

MICHIGAN FARMER

AND LIVE STOCK JOURNAL
PUBLISHED WEEKLY. ESTABLISHED 1843.

VOL. CLXIII. No. 2
Whole Number 4618

DETROIT, MICH., SATURDAY, JULY 12, 1924

ONE YEAR \$1.00
FIVE YEARS \$3.40





Hog's Sick?

Even hogs on pasture are subject to Worms, Necrotic Enteritis and Stomach Troubles. All hogs, sick or well, need:

Feed Semi-Solid Buttermilk

to keep them healthy, thrifty and profitable. It can be fed in a very dilute form with excellent results—costs less than one cent a gallon. Walter L. Nash, Xenia, Ohio, writes: "Several of my fall pigs had died from Necrotic Enteritis. Since I commenced feeding Semi-Solid I have not lost another pig."

Be safe. Get some Semi-Solid today

CONSOLIDATED PRODUCTS CO.
4750 Sheridan Road Dept. 900 Chicago, Illinois

Kalamazoo Tile and Wood Silos



The certain increase in production by feeding good silage often doubles net profits. It has been proven over and over by thousands who for over 30 years have used Kalamazoo Silos.

Everlasting Silos—Better Ensilage

Kalamazoo Silos are built right, stay right, make better silage—no spoilage. Pay for themselves. Investigate—get the facts. Write for handsome free book on tile and wood silos and glazed tile for all buildings. Special 68 terms to early buyers. Free estimates.

KALAMAZOO TANK & SILO CO., DEPT. 423 KALAMAZOO, MICH.



THE COMBINED HORT TOUR.

THIS year the annual summer tour of the State Horticultural Society will be held in conjunction with that part of the American Pomological Society tour which will be held in Michigan.

The American Pomologists will enter the state from Indiana and will meet the Michigan fruit growers at the Hotel Dwan in Benton Harbor on Sunday, July 20. The Michigan tour will start from there on Monday, July 21, at 8:00 A. M. At 9:30 A. M. the first stop will be made at William E. Daley's dewberry farm at Riverside; 10:15 A. M., Friday Brothers' cherry and apple orchards at Coloma; 11:00 A. M., Robert Sherwood's 300-acre apple orchard, Watervliet; 1:00 P. M., dinner at Carl Buskirk's farm near Paw Paw, served by Hiddenburg Ladies' Aid. Speakers from the American Pomological Society will talk after lunch; 3:00 P. M., drive through Paw Paw grape belt with short stops at vineyards owned by Tom Woodman,

L. C. Dunham, M. P. Pugsley, Mrs. Cora Morrill, George Low, White Vineyard Co., and M. D. Buskirk. Night stop at tourist camp or Park American Hotel, Kalamazoo.

Tuesday, July 22.

8:00 A. M., eastern time, leave Kalamazoo for Battle Creek and Marshall; 10:00 A. M., Stuart orchards, Marshall; 10:30 A. M., Farley Brothers' farm, Albion, where one fourteen-year-old Spy tree produced thirty bushels of fruit in 1923; noon, dinner in Jackson; 1:00 P. M., leave Jackson for L. Whitney Watkins' sixty-five-acre apple orchard near Manchester; 4:00 P. M., Huron Farms Co., Ann Arbor, where mechanical cold storage plant of 20,000-bushel capacity is under construction. The night will be spent in Ann Arbor.

Wednesday, July 23.

Eight A. M., eastern time, drive through university campus; thence to Oakland county; 9:30 A. M., Fred P. Simons & Son orchard, 125 acres of apples, air-cooled storage; 10:00 A. M., John Lathrop orchard, forty acres into apples; 10:30 A. M., drive through D. B. Button's orchard; 11:00 A. M., C. H. Halstead's orchard; noon, dinner at Orchard Lake; 1:00 p. m., talks by speakers for American Pomological Society; 2:00 P. M., leave Orchard Lake for drive through Wabeek farms owned by James S. Couzens, to the dusted orchards of Edwin S. George; 4:00 P. M., Sly fruit farm, Birmingham.

Many of the growers will continue on the tour into Ohio and eastern states. The American Pomological Society will start its tour in Kentucky on July 14, and then will pass through Indiana, Illinois, Michigan, Ohio, Maryland, West Virginia, Virginia, Pennsylvania, New York, New Jersey, Connecticut, Rhode Island, Massachusetts, Maine, New Hampshire and Vermont. The tour will end August 24 in western Massachusetts.

PUT OVER BIG PROGRAM.

FOUR hundred and twenty-eight thousand demonstrations of the latest improved methods of conducting farm and home activities were carried to completion by 250,000 club boys and girls during 1923, and the results called to the attention of the communities in which they were held, according to figures assembled by the states' extension workers in the department of agriculture.

In these demonstrations 43,000 acres of crops, valued at \$2,000,000 were grown; 105,000 farm animals were fed and cared for until they reached a value of \$3,000,000; and 563,000 head of poultry, valued at \$978,000 were raised.

WHAT THE GIRLS DID.

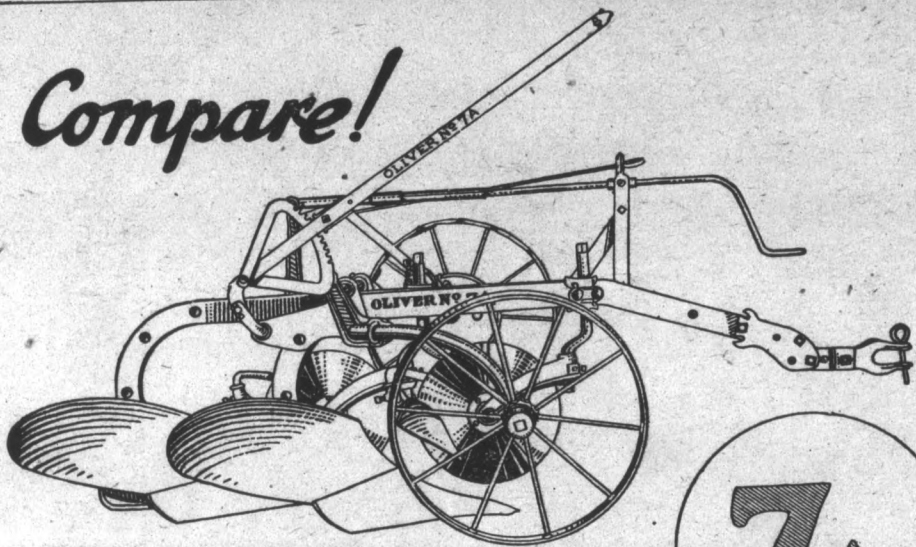
GIRL club members prepared during the year 103,000 well-balanced and well-served meals in their own homes and 192,000 hot school lunches; baked 102,000 loaves of bread; canned 1,848,000 quarts of fruits, vegetables and meats; dried 196,000 pounds of food; and brined and cured 106,000 pounds of meats. More than 528,000 articles of clothing, valued at \$647,000, were constructed, remodeled or selected by club standards of suitability, healthfulness and becomingness.

STORAGE BUTTER ABOVE NORMAL.

THERE were 22,328,000 pounds of creamery butter in storage, compared with 10,112,000 pounds in 1923, and a five-year average of 17,461,000 pounds; American cheese, 27,148,000, compared with 17,507,000 pounds in 1923, and a five-year average of 15,350,000 pounds.

Notwithstanding the fact that this is the flush season for milk production, and the largest amount of butter in storage, butter prices have made three increases since June 1.

Compare!



The New OLIVER Plow for the FORDSON

Fordson plowing was a step in the elimination of plowing drudgery. In the new Oliver No. 7-A you will find another important forward move in better plowing, easily accomplished.

You will find the Oliver No. 7-A different—so simple in construction, so easy to operate. It will penetrate in hard soils as in more favorable conditions.

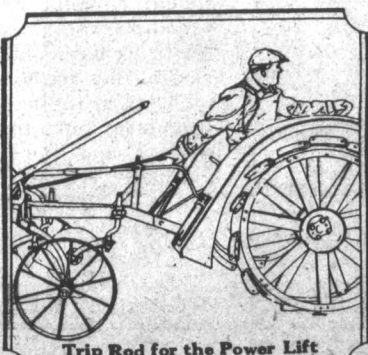
When you see this plow, note the exceptional clearance which permits good plowing in trashy fields. See how a powerful screw sets the depth and allows the

bottoms to be raised clear of the ground even with the plow standing still. Grasp the handy controls which permits all adjustments from the tractor seat. There is a power lift, of course.

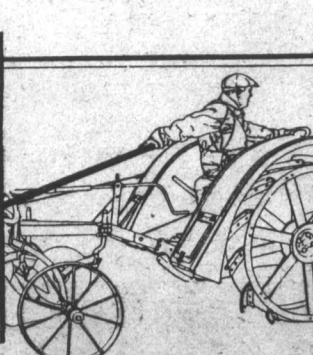
Wheels, not landsides, carry the weight of the plow, making lightest draft and even depth furrows so desirable for a good seed bed. The hitch can be rigid or flexible as your field requires.

As for the work of the plow itself—we ask you to see it and compare it with your exacting standard of quality plowing.

See Any Authorized Ford Dealer



Trip Rod for the Power Lift



Leveled from the Seat



The Depth Adjusting Screw

DEVOTED
TO
MICHIGAN

VOLUME CLXIII

MICHIGAN FARMER

AND LIVE STOCK JOURNAL
PUBLISHED WEEKLY
ESTABLISHED 1843

A Practical Journal for the Rural Family

MICHIGAN SECTION THE CAPPER FARM PRESS

QUALITY
RELIABILITY
SERVICE

NUMBER TWO

Ravages of the European Corn Borer

How and Where this Imported Pest is Working Havoc

By J. C. Gilbert

THE states of Ohio, Indiana, Illinois and Iowa, constituting the world's greatest food-producing area, are threatened by the advance of the European corn borer. When first

discovered the European corn borer had occupied an area of about 100 square miles in the vicinity of Boston, Massachusetts. That was in 1917.

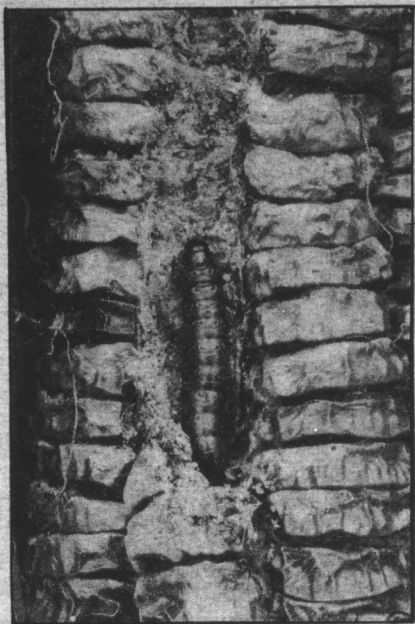
In the past five years it has spread over a total area of nearly 7,700 square miles. The insect gained a foothold in a section north of Lake Erie in Ontario, Canada. Later it penetrated the territory along the American shore of the lake in New York, Ohio and southeastern Michigan. Last year a marked spread of the insects was noted in northwestern Ohio which is the beginning of the great corn belt of our country. This startling advance so aroused the corn-growing states that Indiana and Illinois, the latter two hundred miles from the front, is sending experts to Ohio to cooperate in the work of eradication. Canadian authorities are working hand in hand with the corn states experts in an effort to stem the seemingly relentless tide.

The damage to corn is done by the larvae, or borers, chiefly in the ears and stalks, but they also drill tunnels within the midrib of the leaf, the tassel, the brace roots, and the stubble.

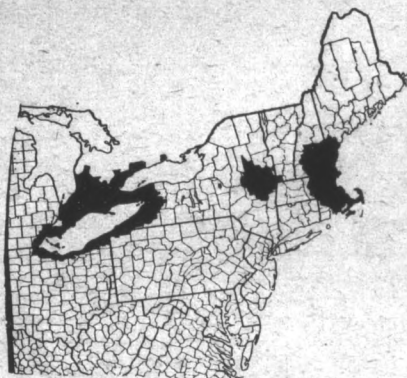
Plants other than corn are also attacked by this ravenous insect.

A conspicuous sign of infestation in a field of growing corn is the breaking

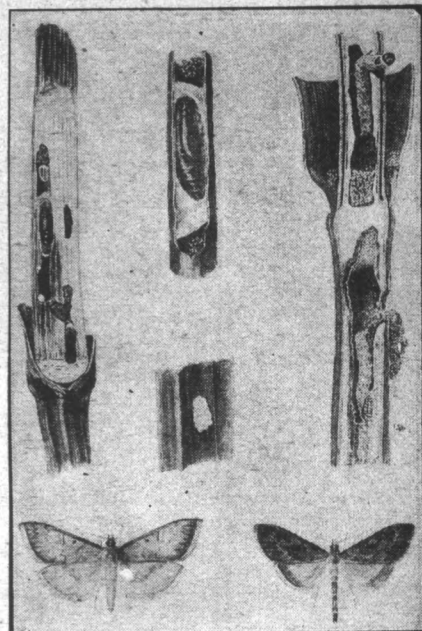
borer, the celery stalkworm, the lined stalk-borer, and the larger cornstalk-borer, but the breaking over of tassel stalks is almost always the work of the corn borer.



European Corn Borer at Work in a Mature Ear of Sweet Corn.



This Map Shows the Areas Now Suffering from the Depredations of this Imported Pest.



How the Borer Looks at Various Stages in its Development.

A New Light In the East

For the First Time in Four Years the Wheat Grower Awakens to See Flickering Rays of Hope in the Newly Adjusted Supply and Demand

By the Market Man

THE prospective carryover on wheat on July 1 in various exporting countries will be 75,000,000 to 100,000,000 bushels less than expected eight months ago when the outcome of the harvest for 1923 was becoming known. Now crop prospects promise considerable less wheat for export than has been available for the last twelve months, not only in this country but in other exporting countries. The requirements of importing countries will not be much less and they may be greater.

Conditions Always Changing.

Subsequent changes in weather and crop conditions in this country and abroad may modify the present outlook, either on the side of higher production with lower prices, or lower production with higher prices. There are some indications, for example, that the July 1 forecast for the United States will show an increase over June. A big European potato crop might reduce the amount of wheat needed, just as the small potato crop seems to have had the opposite effect in the past year. But it will require an extremely drastic change to prevent wheat prices in the next twelve months from averaging higher than in the last twelve.

Our 1924 Surplus Not a Burden.

So far as the United States alone is concerned, if the present crop forecast is fulfilled, the calculated surplus after allowing for only a normal carryover on July 1, 1925, will be about 100,000,000 bushels. The United States has certain well established markets

for wheat, such as the West Indies and some American millers have foreign outlets for their flour brands. As a result, part of our wheat and flour will be sold for export even at prices above the world level. The spring wheat crop includes around 50,000,000 bushels of durum, most of which is sold for export. Inferior varieties and low-grade wheat and flour also may be sold for export at the world price level without great detriment to domestic prices for good milling wheat.

The United States also has a definite period in which it has been the main reliance of importing countries. While most of the world's wheat is harvested during the summer and fall months, the harvest is under way in some part of the globe every month of the year. New crop Canadian

wheat is not available in quantity until October. Argentina and Australia usually dispose of the bulk of their surpluses by July and shipments from their new crops harvested in December and January cannot reach European ports until around the first of March. As a result, the United States always has a chance to sell to advantage for export during the summer and early fall months. It does not seem difficult to dispose of such a surplus as we will have this year, based on present crop conditions. This means that prices in this country most of the year should be above the world level and, in view of the change that has taken place in the general situation, the world level should be higher than it has been during the last twelve months.

