will be generally mild and unsettled to stormy. Showers or snow flurries will occur during the period from Sunday to Wednesday together with moderately strong winds in various parts of the state. About Wednesday or Thursday temperatures will fall somewhat.



## Your Barn Equipped Complete



### A Year to Pay

Yes, you can now buy barn equipment from the old established, quality house of Babson Bros. on a small payment down, with a year to pay the balance. Write for complete proposition at once. Whatever you want — a complete outfit — a few stalls — a pen — a carrier — everything formerly sold only for cash, now offered on this easy payment plan. You'll be surprised at the many big improvements we have made and the low prices quoted on barn equipment which measures up to the quality standard of the famous imported Melotte Cream Separator, sold by us on payments to thousands of American farmers for years.

### Expert Service FREE

Let our expert submit ground plans for your new barn — or for re-arranging your old barn, with utmost economy and convenience. You assume no obligation. Let us figure with you. Our prices, superior quality, and monthly terms will be mighty attractive.

### Write Today!

Just a card will do. Tell us what equipment you are interested in. How many cows you have. Get our complete proposition. See how easy it is to buy the Babson way. Write us at once. Do not miss this chance of fixing up your barn now and paying during the coming year.

**Babson Bros.** Dept. 33-02 Chicago 2343 W. 19th Street

## FOUR BROOMS \$2.85



We pay the postage

Two fine parlor brooms, one kitchen broom and one heavy garage or barn broom. These brooms ordinarily sell through stores at \$4.00. Our price, delivered at your door, \$2.85 — the best household value ever offered straight from our big factory.

### A Year's Supply of Brooms Direct From Factory

Made from the country's finest broom straw yield. All stock hand sorted and selected.

Sold on absolute satisfaction or money back basis.

Reference—Commercial Trust & Savings Bank, Lomax, Ill.

Only one set to a family—Send check or money order today. \$2.85 brings these four brooms to you home—we pay the postage.

**Consumers Broom Mfg. Co.**  
370 First St. Lomax, Ill.

## Detroit Beef Company

offers its services to the *Farmers of Michigan* as a high class, reliable commission house for the sale of *Dressed Calves* and live poultry. Write us for information how to dress and ship calves to market. \$250,000 capital and surplus. 34 years in business in the same place and same management.

Address

**DETROIT BEEF CO.,** Detroit, Mich.

## GARLOCK - WILLIAMS CO., Inc.

2463 RIOPELLE ST., DETROIT, MICH.

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References: Wayne County and Home Savings Bank, Bradstreet.

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lower but about Friday will again rise under the influence of falling barometer. As a result of this condition snow flurries will occur in many parts of Michigan during last days of week. This activity will be followed by change to much colder.

### Week of February 24

Following the storminess that may reach into this week, the weather in Michigan will be generally fair and colder up to about Wednesday.

Shifting winds from east to south with falling barometer by the middle of the week will introduce rain, sleet or snow into many parts of the state.

Following after this storm area the weather will be clear and the closing days of the week will experience mild temperatures for this time of year.

### March Warm and Dry

March in Michigan will average warmer than the seasonal normal and will give indications of an early breaking up of winter but the farmer has yet to reckon with fickle April. During March precipitation will be far below the seasonal average.

### April Cool and Stormy

For April in Michigan there will be much storminess and temperatures will average below the seasonal normals.

## HOLSTEIN AND SHORTHORN BREEDERS HOLD SALES

(Continued from Page 6)

to supporters of the breed that Holstein cattle have started their long-delayed "comeback." Several out-of-state breeders were present and animals were purchased to go to Pennsylvania and to Indiana.

A Holstein heifer donated by Corey J. Spencer of Jackson, to the Peoples Church of East Lansing, was sold twice. The first sale was under the direction of Prof. O. E. Reed, head of the M. A. C. Dairy Department, as auctioneer. The bids were donations, each bidder paying into the building fund of the Peoples Church the amount which his bid raised the preceding bid. Some \$165 dollars was raised for the new church building in this way. Then the animal was auctioned off in the regular manner and was purchased by the Detroit Creamery Company for \$200. This amount also goes toward the building of the new church.

A fund which is bound to be of untold benefit to worthy students at the M. A. C. was created by Mr. Spencer through the donation of ten purebred Holstein heifers. These were sold for \$1100. This money has been put in a loan fund and will be used to assist needy students who are working their way through college.

### The Shorthorn Sale

At the close of Farmers' Week, on Friday afternoon, the Shorthorn breed was featured. The animals consigned to the sale were first brought in and judged. This gave the buyers an opportunity to inspect the offerings as well as to discuss Shorthorn type. Following the judging came the sale at which some 45 Shorthorns changed hands.

Due to a large number of young animals the average of the sale was somewhat low, being in the neighborhood of \$100 per head. The top animals of the sale brought \$300 each. These were yearling heifers, bred and consigned by H. B. Peters and Sons, Carland, Michigan, and were sold to Houston and Ikeler of Grandville, Ohio.