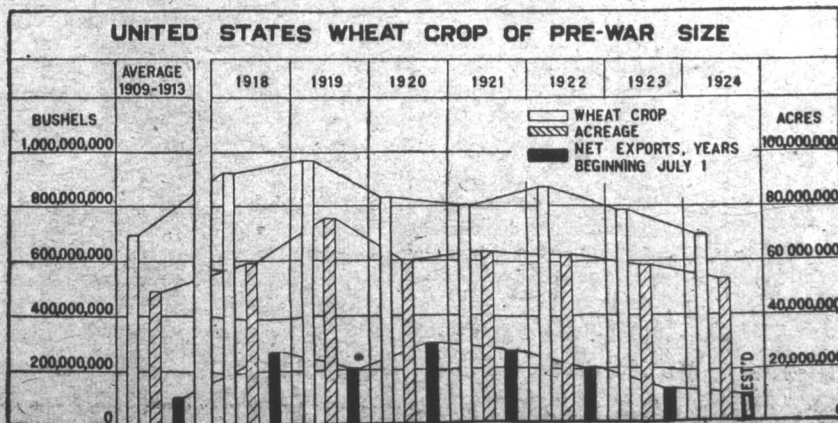
In still another direction there is room for some optimism. Events are moving slowly but inevitably toward an industrial revival in Europe which will increase European buying power. This should help to lift the world price level for wheat.

How High Should Wheat Go?

All this is not to be construed as a forecast of highly profitable prices for wheat producers in the United States. A crop failure may occur, of course, and put the market up to an exorbitant figure. Barring such an accident, however, the market will have responded most admirably to the changes now evident in the world's situation if wheat prices average twenty-five to thirty-five cents higher in the next year than in the last one.

Further Curtailment in United States Justified.

Taking a long distance view, there are still a number of cautions which should be kept before the American wheat grower. Canada, Argentina and Australia have not yet exhausted their possibilities for expansion of the wheat industry in the natural growth and development of their lands. Russia, Siberia and the Balkan states will gradually restore their wheat production and furnish the pre-war amounts for export. That means that some country must export less or all must lower their prices. Production costs in all these countries are lower than in the United States. Transportation costs to Liverpool are much the same from Kansas, Saskatchewan or the wheat growing provinces in the Argentine.



MICHIGAN SECTION THE CAPPER FARM PRESS



Published Weekly Established 1843 Copyright 1924

The Lawrence Publishing Co.

Editors and Proprietors

1632 LaFayette Boulevard Detroit, Michigan
Telephone Cherry 3384NEW YORK OFFICE 120 W. 42nd St.
CHICAGO OFFICE 608 So. Dearborn St.
CLEVELAND OFFICE 1011-1013 Oregon Ave., N. E.
PHILADELPHIA OFFICE 261-263 South Third St.ARTHUR CAPPER President
MARCO MORROW Vice-President
PAUL LAWRENCE Vice-President
F. H. NANCE SecretaryI. R. WATERBURY Associate Editors
BURT WERMUTH
FRANK A. WILKEN
ILA A. LEONARD
P. P. POPE Field Editor

I. R. WATERBURY Business Manager

TERMS OF SUBSCRIPTION

One Year, 52 issues \$1.00
Three Years, 156 issues \$2.00
Five Years, 260 issues \$3.00
All Sent Postpaid
Canadian subscription 50c a year extra for postage

RATES OF ADVERTISING

55 cents per line agate type measurement, or \$7.70 per inch (14 agate lines per inch) per insertion. No advertisement inserted for less than \$1.65 each insertion. No objectionable advertisements inserted at any time. Entered as Second Class Matter at the Post Office at Detroit, Michigan. Under the Act of March 3, 1879.

Member Audit Bureau of Circulation

VOLUME CLXII

NUMBER TWO

DETROIT, JULY 12, 1924

CURRENT COMMENT

Sound Business Needed

IT has been known for some time that the financial condition of Chippewa county has not been in a satisfactory state. This situation seems to have arisen from higher taxes and a general disposition to pile up debts and deficits. There has been no suggestion that any dishonesty exists. There probably is nothing unique about this situation.

A committee representing the board of supervisors and a number of local and county organizations recently investigated the county's affairs and made a report. This committee asks for the introduction of business methods in conducting the county's business; that all purchases be made through the purchasing agent; that all claims be passed upon by county auditor; that the dispensing of poor relief and allowances under the Mothers' Pension Law be done with greater care, and that a system of debt retirement over a period of years that will extinguish bonded debts and bank overdrafts be inaugurated.

What has happened in Chippewa is likely to happen in any county, if strict adherence to sound business practices is not followed. This is one of the ways in which citizens, through their local farmers' or business organizations, may do themselves a good turn by making the conduct of county and township business a regular issue for study, discussion and action.

The Dairy Industry

DURING the recent slump many sections of the country have come to the realization that diversification is safest for continued agricultural prosperity. In this diversification dairying has become a leading factor, perhaps because the states in which dairying has been prominent have weathered the storms of depression best. Dairying itself, also, makes diversified farming almost necessary.

Furthermore, dairying puts farming on a substantial basis from a fertility as well as a financial standpoint. It takes less from the soil; it gives a year-around income; it knows no crop failures.

For these reasons dairy farming has increased rapidly during the past few years. Statistics show a twenty-three per cent increase in the value of dairy products during the past year. Dairy products constitute twenty-one per cent of the total agricultural produc-

tion, the annual output of milk being one hundred billion pounds, or approximately a half-ton per individual in this country.

However, despite this great production, dairy production will continue to increase, as many of the western states are turning their attention to the milch cow in their diversification attempts.

We are not likely to have over-production, as new and more abundant uses for milk products are being developed to the betterment of public health. But milk products will not be scarce and prices will not be higher, perhaps lower. Therefore, it behooves the present producer of milk products to use all available means to get on an efficient basis of production. Better breeding, better feeding, constant testing to find the poorer members of the herd, and their elimination, will become more and more essentials of successful dairying.

The Two Ways

OUR slow progress toward the practice of sound principles in farmers' business organizations is typical of most every progressive movement made by man. In an effort to discover the factors contributing to the success of mutual institutions among farmers, one invariably finds himself confronted with the old idea that it is easy to get to the bad place but hard to reach the good.

Here, as elsewhere, the broad way leads to destruction. The board of directors which does not make a determined effort to learn the sound business principles that will take it through the narrow way to success, will find the business at an early date sliding down the broad expanse toward the habitation of fallen angels.

These unhappy endings come to a wide variety of victims. There appears to be no respect for those who undertake to do things for their fellowmen, even when prompted by a self-sacrificing spirit and a high pur-

pose. If, through ignorance, they take the wrong route, get out of that unvarying, exacting, narrow way, down they go.

Naturally, therefore, many cooperative associations have failed to meet the expectations of the members, not through a lack of moral fiber in the men at the head, but through a lack of definite working knowledge of the business they have undertaken. Often these leaders would laugh at the farming attempts of a city man, but with the utmost confidence they will step from behind the plow to direct a fifty or hundred thousand dollar elevator institution.

The imperative need is exact knowledge based upon experiences of not one but a thousand farmers' business associations. The federal bureau of agricultural economics is now gathering information on these practices of cooperative enterprises. Michigan will contribute her full share in this cooperative study of cooperative business.

Emotion And Promotion

OUR friend Hy has seen fit to say something about "emoshun," so we feel prompted to say a few words about the subject ourselves. It is true that emotions add much to life's interest. Life would be a dreary thing without them, but they add much to life's complexities. They bring both trouble and happiness. They often interfere with good judgment. The battle between emotion and good judgment is often a strenuous one.

Emotions are involved in most every activity of life. Most business is done on the emotional basis and, being so, good business is often interfered with. Our most notable business success has eliminated emotion from business as much as possible and is doing business on cold, hard facts.

In politics—well, as this is being written the democratic convention is still a continuous performance of vot-

ing and yelling. Stunts have been staged and acted to make emotional appeals to the delegates. Perhaps some one little emotional appeal will throw the whole delegation over to the winning candidate.

Practically all of our public officials are elected on the emotional appeal. It is too bad that this is so, as running the government is the greatest business in this country, and to make this government the most efficient it should be run on known principles of good government instead of being hindered by prides and prejudices, hate and heart throbs.

Emotions will always be a part of human life. But, the great hope for the promotion of civilization will be in the individual and collective practice of self-control so that emotions will help and not hinder, and will be kept in subjection when the tendency comes to use them instead of well established scientific principles in the various activities of life.

Emoshuns

MOSHUNS and emoshuns is nearly spelt the same, but they ain't the same. Fer inst., the pendulum of a clock kin swing and make a tick every time, but it ain't got no emoshun. But when a dog swings his tail he is emotin'. And it makes lots o' difference the way he swings his tail, 'cause it shows the kinda emotin' he's doin'. And a cat's tail—wow!—what that means sometimes, hey?

Well, you kin moshun without emotin', or you kin emote without much moshun. A drop of the eyelid sometimes means a lotta emoshun, and a drop o' whiskey sometimes starts a lotta moshun, and sometimes emoshun, too. Because o' that they don't allow it no more; it is too hard on the feelin's o' folks.



You're emotin' most all the time, 'cause your'e sendin' wireless messages to other folkses about

what you are and what you are thinkin'. Sometimes you kin send false messages, but one what kin read emoshuns well, kin generally read them right.

They is some folkses, principally woin, what kin emote fer effect. Fer inst., there was one of them woin what was dressed like a newly painted red barn. She got emotin' around me. Well, I says, "Now see here, you stop your broadcastin'. I get your S. O. S., but to me S. O. S. means safety or sorrow. So, go home and darn your stockin's." She thought I was as green as I looked, but I guess I convinced her she was color blind.

Emoshuns is the greatest things in life, 'cause they make life interestin'. There is so many kinds of them and we never know how things is goin' to make us emote. There is some things what make us sympathetic and there is others what make us madder than a hornet. There is some what make us laugh and others what make us cry. What would life be if there wasn't something to play tunes on our heart strings. It is the sad and the bad tunes, or emoshuns, what often make the glad and the good more appreciated.

Sofie just come and told me that I better stop emotin' and get into mosh-up, 'cause there's corn ta hoe. That kinda started a bad emoshun, but I guess I gotta do it anyhow. Corn ain't got no emoshuns, but it certainly seems like it appreciates good hoein'. So here it goes fer the sake of the corn. I kinda like ta do things when they is appreciated.

HY SYCKLE.

From the standpoint of value, dairy animals are the most important class of live stock on the American farm.

Our Citizenship Creed

I AM living under a government—and am myself a part of such government—wherein at least an elementary knowledge of the nature and principles of this government must be generally diffused among the great mass of its citizens. I therefore believe it to be my duty to inform myself on American history, the foundations of our government as embodied in the United States Constitution, and the application of the principles therein contained to present-day problems.

SINCE ours is a government of, for and by the people, it is by the very same token a government of and by public opinion. It is, therefore, my duty as a good citizen to help form public opinion in the community in which I have lived in order that all citizens may hold intelligent, just, and humane views on governmental questions and endeavor to have such views embodied in our laws.

SINCE popular government is shaped in the first instance by the exercise of suffrage, it is one of my primary duties as a good American citizen to cast my ballot in all local, state and national elections and to urge my fellow-citizens to do the same.

SINCE ours is "a government of laws and not of men," and since an orderly government can exist only through laws justly administered and impartially enforced, I declare it to be my duty as a good citizen to serve as a juror whenever summoned, and to use my influence in every proper way to the end that lawyers, judges and jurors so conduct the administration of justice as to entitle the law and the courts to popular approval and support.

I BELIEVE that we Americans have the best government that has ever been created the freest and the most just for all the people—and that it is my duty to uphold and defend this government at all times. I believe that just as the "Minute Man of the Revolution" was ready upon a moment's notice to defend his rights against foreign usurpation, it is my duty as a patriotic American to be a "Minute Man of the Constitution," ready at all times to defend the long-established and cherished institutions of our government against attacks, either from within or without, and to do my part in preserving the blessings of liberty for which my Revolutionary forefathers fought and died.

I BELIEVE that as a good American citizen I must maintain continuously a civic consciousness and conscience; that my country needs my active service in times of peace no less than in war; that patriotism must be a constituent part of my religion; that no prouder boast can emanate from my lips than truly to declare, "I am an American citizen," and that as an American citizen the Constitution of the United States ought to be as actual a part of my life and of my religion as the Sermon on the Mount.

We subscribe to the above citizenship creed which was adopted by the American Bar Association at its recent annual gathering.

Michigan Farm Notes

The Kingsley Cooperative Marketing Association is reported to be the first to sign up the allotted number of acres of potatoes under the new marketing contracts of the Michigan Potato Growers' Exchange.

Under arrangements made by the Michigan Agricultural College it is not necessary for one to be a member of any organization to secure the advantages of the potato field inspection work in the production of certified seed.

Members of the new profession now growing up in our rural communities, the expert poultry culler, had opportunity to improve their skill at the one week's school held at the M. A. C. during the last week of June.

Prof. R. H. Pettit, of the State Experiment Station, recommends the use of arsenate of lead at the rate of one pound to fifty gallons of water for the leaf beetle troubling cherry orchards on the west side of the state.

Prospects for a short crop of apples in the northwest give hope that Michigan growers may have a look in at prices this fall.

Federal and state soil men are making surveys of Kent, Hillsdale, Barry and Muskegon counties this year. These surveys are done in detail, making available definite information as to the agricultural resources of any parcel of land in the territory covered.

The bean growers in certain localities of the state are having trouble with the bean weevil. Reports from Eaton and Ionia counties indicate that the damage is extensive in some fields.

The Michigan Milk Producers' Association are now manufacturing sweet cream butter at its newly equipped Adrian plant. This plant was built by the association to aid in taking care of surplus milk in the Detroit area.

Livingston county Guernsey breeders having affected an organization looking toward economy and efficiency in the distribution of surplus stock, and in the general promotion of the breed. A. B. Crandell, of Howell, is the secretary of the new organization.

A big berry crop is to be put on the market by the Onkama Cooperative Association this year. Progressive growers of that district believe they

have the quality in their berries to justify the hope that they can build a strong marketing institution.

The wild berry crop of northern Michigan is generally reported most promising this season. This includes blackberries, huckleberries and raspberries.

The East Jordan Creamery recently shipped its first car of cheese to Detroit. Four milk routes serve this dairy manufacturing institution.

A half million dollar construction program now in progress, will greatly improve the facilities of the Michigan State Fair grounds and indirectly aid in putting on a bigger and better fair for Michigan people.

Farmers' Day at the Agricultural College this year, will be held on August 1. G. I. Christie, of Purdue University, and Prof. J. T. Horner, of the M. A. C., will address the visitors.

Michigan's beet acreage this year is considerably increased, while the stands are generally good.

When the United States army secures foreign butter to supply her soldiers in the Philippines, the farmers on this side are naturally peeved.

LESS TAX MOVEMENT NEEDED.

THE "Lower Taxes—Less Legislation League" movement was started none too soon, judging from the report of the federal trade commission on its taxation investigation, made pursuant to a senate resolution. The commission found that the total taxes paid by the American people for federal, state and local purposes in 1922 was over seven and three-fourths billions of dollars, which was an increase of 127 per cent in five years. Federal taxes constituted about one-half of this amount.

Between 1912 and 1922 the aggregate net debt of the United States, the states and local governments increased more than six-fold and was nearly thirty-two billions dollars in the latter year. The national debt increased from about a billion to over twenty-two billions, while state and local government debts combined increased from less than four billions to nearly nine billions.

The farm premises can be made brighter and cleaner by the liberal use of some good whitewash.

The Tie That Binds

By Harv Hess

Of all the heroes up to date
That's really numbered 'mong the great,
Give me the guy to first create
Hay wire.

For, if the farm equipment fails,
I don't want rivets, screws or nails;
Trot out the stuff that ties the bales,
Hay wire.

A belly-band goes on the blink,
A hame strap breaks. Tug busts a link.
Do we buy new ones? I don't think,
Hay wire!

The flivver's headlight rattles loose,
Or, else, the coil gets out of juice,
We bless the bird that can produce
Hay wire.

You snag your coat. A shirt may rend.
A button pops, your pants distend.
What hides your pelt from foe or friend?
Hay wire.

The sink stops up; 'phone doesn't ring;
The clock quits cold, ain't worth a ding,
Friend wife sings out: "Oh, Harv,
please bring—
Hay wire!"

Our fences start to pull asunder,
A spring-tooth drag goes all to thunder,
What do we fix them with, I wonder?
Hay wire.

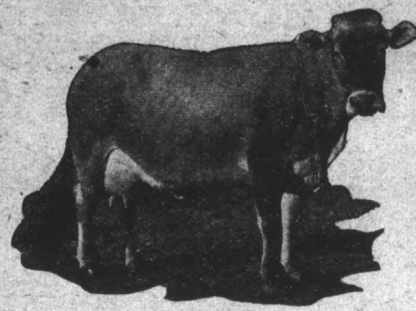
Your radio acts so erratic,
It seems the air is full of static,
"Oh, get me quick," you yell, emphatic,
"Hay wire!"

I crack a rib or bust my beak.
My poor heart breaks. I cut my cheek.
I have no fear, can I but shriek
Hay wire!

So, should I ask each hick or jay
To name the best device today
For farmers, everyone would say
Hay wire!



Believe, world's champion Brown Swiss cow, and champion of all breeds for cows over 12 years of age.
Left—GEORGE MINETTE, under whose care the record was made.
Right—F. P. MINETTE, Sauk Center, Minn., owner.



14-Year-Old Cow Makes World's Record Milked with a De Laval

Again a cow milked with a De Laval Milker makes a world's record—probably the most remarkable of the many great records made by De Laval-milked cows. This record was made by *Believe*, a purebred Brown Swiss cow owned by F. P. Minette & Son, Sauk Center, Minn., who at the age of 13 years, 6 months and 5 days, started a yearly test and completed it by producing 25,847.8 lbs. of milk containing 1002.62 lbs. of butter-fat. This record not only makes *Believe* the greatest producer of all Brown Swiss cows, but also makes her the champion producer of all breeds for cows over 12 years of age.

Believe was milked during the entire period with a De Laval Milker, and George Minette, under whose care the record was made, says:

"We have been using a De Laval Milker for over two years, and it has given very good satisfaction. We have used it every day and have just finished several wonderful records, especially the one made by *Believe*. No doubt *Believe*, being a wonderful cow, would have made a good showing anyway. However it is only right that we give the De Laval Milker its credit."

There is no question but that a De Laval Milker, because of its uniform, gentle and stimulating action, helps cows produce more milk, as records such as this are constantly proving. You may not be interested in making big records, but you certainly want to produce more milk, of better quality, at less expense—and this a De Laval Milker will surely help you do. If you are milking ten or more cows by hand, you can soon pay for a De Laval. It is sold on such easy terms that you can use it while it is paying for itself.

The De Laval Separator Company
NEW YORK CHICAGO SAN FRANCISCO
165 Broadway 29 E. Madison Street 61 Beale Street



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



TRY a Michigan Farmer Classified Liner—They cost little and bring big results. See rates on page 35.



The Safe Way

Buy Your Grimm Alfalfa Seed
Direct from the Introducer!

For a permanent alfalfa acreage, sow Lyman's Bingham County, Idaho, Grimm Seed—the greatest forage crop and soil builder ever developed! The Lyman Seal on every sack is your guarantee of pedigreed seed, bred from the original Grimm strain—pure individual stock—unblended. Over 99% pure by test. Certified GENUINE.

From early spring to late fall, Lyman's Grimm thrives, producing three to four generous crops annually. This hardiest of all alfalfa stools so heavily, it requires but little seed for a full stand. Grown in the heart of the Aberdeen Sterling Black-foot district.

MAKE ROOM FOR THIS PROTEIN-PRODUCER ON YOUR FARM! Send us your order to-day! Only a limited supply of seed left. While it lasts—50c per pound!

A. B. LYMAN, Introducer
350 Water St., Excelsior, Minnesota
The Home of Grimm Alfalfa!

What are the Prospects?

Taking a Look at the Future of the Farming Business

By J. T. Horner

WHAT is the outlook for agriculture for the present crop year? The large crops of the past few years, coupled with the general business depression, has caused the prices of most agricultural products to fall quite low. Only a few farm products have remained high in price. These are wool, cotton and dairy products. In most sections of the country fluid milk prices are on the decline and butter prices are only slightly recovering from a recent slump.

The crop outlook is the most important present factor affecting the probable position of the farmer when the harvest is gathered this fall. Crops are backward in almost every section of the country. Cold weather and heavy rains have delayed planting and crop growth. Weather must be very favorable to offset the handicap at the start of the season. In some sections of the country the wheat crop is going to be very short, while in others a good crop is anticipated. If production is decreased materially, due to bad growing conditions, there is apt to be a shortage which will cause higher prices.

Farmers who are wise are not depending upon higher prices to bring them profits. They look at something besides the price level. They realize that high prices do not always offset the disadvantages of low yields and high costs. Small crops do not always help the seller of produce. Other things being equal, the man with the greatest quantity to sell is better off, even though the price is low. Small crops, with the exception of harvest expense, cost almost as much as large ones. The larger the crop with the same amount of expense, the lower the unit cost of production. The lower the cost of production, the greater the possible profit.

Low prices for wheat have caused many farmers in the wheat belt to turn to dairying. If this turn is sufficiently great it will surely increase production enough to cause a decrease in dairy products prices. An overproduction of dairy products for the country at large will have a bad effect on Michigan agriculture. However, it will not be possible to greatly increase this production within a short space of time.

At such times when prices are low and farmers of other sections are coming into our special fields of production it is essential that we give very strict attention to the problems of costs. Prices for butter, cheese, and manufactured dairy products are going to be determined by conditions in the world market. The individual farmer must sell on this world market and his return will depend to a great extent upon factors over which he will have very little, if any, control.

Since the farmer cannot have any influence upon the price which he shall receive for his product during this period of intense competition he must turn his attention to some factors over which he has some control. Income less expenses leaves profit. If income decreases then expenses must likewise decrease or profits will vanish. So at this time of intense competition in agriculture, farmers must decrease their costs so that they can

sell on the prevailing markets and still receive a profit.

This principle of cost reduction applies to all phases of agriculture. The most effective way to reduce costs is by following those practices which practical agriculture and science have proven to be efficient and profitable. The production specialist is in the field now to assist farmers with problems of production. These problems of production are not primarily those of increased production, but those of efficient production which will result in good quality produce at a lost cost per unit.

The Present Depression.

From all the information available it seems that business is not going to improve very much for some few months. Just how long this period of depression is going to last is difficult to forecast. The increase in unemployment is going to have an effect upon the purchasing ability of the country. Price trends are bringing agricultural prices more nearly in harmony with general prices than has been the case since the depression of 1920. It is quite probable that the present depression is going to do much to bring about the re-adjustment we have been longing for. However, the prices may get back to the basis of

1913; yet agriculture might still remain in a depressed condition if there was nothing to sell or if the purchasing power of the public was not sufficient to make trade active, or if costs were so high that nothing remained from the income for the "profit pocket."

The great mass of the farmers are probably not going to have a very great profit left after the year's business is wound up. This year seems to be one in which

capital, labor and agriculture will all have to look quite closely to the outgo. The farmer who comes out at the end of the year with the greatest pay for his season's work is going to be the one who follows the best productive practices, reduces his expenditures to those which are essential to efficient agriculture, and keeps his personal expenditures at the lowest possible level consistent with his standard of living and common sense. At times when prices are going through the process of re-adjustment large expenditures for equipment, buildings, and machinery are not wise.

There is no cause to look upon the future through the eyes of the pessimist. We have one hundred and ten million people in this country who need food and clothing. These are mostly industrious people who are going to be engaged in gainful occupations which will bring them money with which to buy. We are going forward pretty much the same as we have in the past; but for a while the wise course seems to be that of economy and frugality. The future is one which holds many promises for the scientific farmer. The development of great cities and the great increase in population in this great middle western country is bringing a market to the door of many of our farmers.

There will be times of depression and unfavorable prices and farming will never return fortunes to those who follow it; but the future holds

forth a good living to those who farm well and consider their costs with the same foresight practiced by the successful manufacturer or trader. Regardless of the business situation the

man who has the lowest costs is the one who has the best opportunity to make profits. The farmer will do well to look well to his costs during the present year.

OUR SERVICE DEPARTMENT

Always Give Name and Address When Sending Inquiries as Satisfactory Service Cannot be Given to Unsigned Letters

PART OF BARN EQUIPMENT.

Has A., who sells his farm to B., (without any agreement or understanding), any right to sell hay carrier, rope and pulleys? Are they personal property, or are they part of the barn (real) equipment?—G. S.

In my opinion the carrier and attachments are a part of barn equipment and pass with it.—Rood.

SHARE OF CHILDREN OF DECEASED.

Would the children of a deceased sister (dead fifteen years) share in property along with the other sister and brothers of a deceased bachelor brother?—F. L.

Yes, the children take among them the share their parent would have taken if living.—Rood.

LICENSE FROM STATE TO RUN STAND.

Could you tell me what steps I should take to get permission from the state to put in a gas and oil station, also a lunch counter, selling ice cream and light drinks, at the Five Channels Dam on the Consumers' Power Company's land?—D. F.

Application should be made to the state food and drugs commissioner at Lansing for a license to sell soft drinks. I am not aware of any other license necessary other than that, and lease of the owner of the land.—Rood.

FULFILLING ROAD CONTRACTS.

Can one township board and commissioner of highways enter into a road contract, and if the job is not finished at the end of their term of office, is the other township board and commissioner of highways bound to carry out the agreement? In other words, can one township board and highway commissioner bind the next succeeding township board and commissioner on road contracts?—F. F.

The town is liable on a contract made by the town board within the scope of its authority, though the contract is not completed during the term of office of the board making the contract.—Rood.

EXEMPTIONS FROM SALE.

How much real estate property and how much personal property is a married man with a large family on a farm entitled to?—T. L.

There is exempt from sale on execution to each householder, a homestead of not exceeding forty acres, nor over \$1,500 value, sewing machine, pew in church, cemetery lot, library and school books, up to \$150, ten sheep, two cows, five hogs, provisions for six months, household goods up to \$250, team and tools of trade \$250, and feed for exempt animals for six months.—Rood.

GROUND SOY-BEAN HAY.

Will you kindly advise us as to the relative value of protein, etc., and of ground soy-bean hay as compared to cotton and linseed meals?—E. B. F.

Ground soy-bean hay compares almost identically with ground alfalfa hay, but has only about one-third as much protein as oil meal or cottonseed meal, while soy-bean meal (or cake) is equally as rich in protein as either oil meal or cottonseed meal.

Several feeding experiments show conclusively that soy-bean meal or cake, that is, the residue after the oil has been removed, gives equally as good results as either oil meal or cottonseed meal.

The ground soy-bean hay would not

be as valuable a feed, as feed for a concentrated protein feed, as oil meal or cottonseed meal. In the one you are taking the whole plant into consideration and comparing it with the seed of another, and it is in the seed that the protein is concentrated.

POTATOES FOR PIGS.

What is the value of potatoes for pigs that run in pasture lot and have milk to drink, and corn; also oats could be fed.—C. W. S.

Potatoes are quite a valuable food for pigs if they are cooked first, but you will have no success feeding potatoes to pigs in a raw condition. It is all right to feed them raw to cattle. When boiled, potatoes are best mixed with wheat middlings or cornmeal with some oil meal to furnish the extra protein, as potatoes are deficient in this food nutrient. The skim-milk that you have would be a substitute for oil meal or tankage as this product is rich in protein and it probably would give best results if you mixed the potatoes, cornmeal and ground oats with the skim-milk, making a thick slop, and you can feed the pigs all that they will eat up clean.

BUILDING UP THE LAND.

I would be glad to know what you think best to sow in the line of clover on land where June or Mammoth, or even sweet clover, don't do well. I can get a good stand of June clover but it doesn't seem to make any growth. Soil is a kind of white clay and sand mixed. I was thinking of trying alfalfa. Which is the quickest way to build up land, by dairying or by growing green crops and turning under, and by putting back all straw, as bean, corn, and plowing down? I have an idea that close pasturing is very bad for the land, and crops of clover and hay are ruined thereby. Would it be all right to sow a 2-12-2 fertilizer about 100 pounds to the acre, in with beans in the same row, or would it burn the seed?—J. R.

Under the conditions you mention, I do not believe it would be advisable to seed alfalfa. The soil is too low in fertility and organic matter to produce a satisfactory growth of clover, consequently alfalfa would be of little value. Even sweet clover has not produced a good yield on the land, and sweet clover will make a growth where clover and alfalfa sometimes fail.

An application of 100 pounds of 2-12-2 would be rather light under the conditions mentioned. I would recommend the use of 250 to 300 pounds per acre. Fertilizer should be applied broadcast or drilled ahead of the bean crop.

Land may be built up in fertility by growing leguminous crops and feeding these crops to dairy stock, provided the manure is carefully returned to the land. If the manure is allowed to leach, a large amount of the fertility will be lost and the land will gradually become poor instead of being built up. All straw and fodder not fed to live stock should be carefully returned to the land to supply organic matter.

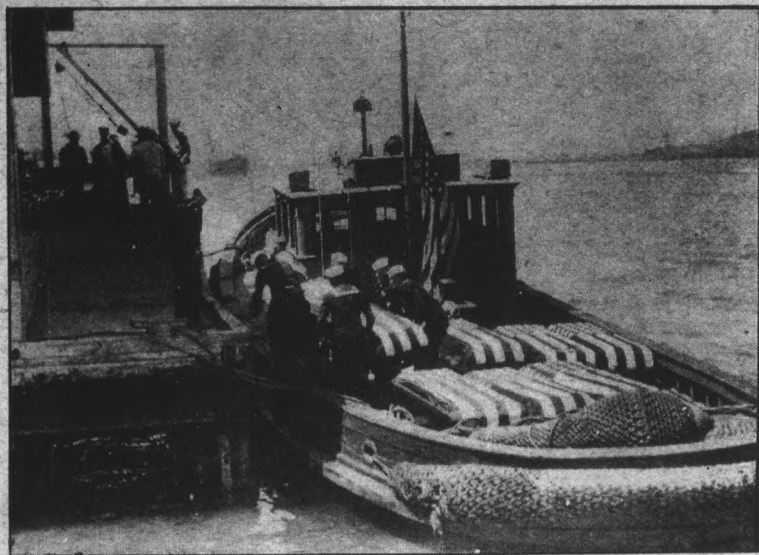
Leguminous crops, if inoculated, have the ability to make use of the free nitrogen of the air and should build up the nitrogen content of the soil.