Officials in charge of the sale expressed themselves as satisfied with the results secured. As a result of the interest displayed they are looking forward to a certain, though gradual, improvement in the Shorthorn business. —Carl H. Knopf, special correspondent.

## RADIO PROGRAMS

Station KYW, Chicago. Central Time 8:20. Wave length 536 meters.

February 19—"Some Business Aspects of Farmer Organizations," by R. A. Cowles, Treasurer, Illinois Agricultural Association.

"Dairy Industry and Its Relation to National Health," by Louise Fitzgerald, National Dairy Council.

February 26—"Agricultural Editing on the Metropolitan Paper," by Frank Ridgway, Agricultural Editor, Chicago Tribune.

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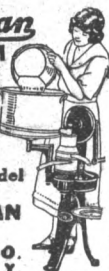
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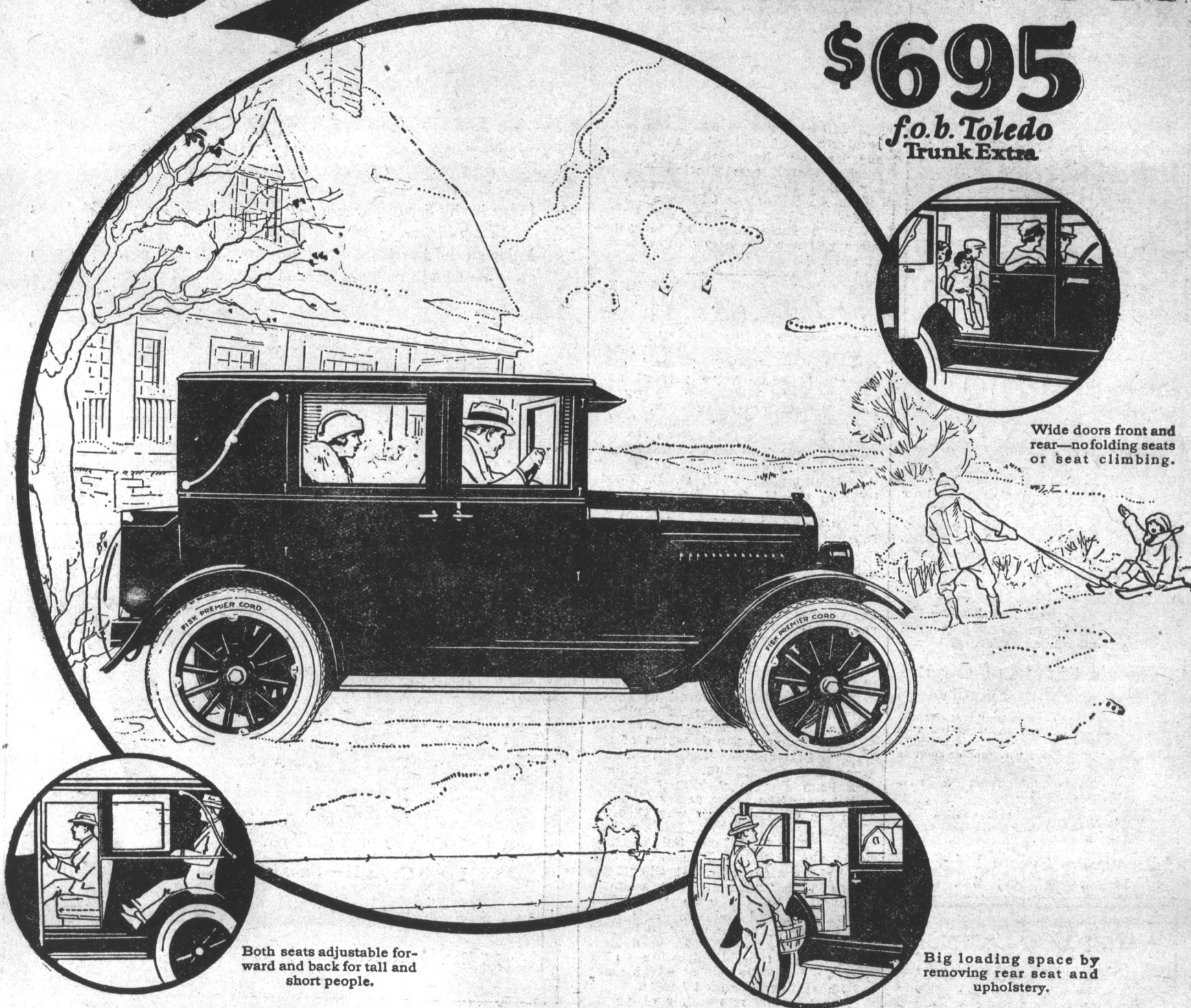
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