If the soil is low in phosphorous, the use of sixteen per cent acid phosphate is advisable. However, complete fertilizer, as suggested, would be advisable the first year or so.—C. R. Megee.

WORLD EVENTS IN PICTURES



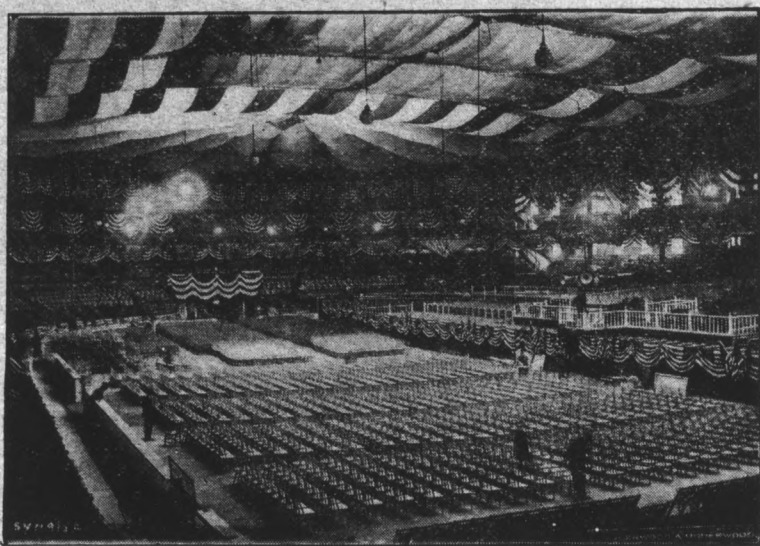
Jene Loeb shows that college girls have nerve, by doing toe dance top of Delaware bridge tower.



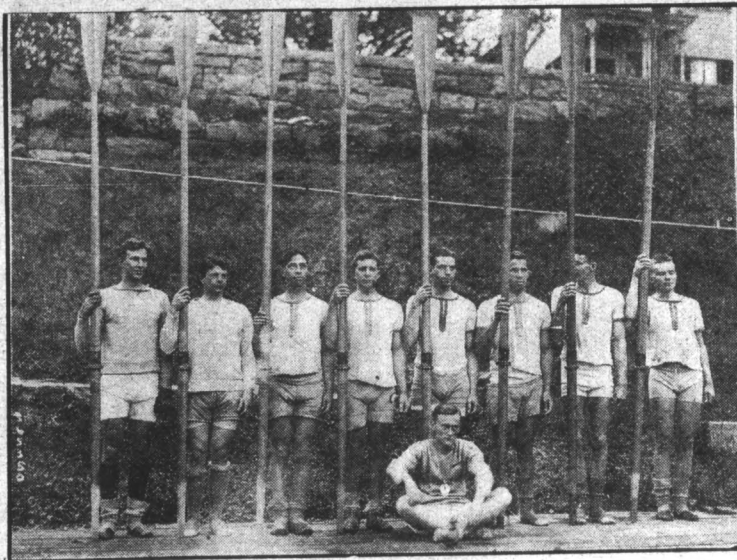
The bodies of the sailors who lost their lives at the turret explosion on S. S. Mississippi, being landed in the Los Angeles harbor. The bodies will be given military burial.



Wm. G. McAdoo and two daughters, Ellen Louise and Mary Faith, at New York convention.



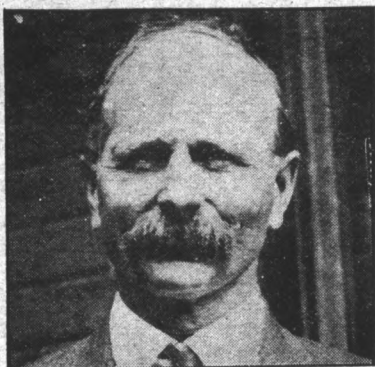
A good view of Madison Square Garden, New York, as it appeared ready for the national democratic convention. Amplifiers at the speakers' stand made it easy for everyone to hear.



Yale University eight, which won their fourth victory over Harvard in the 57th annual regatta. Immediately after the victory this crew started for France to compete in the Olympic games.



Hostesses appointed by the national democratic committee who will have charge of the entertainment of the guest delegates.



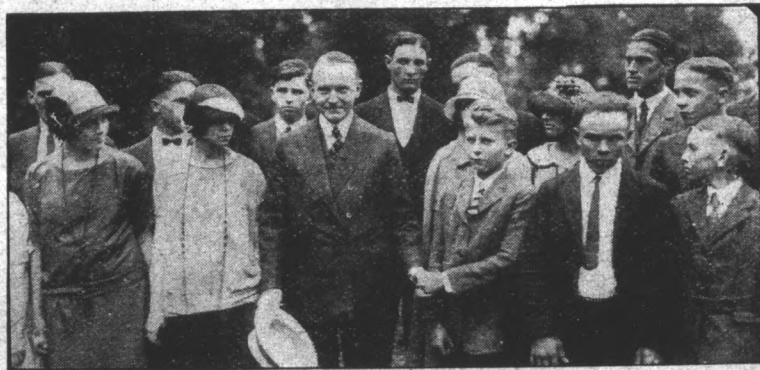
Duncan MacDonald, of Springfield, Ill., a miner, presidential nominee of Farmer-Labor party.



The adopted son and daughter, Dana and Virginia, of General Chas. G. Dawes, vice-presidential nominee, at Evanston, Ill., home.



Members of the class of 1884, Marietta, (Ohio), College, of which Brig.-Gen. Charles G. Dawes, republican vice-president nominee, is a member. Mr. Dawes is second from left in the back row.



The boys' and girls' corn-club members from Indiana were the first group of prospective voters to congratulate President Coolidge upon his nomination at the recent republican convention.

The Mid-Air Rescue

By Edwin Balmer

Author of "Keeban," "The Breath of Scandal," "Ruth of the U. S. A.," "The Indian Drum," etc.

ERIC steered closer to Twenty, veering as Twenty steered to the side; then, suddenly, he lifted himself from his seat, and Artie, from his place, slipped down into Eric's. The next instant Eric, barefooted, was standing upon the lower wing; he had a coil of rope, one end of which he secured to a brace; he dropped the rope behind and let it trail.

It flew out behind, of course, and therefore served as no measure of the space down to the upper plane of Twenty; and Eric sat on the edge of the lower wing; his feet dangling over nothing—a mile of nothing down to the veiled abyss of the ground. A distant, sparkling spot far, far below denoted the presence of a city with streaks of specks of village street lamps radiating irregularly away.

Number Twenty, piloted by that very exhausted girl, seemed to be steering over that city; so Artie held to the direction, too. Eric could not help thinking of roofs and spires below him; well, they were no worse than a plowed field, if you dropped from a mile up.

The chill night air of the sky was biting at Eric's feet. He had a little resin in his pocket and, holding on with his left hand, he thrust his right into the pocket, powdered it with resin and raising his feet from over the edge, he rubbed one and then the other. Gazing down again, but only at the planes of Twenty—not at the ground far, far below—he seized the ropes and slid down it over the edge of his lower wing.

His weight, of course, stopped the rope from trailing; but he still swung backward farther than he had thought he would; and the lower he descended on the rope, the farther back he dragged as Thirty rushed above Twenty through the sky. He knew that he was farther back than Artie would suppose, and he knew, also, that Artie could not see him at all.

This was not only because of the darkness, but because he was dangling in the space known as the pilot's "blind spot," where the fuselage and the lower wing screens off the pilot's view.

Eric considered climbing the rope to return to Artie; he did not, but, instead, let himself farther down; he was not able to forbid his mind from thinking of the small knot at the end of the rope as the only thing between himself and those streaks of flint which were the street lamps a mile below. There was nothing else between, just then, for Twenty had veered out from below him; and Artie, following a few seconds later, had not yet put himself again directly above. And the change of direction had set Eric to swinging sidewise a little, like a pendulum.

His feet, at this moment, felt the

end knot, below which there was nothing; he cramped himself to the rope for a minute and shut his eyes as he held on. Though still attached by that thin line to Thirty, yet now he was much nearer Twenty. The roar of Twenty's airscrew, which had hardly been perceptible above Thirty's clatter when Eric had been in Thirty's pilot seat and when he was on the wing, now almost shut out the sound of Thirty. He opened his eyes and now, not two lengths under his feet, was the lighted cabin, into which he could look as though he hung on a rope above the lighted window of a house. He saw plainly the women's features and the man's, and Fresnoy on the floor with his face covered.

But he could not drop upon that cabin top; for it was too narrow. He must be above the wings; and now Artie slipped up a little on Twenty. Eric saw, directly below, the spread of wings.

He swung again to one side; cramping convulsively to his rope—and then he let go.

At the instant of release, when he felt himself falling and knew he could not clasp his rope again, he believed he had missed; he thought he was falling in front and directly into that roaring, whirling airscrew which must cut him in two before it flung him down; then he thought he was to fall behind the wing and on on just—down. He tried to fling himself forward as he felt himself sprawling in the air, able to touch nothing. Then his feet met the surface of the wing, and did not slip.

For the moment, as he had clamped himself to the rope before letting go, so now he hugged down to the wing of Twenty, content—and more than content—to feel himself holding on. He had made it!

Above him, he saw Artie circling; for Artie, having felt the release of the weight, had known he had dropped. He raised an arm now and waved to Artie; and he believed that Artie saw him. At any rate Thirty dashed ahead and took itself out of the way.

Eric was edging himself along toward the middle of the wing; he caught a bracing wire and let himself down, over the back of the wing, to the fuselage.

Tense, slender hands seized him, closed tight on his hands and drew him down; and then, for another moment, held to him. He was crowded close beside the girl in the pilot's pit. Now she drew from him to give over to him the controls.

Before him and far below he plainly could see the lights of the city, which must be Brighton; that meant there was an airdrome not too far away; and it would be lit. Dowse would have seen to that. Eric steered for the city, descending.

Twenty minutes later, Dowse, at the London airdrome, snatched up the telephone to take a call from Brighton.

"Hello Dowse," said Eric's voice.

"Twenty's all right."

"What? Where?"

"Near Brighton. Everybody safe, except poor Fresnoy. Geroux shot him dead; but Mrs. Pickett, that lady from Kansas, had his pistol to Geroux's head; and we've handed him to the police."

"Eric, what did you do?"

"Happened on Twenty flying quite all right about a mile up; transferred to her and brought her down. That's all."

"Transferred!" repeated Dowse. "You say, except for Fresnoy, everyone's safe!"

"The heavy one, Mrs. Byford, is a bit done, I'm afraid. Not Mrs. Pickett, though; and Miss Rudd—I say, Dowse, do you know that girl took over from Fresnoy 'bout seven and carried on till half hour ago. When we came down, do you know what she did?"

"Fainted?"

"She stepped down and went back with me to see that Geroux was properly handed over and all that; then she said to me, 'How did you do that?'"

"What? I said."

"Make the landing. You see, I've been trying all evening to come down;

and I want to know for next time. What do you think of that, Dowse?"

"I think," said Dowse, "that I want to know what you'd like done, so the Line can do it for you. I say, Eric, you've done—"

"Oh, chuck it, Dowse. I'm telling you, you should see her."

"You tell her, Eric, as well as the others, that Glosten will look after them, of course."

"The ladies will stop over here a day or so, Dowse; but don't worry about Miss Rudd. She's stopping here the night; but will go up with me tomorrow."

"Up?" said the London manager. "Up in the air again?"

"Oh, yes; up with me in Thirty to London. I've wired her people in Paris; and I'm 'phoning my mother to expect Miss Rudd with me for a rest-up."

"Ah!" said Dowse, and then, because he was still dazed, he demanded again: "You mean they're all down and all safe, really?"

"You mean," repeated Eric, "can the agents still sing your slogan tomorrow? Yes, they can, Dowse: 'Never Lost a Passenger!'"

THE END.

Another good short story next week.

The Boyhood of Jesus

Our Weekly Sermon—By N. A. McCune

THE boyhood of Jesus was probably not totally different from that of other Jewish boys of His time.

Every boy was expected to learn passages from the Old Testament, which would be his guide through life. It is probable that Christ did a great deal of reading on His own account which the ordinary boy or young man never did. Over and over, He asks His critics, "Have ye never read?" It was apparent that He had read a great deal, in the teachings of the Old Testament. When the temptation came, He quoted three passages from Deuteronomy. The first was the one that every Jewish lad was expected to know, (though no doubt many did not): "Hear, O Israel, the Lord our God is one Lord, and thou shalt love the Lord thy God with all thy heart



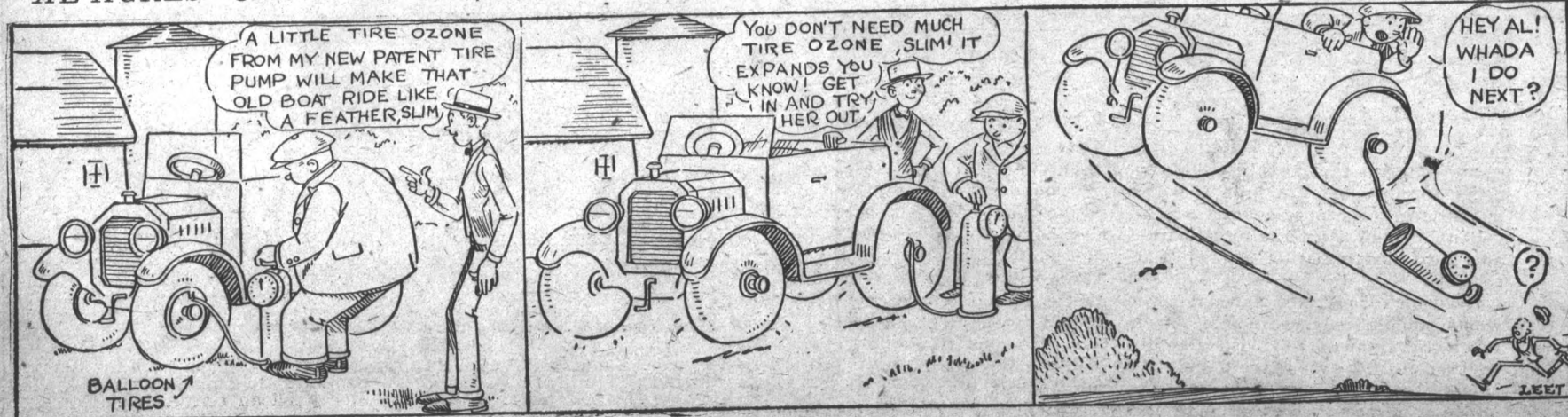
and with all thy soul, and with all thy might." Another was, "The Lord did not set his love upon you, nor choose you, because ye were more in number than any people; for ye were the fewest of all people: but because the Lord loved you, and because he would keep his oath which he had sworn unto your fathers."

But there was more to Christ's Old Testament study than this. He had not only memorized much of it. Memorizing is a splendid practice. Would

that people did it as much now as they in years past. But one may recite words without thinking much on their meaning. A man lived not long ago who was said by his friends to be able to recite the entire Old Testament. But Christ did a deal of hard thinking about what He read. Of course, if you go on the assumption that He did not have to do any reading at all because He was the son of God, then all His teachings came to Him without any mental effort whatever. He simply passed them on, as a copper wire passes on the messages that travel over it. But there is much in the gospels which discredits this view. Jesus became man. He "emptied Himself," as Paul puts it, and took on Him the nature of man. He was in all points tempted like as we are, except without sin. Remember that when people came to Him, He had to ask them questions like anybody else. Of the epileptic boy He asked the father, "How long has he been thus?" He does not know how many loaves and fish the disciples have until they investigate and report. He is unaware of the storm on the lake until he is awakened. All this and much else reminds us that He came to His conclusions much the same way that other people do. And, when you think of it, this makes His teachings all the more impressive, meaningful and vital. They came out of His own thought, observation and experience. They were the product of pain and spiritual travail.

By Frank R. Leet

AL ACRES—Use A's Tire Ozon, and Ride On Air



HIS conclusions with regard to the Old Testament were revolutionary. He said that He came to fulfill the law, but it was in a new way. Moses had written that the law of human relations was one of being struck and striking back. "Eye for eye, tooth for tooth, hand for hand, foot for foot, burning for burning, wound for wound, stripe for stripe." But He said, "No. All that must be reversed. If individuals and nations go on forever striking back there will never be an end to strife, hate and sorrow."

This may seem to be far from the boyhood of Jesus, but He began the kind of thinking then which led to what He taught later. "The thoughts of youth are long, long thoughts." More is decided when we are in our 'teens than we suspect. A boy was once very poor. He lived in Illinois. He had no sled, and one day he found on a junk pile the iron frame of a sled. He took it home, fastened some boards on it, painted it bright green, and went forth proud and happy. A big boy came along, said it was his sled and took it away from him. No one came to his rescue, and he lost the sled. He thought to himself, "How great it would be if I were a lawyer now! I would bring that fellow into court and make him give me back my sled." Then and there he decided to be a lawyer. He became a lawyer, became prosecuting attorney of that county and afterward went to congress. I believe he is in congress now.

WHAT Christ taught, what you and I learned at Sunday School or at home is due in no small measure to the "long, long thoughts" of Christ when He lived at home and was learning the carpenter's trade. We used to think that the time to develop character in youth is during his college course. But we now know that it is far better to begin in his high school years, and still better to take him in the grammar grades, and better yet to start with the primary. Oliver Wendell Holmes would go even further and begin with the youth's grandmother.

Some beautiful things took place when the infant Jesus was brought to the temple for dedication. As the young parents walked in with the Child, two old people came forward and greeted Him. As far as we know, they were strangers to Joseph and Mary. They were blest with the gift of spiritual intuition, which led them to a swift conclusion, as to whom the Babe in Joseph's arms was. This is a rare gift, but one not unknown in other people. When Joan of Arc came to the place where the king of France was, they tried to trick her by putting someone else on the throne, dressed in the royal apparel. But she could not be duped. She went around the crowd and shortly singled out the king. Simeon was so overcome with emotion when he saw the young Christ that he was ready to die. He said he had seen the salvation of the Lord. Nothing more could be added to his life. He had been expecting the Redeemer, and perhaps that is one reason he recognized Him. At the same time a very old woman, Anna, came forward and she, too, recognized the Child as the Messiah.

THEIR words were not all pleasant. Simeon declared that a sword would pierce the mother's heart, and we know that he was right. Compare the present scene, the old man taking the Child in his arms and uttering these poignant words, with that other scene, where three crosses stood silhouetted against the sky, while the women, Mary among them, stood at a distance looking on, in an agony of mind. Think also of that later scene when the mother-heart had gathered courage and had drawn near the cross, and heard those indescribably tragic words, "Woman, behold thy Son!" Simeon was right. A sword was to pierce Mary's soul.

SUNDAY SCHOOL LESSON FOR JULY 13.

SUBJECT:—The Boyhood of Jesus. Luke 2:7-20.
GOLDEN TEXT:—There is born unto you this day in the city of David, a Saviour, who is Christ the Lord.

NEWS FROM CLOVERLAND

GETTING BEHIND THE BOYS.

COUNTY Club Leader Hagen, of Iron county, recently secured five pure-bred registered Guernsey calves for club members in that county. These calves came from Wisconsin.

Mr. Hagen has asked the Crystal Falls Rotary Club to assist a group of club boys to obtain seed potatoes for spring planting. Each boy was assigned to a member of the Rotary Club to assist him in his project. The boys were unable to finance the purchase of pure-bred seed potatoes. The boy pays the Rotarian whatever financial assistance is advanced by him.

PLANS POULTRY PROJECTS.

CO-OPERATING with Mr. L. M. Geismar, county agricultural agent of Houghton county, Prof. J. A. Hannah, of the Michigan Agricultural College, has established six poultry demonstration farms in that county. Professor Hannah says that the opportunities for developing a profitable egg business in the copper country are excellent. There is a large local market and the Chicago market is readily accessible.

He sought out six farmers who would handle only pure-bred stock. Professor Hannah will visit the district thrice in the year to cull the poultry, selecting out those best for breeding purposes. Several additional demonstration farms, it is planned,

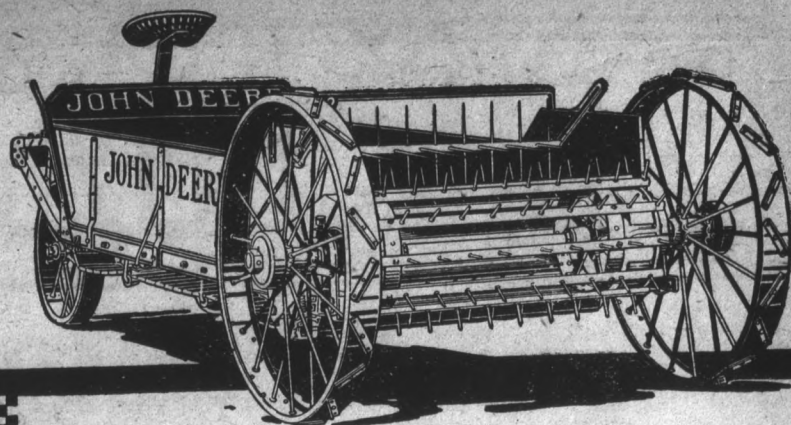
will be located later on. He is due to establish eight similar demonstration flocks in Menominee county.

FARMERS BECOME INTERESTED IN BETTER SIRES.

THIRTY-FOUR pure-bred sires were added to the farms of the Upper Peninsula as a result of the journey of the Cloverland dairy special train through the peninsula during three weeks of June. Forty meetings were held at the various stops made by the train. The attendance is estimated to have amounted to 3,600. Rudyard, in Chippewa county, excelled in point of attendance, it is reported. Seven pure-bred bulls were placed in Chippewa county and orders for four more are in, reports the agent. Considerable "better-sire" literature was distributed throughout the trip.

MORE PARKS FOR THE TOURIST.

TRAVELERS to the peninsula, this summer, will be greatly interested in the four new state parks that are now being gotten ready for them by the state conservation department. These will be located at Brimley, Marquette, Baraga and Fort Wilkins. Fort Wilkins was an old United States Army post on Keweenaw Point, Copper country, established just before the Mexican War and abandoned after the Civil War. The usual camp equipment will be installed at these parks.



Its Extra Years of Service Brings the Cost Away Down

The few extra dollars you pay for a John Deere Spreader will come back to you many times over in extra years of low cost service.

The first John Deere Spreaders built more than thirteen years ago, are still spreading manure, and, apparently, will give several more years of service—you will find proof of this right in your own locality.

The low repair expense is another item well worth considering. In April, this year, J. P. Jacobson of Old Albuquerque, N. M., bought his first repairs, at a cost of \$2.70, for his John Deere Spreader which he bought nearly twelve years ago. Mr. Jacobson runs a dairy farm and spreads lots of heavy manure. The reason for this better spreader service is quite evident when you make strength comparisons—when you put the John Deere on the scales. It has the

strength to stand up day after day under most severe spreading strains. Make your own comparisons.

Besides, the John Deere is easier on you, easier on your horses, does better work and lasts longer because—the beater is on the axle.

It's to your advantage to know all about the John Deere before you buy. Look it over at the store of your John Deere dealer.

"SOIL FERTILIZERS" Free—a booklet that contains a world of information about manures, their uses, and how to get the most out of them. Also free spreader booklet. Write today to John Deere, Moline, Ill., and ask for Booklet 'S E 422

JOHN DEERE
THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

ALLIGATOR STEEL BELT LACING



MAKES BELTS LAST LONGER
Most belt trouble starts with the joint—pulling out, tearing, etc. Alligator Steel Belt Lacing avoids these belt failures. Teeth clinch through, compress and protect belt ends from internal friction and unequal pull. A quick, durable hinge joint on farm engine, tractor and thresher belts. Sold by dealers everywhere.
FLEXIBLE STEEL LACING CO.
4612 Lexington Street Chicago, Ill.

"Never Lets Go" Saves Time and Money

Threshing Days Coming

Cut Down the Cost of Harvest

COMPLETE THRESHING OUTFIT COMPLETE SILO FILLING OUTFIT

Consisting of 40 H. P. Case Traction engine with canopy and contractors' Fuel Bunkers. 28x50 Case thresher with self-feeder, wind stacker, grain weigher and mechanical oiler. Steel water tank complete. One Type S. Wilders-Strong, Silo Filler complete, complete set of Belts.

Practically New and in Perfect Condition. Price Cut in Two for the Early Buyer

F. W. CRAFT,
12-243 General Motors Bldg., Detroit

Wash No-Buckle Harness FREE HARNESS BOOK

SPECIAL Inducement to SUMMER BUYERS
To keep my big factory busy all summer, I make it worth your while to order now. No money to pay until you have proven by 30 days free trial that the Wash is the **World's Strongest Harness**. No buckles to tear straps; no rings to wear straps—best leather ever put in harness. Lasts longer without repairs, hence costs less. Over 8 years success.
\$5.00 After 30 Days Free Trial Balance monthly. Return if not satisfactory. Write for Free book, now while you think of it. **JAMES M. WALSH, Pres.** Walsh Harness Co., 439 Keefe Ave., Milwaukee, Wis.

ANTI-ABORTION

For treating your cows for loss of calves. Inexpensive and easily applied by yourself.

SUCCESSFULLY USED FOR THIRTY YEARS

Write for FREE copy of The Cattle Specialist. Answers every question pertaining to Abortion in cows. Ask our dealer or write **Dr. David Roberts** direct.
Dr. David Roberts Veterinary Co.
124 Grand Ave., Waukesha, Wis.

POWER MILKER \$142

Complete READY TO MILK WHEN YOU GET IT

Send for sensational offer! Milk 18 to 40 cows an hour—easy. Costs nothing to install. Easy to clean. Milks the human way—easy on the cows. 30 Days Trial—10 Year Guarantee—Cash or Easy Terms—a year to pay. Write for FREE BOOK, "How to Judge Milkers". Get yours now!
Ottawa Mfg. Co. 1807 White Street, Ottawa, Kansas
Box 1807 Magee Bldg., Pittsburgh, Pa.

LEARN AUCTIONEERING

at World's Original and Greatest School. Become independent with no capital invested. Write today for free catalog coming term. **Jones Nat'l School of Auctioneering**, 28 N. Sacramento Blvd., Chicago, Ill. Carey M. Jones, Pres.

CORN HARVESTER

cuts and piles on harvester or windrows. Man and horse cuts and shocks equal Corn Binder. Sold in every state. Only \$25 with bundle tying attachment. Testimonials and catalog FREE showing picture of Harvester. **PROCESS MFG. CO.**, Salina, Kan.

OUR BOYS AND GIRLS

Some More M. C. Letters

In Which Several Subjects are Cussed and Discussed

Dear Uncle Frank:

Would you admit a newcomer? I have been reading about the boys' and girls' discussion on the topic, "Are all boys rude?" Boys may be rude, as a rule, but there are exceptions to all rules.

I wonder who it is who plays the football games the most successful? Who does the good playing at a bat? Say, Uncle Frank, did you ever watch a girl use a ball bat? You would swear she thinks it is going to bite her.

Then when a player swipes a ball way out in center field don't the girl cheer as well as the boys?

Did you ever, Uncle Frank, walk



Ronald Blakeslee with Buck and Jennie. These calves were broken and driven as oxen. Buck was very tame and would follow Ronald everywhere. Jennie is now a heifer three years old. First prize in the Pet Picture Contest.

down the street and touch your hat to a lady and have her elevate her powdered nose about forty-five degrees out of position? I have, then who was rude?

Talk about teeth. Not long ago one of the noble race of flappers bit my knuckle till it bled. In a very short time I had a pretty little red streak clear up to my elbow. But for the skill of our doctor I might not be writing a letter tonight.

How's that for a "straight from the shoulder" crack, Uncle Frank? Pass me W. B.—I beg to remain, Yours truly, Fred Horton, Caseville, Mich.

Yes, I've seen girls bat and throw balls, but I've seen boys try to knit and thread needles, too. I guess you'll have to beware of the biting kind after this. There is no excuse for biting.

Dear Uncle Frank:

I received my Merry Circle card and pin this morning and want to thank you. I have tried many times. "Work-and-Win" is a good motto to follow.

I like the boys' and girls' page very much and have some nice correspondents from the letter scrambles. Mother says writing letters is good for me, as it improves my spelling and writing, as I look up hard words in the dictionary.—Your niece, Margaret Mikesell, Shiloh, Mich.

I am glad that the correspondence scrambles have been helpful and interesting to you. Writing letters does help, for it is good practice.

Dear Uncle Frank:

I just got through reading the Michigan Farmer and I made up my mind to give my opinion of the question, "Are boys rude to girls?" I do not think they are, or at least, they aren't rude all the time.

Girls are always trying to get on the "good side" of boys, trying to get favored a little more than someone else. Such things boys hate, and I don't blame them either.

After a boy has just got through being powdered by a girl, "just to make him mad," he naturally wants to get even. Then a girl gets mad when he pulls her hair or does something like that. Another thing a boy hates is having remarks made about a mistake in his lessons, especially by a girl.

I think just as Nelly Priest, "Do unto others as you would have them do unto you."—From an M. C. niece, Azia Tillman, Osseo, Mich.

Well, here's one girl who is sticking up for the boys. At least, she tries to be fair.

Dear Uncle Frank:

I think I will say something on the subject of "our boys being rude to girls." I think they are sometimes. The pupils in our school were going for flowers one day. The boys killed a snake and then one of them tied it on a stick and chased the girls with it. Then they wouldn't let them come back, saying that they still had the snake. But boys will be boys, and we are always full of mischief. I am just as bad as any of them. I like to tease the girls, too, to make them run and scream.

I agree with Harold Coles about bobbed hair and knickers. Knickers are all right on a camping trip, they are better than dresses—but they are no good on the street.

Well, I'll have to close now. A long-silent cousin, Norman Murphy, R. 3, Midland Mich.

Yes, you said it, boys will be boys, but some boys are gentlemen and some are not.

Dear Uncle Frank:

I received my flashlight a few days ago and thank you ever so much for it. "Now I can travel in the dark without running into one of those boys who hate 'bobbies' so much." (Excuse me, Harold).

I'm so glad there are some good boys, and some girls who think boys are not rude!



Doings In Woodland

The Ship Wreck

THE three little Woodland boys, Jackie Rabbit, Willie Woodchuck and Johnnie Muskrat, were thinking hard how they might get to shore as they drifted, drifted toward the Big Sea on their funny little ship, the old fishing log.

Of course, Johnnie Muskrat could get back, for he could swim. But he was trying to think of some way to get his two little friends back with him.

"If we only had a paddle," said Willie.

"Yes, and if we had wings we might fly," said Johnnie.

"Perhaps the wind will change and a merry little breeze will blow us to shore," said Jackie.

But no paddle drifted by and they did not have wings and the merry little breeze they wished for did not come. So it was three frightened little boys that sailed along their log ship.

As they drifted along the shadows on the shore grew longer. Soon the sun went to bed behind a hill, and still they kept on drifting. Then a little star appeared way up in the sky. Little Jackie Rabbit spied it first.

"Star light, star bright, The first star I have seen tonight, I wish you may, I wish you might Bring me the wish I have tonight," sang Jackie.

"I bet I can guess your wish," said

The Merry Circle boys are dead. You never hear from any of them. They ought to defend their good reputations from the girls' onslaught, or they will lose them before they are aware of the fact. Wake up, boys!—Sincerely, Polly Svinicky, Stephenson, Mich.

Boys, Polly is saying something to you. I, too, wish more boys would write. I would suggest that some of you answer back.

Dear Uncle Frank:

You have not heard from me in a long time, have you? You see, I have been in a recital here, then an operetta, and then commencement exercises. You see, I am an eighth grader in grammar school and have just graduated into high school, and next year I'll be a freshman, although somebody told me I was fresh enough now. Do you think so?

I laughed quite a bit over that letter of Ronald Douglas' when he changed his calf from a she into a he and then back to a she again.

In my opinion, I think you had better put your picture in the paper again if it will make bashful folk write to see what you are like.

Well, I'll say so-long 'till another time.—As ever, an M. C. niece, Clarissa Englebert, Concord, Mich.

You were some busy during graduation time. Ronald worked wonders when he changed his calf as he did—some calf, I bet.

Dear Uncle Frank:

Tut! Tut! Will you listen to me? Let's stop quarreling about bobbed hair and knickers. Also boys being rude to girls. Let's talk about the weather, the beautiful birds and fragrant flowers.

I think Alfred Fritsch is right about the boys writing letters, but perhaps if we make it more interesting they will write more letters. Let us talk about the summer sports, there are so many. I wonder how many girls can

ride a bicycle or horseback? My, but it is fun to beat some boy in a race. I think it is a lot more fun than driving a car, because you can go as fast as you want to, and if you run in the ditch it won't hurt you.—Your M. C. niece, Mildred Holmes, Quincy, Mich.

There are other subjects we could discuss but nobody wants to discuss them. About all they want to talk about is bobbed hair, knickers, etc. Yes, riding a bicycle is great fun. I used to like it when I was a kid.

Dear Uncle Frank:

Received my fountain pen yesterday and thought it a fine one, much better



Llewellyn Garrison has two pet crows with which he has lots of fun. Only one crow shows in the picture, as the other got angry and would not sit on Llewellyn's shoulder. Second prize in Pet Picture Contest.

than I had reason to expect. I am now using it to write my "thank you" to you for same.—Sincerely yours, Harold Haight, Allegan, Mich.

I am glad you like the pen. We try to make our prizes worth while.

FOURTH OF JULY WINNERS.

WE received many suggestions for spending the Fourth, some of which I will use myself. On the whole, the ideas regarding the use of that great holiday are divided into two great sections. One bunch like to spend it with something doing all the time—fireworks and all. Others want to get into the quiet country to spend the day communing with nature. Most everyone wanted to get near some water—a lake or a river. It seems that water is a fascination to everybody.

We won't run the prize winning papers this time, as it is past the National holiday, but we will keep them to use at some other time.

The prize winners are:

Fountain Pens.

Josephine Well, M. C., R. 5, Dowagiac, Mich.
Sylvia Schumaker, M. C., R. 2, Standish, Mich.

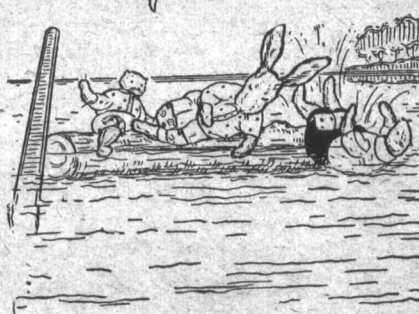
Flashlights.

Ruth Yoder, R. 1, Mio, Mich.
Ruth Tabor, Belleville, Mich.
Mildred Merritt, M. C., R. 1, Ypsilanti, Mich.

Candy.

Hilda Gross, M. C., R. 1, Saline, Mich.
Janette Severance, M. C., Mason, Mich.
Magda Hueffner, R. 4, Saginaw, E. S., Mich.
Alice Aldrich, M. C., Remus, Mich.
Virginia La Forge, M. C., R. 5, Ypsilanti, Mich.

It looks as if the M. C.'s come to the front quite heavily this time. It also looks as if the boys had very few plans for the Fourth, or if they did, they did not care to write about them.



Then it Was Sink or Swim.

kept on drifting, for they could not think of any way to get to shore. As it grew dark, they were tired, frightened and sleepy. Finally the old moon peeped his head over the hill, and to keep from getting lonesome, they told stories about him.

When it was only an hour past bedtime, they just couldn't keep awake any longer and one after another went to sleep. It was then that something happened.

"Kerplunk, perchug, slash, splash." The old log ship had hit a stump and off went the three little sleepy Woodland boys into the water.

Woman's Interests

Use Sour Cream In Baking

Some Practical Suggestions

By Nelle Portrey

MANY housewives think they can not make a really good cake without butter. As long back as I can remember, mother has done most of her baking with sour cream as shortening, and she is a good cook, too. "Why not use the cream," mother says, "instead of going to the trouble of making it into butter first?" In most recipes, cream may be used instead of butter, by using twice as much of the cream as you would butter. We use sour cream for healthful and delicious cakes, cookies, baked and steamed puddings, biscuits, short-cakes, gem cakes and muffins. The following recipes all originated in our kitchen, and are as good as they are original.

Coffee Cake.

This makes quickly and is delicious for supper, as well as being nice for any occasion when you wish to serve a lunch and have nothing baked. To two cups of rather thin, sour cream, add two level teaspoons of soda, half a cup of sugar, one well beaten egg, and enough flour to make a stiff batter, into which two level teaspoons of baking powder has been sifted. Pour into a well greased pan. Mix half a cup of sugar, one level teaspoon of cinnamon, one level tablespoon of flour and seven level tablespoons of melted lard or lard substitute together, and spread on the batter in the pan. Then bake in a moderate oven. A large enough pan should be used so that the batter will not be more than an inch thick. It usually takes about half an hour for the cake to bake. It is best served hot.

Plain Spice Cake.

This is a simple but delicious cake, and is not too rich for the little folks. To one cup of sour cream add a level teaspoon of soda, one cup of brown sugar, two well beaten eggs, one level teaspoon of ground allspice, one level teaspoon of cinnamon, one level teaspoon of ground cloves, and two cups of flour in which a level teaspoon of baking powder has been sifted. Beat for five minutes. Bake in a moderate oven. Half a cup of chopped nuts or raisins may be added if desired.

Plunkett.

To one cup of sour cream, add a cup of dark cooking molasses, and two level teaspoons of soda. Beat well. Then add one level teaspoon each of ground cloves, ground allspice and cinnamon. Mix in enough flour to make a stiff batter, beat well and bake in a moderate oven. Best served hot.

Ginger Cookies.

Mix well, one cup of sour cream, one cup of dark cooking molasses, two level teaspoons of soda, one egg, and two level teaspoons of ginger. Add enough flour to make a soft dough, roll thin, and cut in squares, or round cookie shapes. Bake in a quick oven.

Light Cake.

Mix one cup of sour cream with a level teaspoon of soda and a cup of sugar. Add the well beaten yolks of three eggs. Sift in flour enough to make a medium batter, in which a level teaspoon of baking powder has been sifted. Beat for five minutes, and then add a teaspoon of vanilla extract, and beat until thoroughly mixed. This cake may be baked either in layers or in loaf. It is delicious if baked in layers and put together with lemon filling. White filling or frosting is also fine, and nuts may be added.

Evaporated milk is better for boiled salad dressing than ordinary milk. A

little of the spiced vinegar from chunked pickles, added to the dressing, makes a pleasant change.

KEEPING THE CUT FLOWERS FRESH.

IT is easy to keep flowers fresh if the right precautions are taken right from the start. In the first place you should cut the blooms in the morning before the sun has had time to cause them to wilt any. Then they should be placed in large vases that give the stems plenty of room and that are deep enough so the water can come up almost to the flowers. This is necessary to fill the stems perfectly. Keep them in a cool place that is not subject to drafts. After they stay here for a few hours they are ready to use on the table or any place you want them, not in the direct sunlight or strong wind, and will remain fresh ordinarily. They should be treated in this same way if you desire to ship them, and I have sent flowers for a thousand miles and had them come through in good shape. They should be packed in a box just large enough to hold them without crowding, and this should be lined with one or more sheets of oiled paper (wax paper), and inside this with common tissue. The water on the stems when removed from the vase is sufficient, but be careful to keep it off the blooms. Wrap the box well and it will go reasonable distances all right.—A. H.

HINTS WORTH TAKING.

A teaspoonful of sugar in the kettle in which green corn, new peas, string beans or carrots are being cooked improves the flavor wonderfully.

Chilled, ripe tomatoes with the seeds and pulp scraped out make

dainty cups for vegetable salads. The part that is scooped out need not be wasted, it may be utilized in vegetable soups and purees.

A nice vegetable salad which is easy to make when you want to use up the left-overs, is made by taking equal parts of cooked beets, string beans and cold potatoes, cut in small pieces, seasoning and making a dressing of mayonnaise, whipped cream and a little vinegar.

A kitchen time-saver is made by fastening a large spool to the wall with a nail loosely enough so that it will turn around. On this wind all string that comes around parcels and it will always be handy.

When punching new holes to tighten your sewing machine belt, heat a hat-pin red hot and it will penetrate the belt like magic.

A bunch of arrowroot tied in a thick cotton cloth and boiled with the white clothes will give them a delightful perfume.

By using a bottle brush to clean the refrigerator pipes, the job is more thoroughly and quickly done.

Before using cabbage, cauliflower or lettuce, turn the heads down in salted water to which a few teaspoonfuls of vinegar have been added. All insects will crawl out.

Unsightly holes in the walls made by driving nails into the plaster can be filled with paraffin melted just enough to soften so as to be pressed firmly into the holes. It will keep the plaster from crumbling and will look neat.

Rusty steel should be soaked for several hours in linseed oil and then polished with unslaked lime or emery powder. This powder is easy to use if applied with a cork which has been dipped in the linseed oil.

HAS OILY HAIR.

My hair is really oily. Can you tell me what to do for it?—Mrs. C. N.

The white of an egg is good for oily hair. Beat it as stiff as possible and rub it into the hair until it seems wet. When dry, brush well.

Rural Health

By Dr. C. H. Lerrigo

CURING TUBERCULOSIS AT HOME.

NO doubt the long absence from home is the chief objection to taking treatment at a tuberculosis sanatorium, from the patient's viewpoint. A letter lies before me now in which a young wife asks for my "honest opinion" whether her husband "can stay at home and follow rules carefully and conquer the disease." There is much more in the letter, which convinces me that she does not want my honest opinion, but wants some justification for keeping her husband at home. My honest opinion is that any patient with tuberculosis who can get sanatorium treatment should take it. His chances for getting well are much greater than if he stays at home. It is not that home surroundings keep him from getting well, but home indulgences do. The sick man is not reasonable. He wants to do things that are not good for him. The home folks yield "just for this time," and so it goes.

But it is quite possible to win the fight against tuberculosis in your own home if you have the intelligence—plus backbone. A Wisconsin man named J. E. Stocker, who accomplished this end, has written a booklet

about it. Mr. Stocker made the great discovery about winning the fight—that it must be won, not by action, but by rest. Read what he says:

"Early in October, 1916, I went to bed again. I took all my meals in bed; I did not as much as move a finger unnecessarily; meats were cut for me into small pieces to avoid the exertion of my cutting them. I was as careful not to make any quick or sudden movement, as I would be if I were nursing a broken limb. Newspapers were cut for me, so I need not take up more than one sheet at a time. I did not bend down to pick up any objects from the floor, or reach up for things that were above my head. I did not put on or take off a shirt or bathrobe without assistance.

"I avoided too much reading and unnecessary talking; when friends called I let them do the talking, explaining to them the reason. Whenever it happened that I was alone in the house and a doorbell rang, I paid no attention to it. Under no circumstances would I get out of bed to answer a telephone call."

A patient who will give such conscientious attention to getting well as this, can get well at home as readily as at a sanatorium.



melts like a snowflake!

For canning, pickling or putting down kraut, this salt assures an even cure—and the kraut retains its natural white color. No waste; no undercure; no spoilage. Send for booklet, "New Truth About Salt."

THE COLONIAL SALT CO.
Dept. 15 AKRON, OHIO
Chicago Boston Buffalo Atlanta
Dallas Pittsburgh

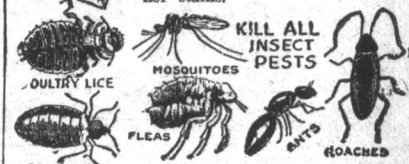
Colonial Special Farmer's Salt

"There's a Colonial Salt for every purpose"

Strange Discovery Wipes Out Flies

Dust of An Asiatic Flower Fanned In Air Is Quick Death to All Insect Pests. Odorless and Not a Poison.

It is now easy to rid the home, outbuildings, live-stock or shrubbery of flies and other obnoxious and disease carrying insect pests. The flower-dust of a remarkable plant, imported from the high, dry altitudes of Asia, when fanned in the air, does it by closing the respiratory (breathing) glands, producing sure stupefaction and death. It is odorless and absolutely harmless to humans, stock and domestic animals. It neither spots nor stains.



The only safe, sanitary method of killing all insect pests. Simply fan it in the air or on animals. A boon to housewives, farmers, dairymen and stock-keepers; especially valuable to dairies, as it enables the herd to eat and sleep in peace, with records of increased milk yields of 15 to 20 percent. Protects grain in storage from weevil and all insects.

Send Now On Free Trial
Send no money. Write today—a card will do, to Imperial Laboratories, 4451 Coca Cola Building, Kansas City, Missouri, and you will receive two regular full size \$1.00 cans of this strange new powder. Use it with the distinct understanding that if it does not rid your house, barn and livestock of flies and other insect pests, easily and quickly, even the special introductory price of only one dollar, which you pay the postman, plus postage, when this regular \$2.00 quantity of Imperial Insect Powder arrives, will be refunded. You do not risk a cent. End the deadly fly menace now.

Home-Made Candies! Improve Their Flavor with MAPLEINE

Adds a rich, mellow and delicious flavor to home-made confections. A perfect flavoring for cake frostings, fillings, pastries, dainty desserts. Your grocer sells Mapleine

Why Not PUT THIS NEW MILL ON YOUR OLD TOWER



Albion steel and wood mills are quiet and powerful. One-third the work, using parts of any other mill. Only main Pitman bearing, subject to wear. This is oilless, and easily replaceable. Covers by dependable weight without springs. Fits any 4-post steel tower. Why not shorten your chores hours now with a good Windmill? This is your chance—F. O. B. Albion. Erect it yourself. Ask your dealer, or write direct to

Union Steel Products Co. Ltd.
Dept. 44, Albion, Michigan, U.S.A.

CHICKS of QUALITY

Bred from Sires of
250 to 280 Egg Strains

BIG BARGAINS for June and July

Prices now within the reach of everybody. Get chicks in June and July and gather your harvest next winter. This is the most economical time to buy and the most favorable time to raise chicks. You can get them in the big outdoors at once, which saves labor, cuts down your feed bill and makes the chicks grow twice as fast. Bright, balmy days in November. The BIG SAVING in prices gives you an opportunity that you cannot afford to let pass by.

Chicks that are strong, peppy, from high production, egg-bred stock, are the chicks that pay. We have sacrificed on price but the same standard of supreme quality is always maintained regardless of price. Our breeders are producing heavily, our incubators working to full capacity, and this enables us to give these high-grade chicks at such extremely low prices.

EXTRA SPECIAL FOR JUNE AND JULY

| Varieties | 25 | 50 | 100 | 500 | 1000 |
|---|--------|--------|---------|---------|---------|
| Extra Selected Barron or Hollywood S. C. White Leghorns sired by 250 to 280 egg males | \$2.75 | \$5.25 | \$10.00 | \$45.00 | \$90.00 |
| Selected Barron White Leghorns | 2.50 | 4.75 | 9.00 | 42.50 | 80.00 |
| Extra Selected Sheppard Mottled Anconas | 3.00 | 5.75 | 11.00 | 52.50 | 100.00 |
| Selected Mottled Anconas | 2.50 | 4.75 | 9.00 | 42.50 | 80.00 |
| Selected Park's Bred-to-Lay Barred Rocks | 3.75 | 7.00 | 13.00 | 62.50 | 120.00 |
| Broiler, Mixed Chicks, Seven Cents Straight. | | | | | |

PULLETS AND BREEDING STOCK FOR SALE

After June 1st we offer Selected White Leghorn Pullets, 8 to 10 weeks old, at \$1.10 each; Sheppard Ancona Pullets at \$1.30 each and Barred Rock Pullets at \$1.50. Prices reduced for 100 or more.

After July 15th we have 700 choice Tom Barron and 400 Sheppard Ancona breeding hens for disposal at \$1.25 each. Also, selected cocks of same breeds for \$1.25 each. These must be sold to make room for our growing stock. Our space is limited. ORDER AT ONCE from this ad. We can make immediate shipment. Cash with order or sent C. O. D. if desired. All chicks sent to your door by parcel post prepaid, 100% alive delivery guaranteed. Pullets and stock shipped by express, charges collect. Catalog FREE.

SILVER WARD HATCHERY, Box 29, Zeeland, Mich.

WYNGARDEN'S "EGG-BRED" BABY CHICKS

English White Leghorns, Brown Leghorns, Anconas

Order Direct from this Ad. for Prompt Shipment

| Selected Matings | Extra Selected Matings |
|------------------|------------------------|
| \$ 8 per 100 | \$10 per 100 |
| \$35 per 500 | \$45 per 500 |

Odds and Ends, (Broilers) \$6.50 per 100; \$30 per 500

100% Live Delivery Guaranteed. For specifications of our different breeds and prices of pullets, send for illustrated catalog.

WYNGARDEN FARMS & HATCHERIES
Box M Zeeland Mich. U.S.A.

REDUCED PRICES FOR BEST CHICKS

For July and August—Pure-bred chicks, hatched right, large and strong, postpaid live delivery to your door.

| Breeds | 25 Chicks | 50 Chicks | 100 Chicks | 500 Chicks | 1000 Chicks |
|------------------|-----------|-----------|------------|------------|-------------|
| White Leghorns | \$2.50 | \$5.00 | \$9.00 | \$42.50 | \$85.00 |
| Barred Rocks | 3.00 | 6.00 | 11.00 | 52.50 | 105.00 |
| S. C. R. I. Reds | 3.00 | 6.00 | 11.00 | 52.50 | 105.00 |

Rock or Red Broilers \$9.00 Per Hundred.
Broilers, no breed guaranteed, \$7.00 Per Hundred.
Low prices on Pullets of all the above breeds.

Our strains are the best laying strains obtainable. Tancred and Barron White Leghorns, Parks' Barred Rocks and Michigan Agrl. College and Penn. R. I. Reds, direct from these breeders. Our birds have always proved their laying ability at official contests. Our chicks are hatched in the world's best incubator, the only incubator that never over-heats, and supplies moisture automatically, thus assuring the strongest chicks possible.

Order at once. Immediate delivery. Quality and price talk. Act now.
BRUMMER-FREDRICKSON POULTRY FARM, Box 20, Holland, Mich.

ONE MILLION GOOD LUCK CHICKS

ROCK BOTTOM PRICES ON READY MADE GOOD LUCK CHICKS \$8.00 PER 100 AND UP

| Varieties | 50 | 100 | 300 | 500 | 1000 |
|--|--------|--------|---------|---------|---------|
| White, Brown & Buff Leghorns, Anconas | \$4.75 | \$9.00 | \$25.50 | \$42.00 | \$80.00 |
| Barred Rocks, R. C. & S. C. & Rhode I. Reds | 6.00 | 11.50 | 33.00 | 52.00 | 100.00 |
| White Rocks, White Wyandottes | 7.00 | 13.50 | 39.00 | 62.00 | 120.00 |
| Black Minorcas, Buff Orpingtons | 7.00 | 13.50 | 39.00 | 62.00 | 120.00 |
| S. L. Wyandottes, Buff Minorcas, Lt. Brahmas | 9.00 | 17.00 | 48.00 | 80.00 | 160.00 |

Mixed Chicks, Light Breeds, \$8; Heavy Breeds, \$9.50 per 100 straight. Postpaid. FULL LIVE DELIVERY GUARANTEED. Bank Reference, Catalog Free, Member I. B. C. A. and Ohio C. A.

NEUHAUSER CHICK HATCHERIES, Box 72, NAPOLEON, OHIO.
CHOICE BREEDING BIRDS. Cockerels and Pullets all ages. Cocks and Hens. In any of our pure-bred varieties, at all times. Prices reasonable. Write your wants.

Cockerels and Pullets

Leghorns, Rocks, Reds, Wyandottes, Orpingtons, Anconas, Minorcas. Also Geese, Turkeys, Ducks. All Pure Breed.

Send for complete Circular with full description of stock and price list.

STATE FARMS ASSOCIATION, Kalamazoo, Mich.
Member International Baby Chick Association
Member Michigan State Farm Bureau

June-July and August Prices

Barred Rocks, White Rocks, White Wyandottes or R. I. Reds, 13c; White Leghorns or Broiler Chix, 10c in lots of 25 or more. We produce only one Grade—the Best. March, April, May, biggest in our 14 years of hatching. If convenient send full amount, if not send 10%, balance few days before chicks are to be shipped. Sept. Chix 14c straight. 100% Delivery by parcel post prepaid. **GREEN LAWN POULTRY FARM, Gus Hecht, Prop., Fenton, Mich.**

MICHIGAN FARMER

Classified Ads. pay well.
Try one.

MAY AND JUNE CHICKS

THE KIND THAT PAYS BIG PROFITS.

PINE BAY FARM CHICKS are backed by our 20 years' experience in the poultry business and a reputation for fair dealing with thousands of satisfied customers. Our experience protects you.

CHICKS FROM 6% UP FOR JUNE DELIVERY.

Rocks, Reds, Minorcas, Anconas and Leghorns. We breed and own International Egg Laying Contest Winners. Free Catalog. Get full prices before ordering elsewhere.

PINE BAY POULTRY FARM, HOLLAND, MICH.

Send No Money

for Silver Lake Chicks. We ship C. O. D. 100% live chicks, postpaid, from pure-bred, heavy laying stock. White & Brown Leghorns, 8c; Barred Rocks & Reds, 10c; White & Buff Rocks, 12c; Buff Orps., White Wyandottes, 12c; mixed chicks, 7c. Silver Lake Egg Farm, Box M, Silver Lake, Ind.

BRED TO LAY Barred Rock Chicks of quality. Culled by experts. \$10.00 per hundred, postpaid. 100% live delivery. Order from this ad. **KRUEPER POULTRY FARM & HATCHERY, Milan, Mich.**



July Poultry Notes

By R. G. Kirby

ALL information broadcasted concerning the cost of producing one dozen eggs should include a fair labor income for looking after the hens. This keeps city buyers from receiving a wrong impression of the cost of production. I find that a lot of time can be spent in the general management of a few hundred hens and if common labor is worth around fifty cents per hour, the time with the poultry should surely be worth that much.

I believe that the cost of production of everything from safety pins to motor cars represents the labor cost as well as the value of the raw material. So we should not give the impression that the cost of a dozen eggs is represented entirely by the value of the feed eaten by the hens during the time the eggs were produced.

Fatten Old Hens Before Selling.

When selling the old hens it pays to fatten any birds that are not already plump and heavy. I find that dealers like heavy hens. If the fattening process returned its only profit in making the buyer friendly to your stock the process would often be worth all its costs.

Fattening consists in cutting down the exercise and increasing the consumption of feed. Common poultry crates can be used as fattening crates by wiring feed troughs to the outside. Colony houses or brood coops can be used in the absence of regular fattening crates.

Rose Bugs Are Poisonous.

Birds of the heavy breeds which are already bagging down with fat are not liked by dealers as well as smooth, plump birds. Most buyers do not like hens as well when they are overfat as they buy too much fatty material which they do not like and seldom use to advantage.

Rose chafers are poisonous to the chicks, and are often found on roses and grape vines. If the range is free from high weeds it also reduces the danger of the chicks eating the chafers. If chicks die suddenly, examine the crop for the presence of these insects. They often kill young chicks so quickly that the insects have no time to pass on through the digestive tract.

Watch for stray cats on your poultry range. Sometimes city motorists decide to give the cat a vacation in the country and drop it off near a farm where it may find a home. These city cats may not know chicks from sparrows, and cause severe losses to the poultryman.

Keep Late-hatched Chicks Separate.

Late hatched chicks are often stunted or killed by being constantly trampled by older stock. Good husky pullets will soon be worth about a dollar each or more. The poultryman who would never allow 200 one dollar bills to blow around the farm, may allow 200 late hatched pullets to be trampled, underfed and poorly housed until the mortality rate is high and the chances for good fall and winter egg records are nearly ruined. Chicks are worthy of good care regardless of their hatching date, or they had better not be hatched at all.

Some observers report a heavy mortality among early hatched chicks which will show up later in a good demand for pullets and better prices than we expected for broilers. Already there are inquiries for pullets from farmers who have had bad luck with early hatches, due to the bad weather.

I do not think that many well developed pullets will be sold for less than one dollar each when they are eight to ten weeks old. This means that poultrymen must be successful in raising good pullets for themselves or plan on spending a lot of their egg money for new stock each year.

Paper Profits.

Pullet production looks like a great business on paper. You brood 300 chicks under coal-burning brooders and raise almost 150 good pullets. Then you sell the cockerels for enough to pay the cost of growing the whole flock. That leaves \$150 worth of pullets in each colony house to sell to other breeders. That means a rapid turnover on the money. But whoever heard of a poultryman getting rich selling ten weeks' old pullets, or broilers, either? There is a lot to learn about raising poultry and so many things can happen to the chicks, especially in the hands of beginners who often need the mor badly.

A few of the germs of acidosis are sometimes said to be present among healthy chicks, and yet seem to cause no trouble. But when the droppings are allowed to accumulate in colony houses until the growing stock roosts on heaps of dirty litter, the chances of infection are greatly increased. Soon a few of the chicks will be showing a lack of vigor and finally die. There are no hastily administered pills that will make up for heaps of dirt in the brooder houses when you wish to raise healthy chickens.

Separate Cockerels and Pullets.

Very few poultrymen on the farm have facilities for separating the cockerels and the pullets and giving them separate places to range. But if this can be done the pullets make a better development and payment, for the trouble is received in the fall when eggs are reaching their highest point and well-developed pullets are the best assurance of full egg baskets.

Only those poultrymen with plenty of range and colony houses can keep many cockerels to sell for breeders or raise many capons at a profit. These birds require a lot of feed and roosting space. The growing cockerels will take the space that the pullets need, and also frighten them from the feed hoppers. Nothing is gained by keeping so many cockerels that you lose more money on the pullets than you make on selling capons or males for breeding purposes.

Selling Consumers Broilers.

I have found that quite a few city buyers will buy broilers, live weight, at farm prices. They know they are obtaining fresh stock and have time after working hours for dressing the birds. For such sales the farmer needs accurate scales, pieces of strong string for tying the feet, and possibly a collection of old feed sacks in which the birds can be carried away by the motorists. The price per pound can be enough over the dealer's price to pay for the trouble of selling birds in small lots. Some of the profit in such deals rests in the fact that eight or ten small sales may save a trip to town with broilers when you are busy with other work and the extra profit on the small sales should pay amply for the trouble of making them.

One of the most useful jewels in the fine mechanism that takes us through our daily toil day after day, is happiness in the performance of our duties.

Live stock AND DAIRYING

PROFITS IN SHEEP.

MR. COLLISON, up in Isabella county, says his little flock of sheep is one of the best paying things about the farm. He goes on to say, "Maybe the reason is because I bought them cheap. This little flock of fifty-two head cost me \$3.50 each, three years ago. Their wool has paid the original cost each year since I have had them; they do not eat much but bean pods, a little good hay and some grass, and, except for a short period during the lambing season, require very little attention. So far we have met with no serious losses, from stomach worms; dogs, or disease, and we are able to figure about seventy-five per cent of the lamb crop as profits.—Pope.

LIVE STOCK EXPERIMENTS.

AT the Michigan Experiment Station a test was made to determine the value of skim-milk in feeding hogs. Pigs from the same litter were used in the test. They were fed for a like

period. One lot were runts while the other grew to good merchantable porkers. The runts were fed a complete mineral mixture in addition to corn and water. The well-developed lot got skim-milk and corn.

MICHIGAN feeders will be glad to learn that tests at the Iowa station gave very similar results to those conducted at the Michigan station as reported in last week's issue. The self-fed steers made more rapid gains, reached a higher condition, and required less feed per hundred pounds of gain, than did the hand-fed steers.

SKEPTICISM about the value of yeast for feeding hogs resulted from experiments recently finished at the M. A. C. Three lots of pigs were fed. All received corn and tankage. One lot got in addition, yeast fed in slop and another was fed a ration in which the yeast was allowed to ferment. The third lot had no yeast at all. The first mentioned paid for the rest of its feed and \$1.03 a bushel for the corn consumed; the next paid ninety-three cents for the corn; while the lot fed no yeast returned \$1.04 per bushel for corn. Overhead costs were not figured in these results.

WHILE hogs having free access to their rations required 383 pounds of grain for each 100 pounds of gain, as compared with 369 pounds in the case of hogs having their feed mixed by hand, the difference is not sufficient to offset the trouble and cost of mixing, according to work done at the M. A. C.

THE younger the steers, the less feed needed to make 100 pounds gain and a money profit. So experi-

SHEEP BUSINESS LOOKS BRIGHT.

THE lamb and wool situation in June was favorable from the growers' standpoint, according to Mr. Gibbons, of the department of agriculture. The sheep industry is now based on lambs and wool and prices of both were fairly satisfactory to the producers.

The number of lambs fed in the im-

portant feeding areas last winter was They keep imported dogs, Canadian dogs, and good dogs. They call the place Lynnley Collie Kennels. Yes, their dogs are all Collies, the real farmers' dog, and the Doctors (veterinary, by the way), take great pride in them.

Dog farms are somewhat rare in Michigan and perhaps it is well. Nevertheless there is a place on most every good stock farm for a dog. Not just any old dog, but a well-bred farm dog. It is man's and child's nature to like animal friends and pets, and the good Collie is a very popular favorite.

THE FARM COW WINS.

WHAT results the average farmer under average farm conditions can expect from the cow testing work being done by the cow testers all over the state has been aptly demonstrated by John P. Eddy, a member of Cow Testing Association No. 3, of Genesee county. A year ago, Mr. Eddy was taking care of his cows in the ordinary farm way of feeding what grains he produced on his own farm. His rations were not balanced and his feeding costs were high in comparison with his results.

A year ago he joined the cow testing association and followed the advice of his tester very closely with the result of getting his herd of grade and pure-bred Holsteins in first-class condition and as a final triumph for a year's faithful effort, he produced the high cow in his association. This cow, a grade Holstein, made a record of 2,058.4 pounds of milk with a butterfat content of 88.4 pounds. This remarkable record for an ordinary farm cow was made by a properly balanced ration and by good care given under ordinary farm conditions and by twice a day milking periods.

Mr. Wenger, the tester of this association is especially pleased with Mr. Eddy's record because this herd is a common farm herd of good type dairy cows, but without the advantage of systematic breeding and feeding of many of the other herds in his association. Genesee County Cow Testing Association No. 3 is composed of some of the most highly advertised and best producing herds in the state of Michigan.—S. Morrish.

URGES PRODUCTION OF SEED STOCK.

FIVE pure-bred Guernsey and two pure-bred Holstein bulls were disposed of in Chippewa county by the dairy special during its visit to the county. Mr. D. L. McMillan, county agricultural agent, calls attention to the need in Chippewa county of diversifying farm methods in favor of less hay and more dairying for the farm income. The agent also calls attention to the opportunities that lie in seed-producing farms. Northern-grown seeds are preferred everywhere as the best. Such seed must be grown on clean farms and in large enough quantities to be capable of shipment to outside points in car lots, he says. Sunflowers will be featured in Chippewa this year for ensilage.

Young steers make better use of feed than do older ones, according to tests made at the Ohio experiment station.

High Milkers for May

THE following table shows ten high cows in milk production in Michigan during the month of May, out of 21,032 cows under cow testing association work in seventy-seven associations reporting.

| Association and Owner. | Breed. | Age. | Date Fresh. | Lbs. Milk. | Lbs. Fat. |
|-----------------------------------|--------|------|-------------|------------|-----------|
| Kent-West Alpine, J. N. Lamoreaux | PB H | 4 | 4-27-24 | 3,233.3 | **97.9 |
| Calhoun, Lakewood Dairy | PB H | M | 5-4-24 | 3,116.0 | **82.5 |
| Genesee No. 7, J. E. Post | PB H | M | | 3,108.0 | **71.4 |
| Genesee No. 7, J. E. Post | PB H | M | | 3,015.0 | **87.4 |
| Kalamazoo No. 1, H. B. McMurray | PB H | 4 | 3-23-24 | 2,997.1 | **95.9 |
| Ionia-Belding Mich. Reformatory | PB H | M | 4-12-24 | 2,985.0 | **86.6 |
| Kent-West Alpine, John C. Buth | PB H | 4 | 3-20-24 | 2,650.5 | 76.8 |
| Van Buren-North, T. C. Tiedebohl | PB H | 6 | 3-23-24 | 2,650.0 | **79.5 |
| Lapeer, D. C. Pierson | PB H | 5 | 4-1-24 | 2,604.0 | **78.1 |
| Van Buren-North, D. C. Tiedebohl | PB H | M | 2-26-24 | 2,573.0 | **90.0 |

*Three times a day milking.

**Four times a day milking.

BREEDERS' DIRECTORY

Change of Copy or Cancellations must reach us Twelve Days before date of publication

Forest Hills Guernseys

FOR SALE—12-mo-old bull, dam's record, 450 lbs. fat at 2 yrs, \$200. Three-mo-old bull, calf \$50; yearling bull, \$150. Three-year-old bull, for sale or lease, \$25 per year. M. HOMPE, R. 5, Grand Rapids, Mich.

FOR SALE Registered Guernsey 33 months old, with heifer calf 2 weeks old. May Rose and Golden Secret lines direct. MRS. F. D. CAMPAU, Grandville, Mich.

Wallinwood Guernseys

Young bulls from A. R. cows for sale. F. W. WALLIN, Jenison, Mich.

FOR SALE Two Guernsey cows and a bull. S. W. SOMMER, Dryden, Mich.

Reg. Guernseys Choice Bull Calf 10 mo. old, out of a good A. R. O. cow. J. M. WILLIAMS, North Adams, Mich.

Guernseys For sale, Reg. yearling heifers, bull calves, May Rose breeding, prices very reasonable. W. W. Burdick, Williamston, Mich.

An Extra Good Calf

Ready for service early this fall. Born October 3, 1923, and well grown. An exceptionally good individual straight as an arrow, and with good depth of body. About one-third white. His sire is a son of Echo Sylvia King Model, Senior Sire at Traverse City State Hospital and from a 27-lb. four-year-old with a record of 900 lbs. of butter and 19,969 lbs. of milk in 305 days. His dam traces directly to King Segis Pontiac and King of the Pontiacs. Bred at the Michigan School for Deaf. Send for pedigree and price.

Bureau of Animal Industry, Department C. Lansing, Michigan.

HOLSTEIN CATTLE one coming in Sept. 30. Getting too old to care for them. JAKE PUTNAM, R. 2, Hemlock, Mich.

Hereford Steers

60 wt. around 850 lbs.; 74 wt. around 775 lbs. 88 wt. around 650 lbs.; 44 wt. around 600 lbs. 46 wt. around 550 lbs.; 50 wt. around 500 lbs. Deep reds, good grass flesh. Some bunches just fair flesh account of short pasture. Real quality Herefords are usually market toppers when finished. Will sell your choice, one car load or all. Give number and weight preferred. VAN B. BALDWIN, Eldon, Wapello Co., Iowa.

HEREFORD BULLS

We are offering some exceptional bargains in young Hereford bulls. HARWOOD HEREFORD FARMS, Six miles south of Ionia, on M-43.

BUTTER BRED JERSEY BULLS FOR SALE CRYSTAL SPRING STOCK FARM, Silver Creek, Allegan County, Michigan

15 Cows, 4 bulls from R. of M. Cows. Chance to select from herd of 70. Some fresh, others bred for fall freshening. Colon C. Lillie, Coopersville, Mich.

Registered Jersey cattle, young bulls, for sale. Tuberculin tested. J. L. CARTER, Lake Odessa, Mich.

BIDWELL SHORTHORNS Revolution Jr. 573938 heads accredited herd 28017. Now offering 2 January roan bull calves of exceptional merit, reasonably priced. BIDWELL STOCK FARM, Box D, Tecumseh, Mich.

Real Milking Shorthorns As I have sold my entire herd of cattle, 35 head of hand-milked cows, pair fed calves and young heifers. CHAS. A. BRAY, Okemos, Mich.

FOR SALE

A few choice young Shorthorn bulls. Write for delivered prices. H. B. PETERS & SON, Elsie, Mich.

FOR SALE One cow, two heifers, and beef breeding. Young cattle sired by Revolution, Jr. Cheap if taken soon. Also a few young cows of strong milking inheritance. BELAND & BELAND, Tecumseh, Mich.

RED POLLED CATTLE M Buy from Michigan's Leading Herd. Owned by F. WESTBROOK BROS., Ionia, Mich.

YEARLING Brown Swiss Bull for sale. Also Poland China, Fall Boars. A. A. FELDKAMP, Manchester, Mich.

HOGS

DUROC SPRING PIGS

Every Pig guaranteed satisfactory when you receive it. Send for actual photo and description. STATE FARMS ASSOCIATION, Kalamazoo, Mich. Member Michigan State Farm Bureau

DUROC fall and spring boars of the best breeding and quality, at prices to sell. Fall pigs at bargain prices. W. C. Taylor, Milan, Mich.

DUROCS We have Sons and Gr. Sons of Great Orion Sensation. Twice International Winner. Buy your fall boar now and save money. Let us tell you about our Sensation Durocs. J. M. WILLIAMS, No. Adams, Mich.

Chester White Boars Size, type, quality and price will please you. Registered free. F. W. ALEXANDER, Vassar, Mich.

Francisco Farm Poland Chinas

Our spring pigs are the best ever. 75 head to choose from. Outstanding herd boars at \$25; pairs \$40; trios, \$50. \$5.00 off if you come and get them. P. P. POPE, R. 3, Mt. Pleasant, Mich.

Fall Pigs either sex, by the great Boar, The Wolverine. Priced reasonable. Boar of dams. W. E. Livingston, Parma, Mich.

DUROCS Stock for sale at all times, write for breeding and prices. F. J. Drott, Monroe, Mich., R. No. 1.

Additional Stock Ads. on Page 35



THE LATEST MARKET REPORTS



GRAIN QUOTATIONS,

Wednesday, July 2.
Monday, July 7.

Wheat.

Detroit.—No. 1 red \$1.18; No. 2 red \$1.17; No. 3 red \$1.14; No. 2 white \$1.19; No. 2 mixed \$1.18.

Chicago.—Sept., \$1.13½ @ 1.13¾; December \$1.16½ @ 1.16¾; May \$1.21½. Toledo.—Cash \$1.16½ @ 1.17½.

Corn.

Detroit.—No. 3, \$1; No. 4 yellow 95c. Chicago.—September 93¾c; December 83½ @ 83¾c; May 83¾c.

Oats.

Detroit.—Cash No. 2 white 56½c; No. 2, 54½c. Chicago.—September 43¾c; December 45¾c.

Rye.

Detroit.—Cash No. 2, 83c. Chicago.—September 77½c; December 80½c. Toledo.—80c.

Barley.

Barley, malting 90c; feeding 85c.

Beans.

Detroit.—Immediate and prompt shipment \$4.40 per cwt. Chicago.—Navy \$5; red kidneys \$8. New York.—Choice pea at \$5.35; red kidneys \$8.75.

Seeds.

Detroit.—Prime red clover cash at \$11.40; alsike \$10.65; timothy \$3.70.

Hay.

Strong.—No. 1 timothy \$23.50 @ 24; standard and light mixed \$22.50 @ 23; No. 2 timothy \$21 @ 22; No. 1 clover at \$19 @ 20; No. 1 clover mixed \$20 @ 21; wheat and oat straw \$11.50 @ 12; rye straw \$13 @ 14.

Feeds.

Bran \$30; standard middlings \$30; fine do \$34; cracked corn \$44; coarse cornmeal \$42; chop at \$38 per ton in 100-lb. sacks.

WHEAT

Wheat prices have averaged higher in the last week but finished with a small net loss. The inception of the movement of new crop hard winter wheat in the southwest, coupled with evidence of improvement in the probable yield of both winter and spring wheat, has checked speculative ardor to some extent. Fears of a crop scare in Canada and the fact that wheat is moving into a stronger statistical position for the coming year tend to prevent more than minor setbacks. Cash demand for wheat has kept pace with the movement to primary markets which has been augmented recently by fairly large receipts of new wheat at Kansas markets. Prices at Liverpool, Winnipeg and Buenos Aires have advanced in the last few days so that our markets are on an export basis. Canada's old crop is cleaning up rather rapidly and Argentina evidently thinks that her remaining surplus can be sold to better advantage later on.

CORN

Unofficial forecasts of the new corn crop range around 2,600,000,000 bushels, compared with 3,054,000,000 bushels harvested last year. Estimates on the condition of the crop range from 73 to 76 per cent, which is the poorest ever recorded for this date. It is doubtful if these forecasts reflect the lateness of the crop and the danger of damage from frost. Clearer skies in the last few days and indications of warmer weather have tended to allay alarm over the new crop. Cash prices are firm and producers are selling very sparingly owing to the rush of the harvest season.

OATS

The condition of the oats crop is about the same as a month ago with unofficial estimates pointing to a yield slightly smaller than last year. Oats prices have weakened in the last few days. The fact that new oats will be available within a month, and the tendency for the corn market to slow down were the governing influences.

BEANS

Demand for beans has increased slightly since the first of the month and prices are \$4.55 @ 4.60 per 100 lbs. for C. H. P. whites, f. o. b. Michigan for immediate or prompt shipment. From this time on the progress of the new crop will have much to do with the trend of the market.

RYE

Rye has had a big advance but has weakened in the last few days and is still cheap compared with either wheat or corn. The new crop both in

this country and Europe makes a poor showing. Increased exports promise to take care of the large carry-over from the 1923 crop. Strong speculative interests, which have been operating in corn and oats, are now active in the rye market.

SEEDS

Seed prices are slightly lower than a week ago. Recent rains have improved the prospects for the new crop of both clover and timothy. Foreign crops also have improved. Cash demand is negligible. The trend of the market will depend upon the weather in the next two months which will determine the final outcome of the seed harvest.

FEEDS

The advance in feed prices has ceased for the present and the markets are quiet, with prices about the same as a week ago. Wheat feeds are slightly easier as new wheat is beginning to come on the market and flour demand has broadened so that mills have increased their scale of operations. Corn feeds are firm as a result of the strength in cash corn and limited output by corn industries. Oil meals are quiet and prices are unchanged.

HAY

Hay markets generally are dull but receipts of good quality hay are light and scarcely equal to the demand. Prices for lower grades are weak and draggy. New crop prospects have improved as a result of rains, but early cuttings of all kinds are expected to show a high percentage of weedy and damaged hay. Continued drought in the far west is steadily reducing the prospective yield of alfalfa hay in that territory.

WOOL

Wool buying remains on a restricted scale as mills are only taking hold when bargains are offered, or they are compelled to buy particular grades to fill orders for goods. The recent spurt in the west seems to have subsided. Prices at the seaboard show little change, with weakness evident in spots, while other holders are awaiting developments rather than to take the prices now offered. The goods market shows little change but a more

hopeful feeling prevails and is helping to support wool. Consumption of wool by domestic mills during May amounted to only about 45,000,000 pounds grease equivalent weight, the smallest for any month since March, 1921. The prices at the London sale during the week were slightly lower than the last sale except on good merinos which were unchanged.

POTATOES

Potato markets are rather weak owing to the arrival in consuming centers of heavy shipments from producing districts in the previous week. Shipments have declined again the last few days, however. Virginia is the principal contributor at the present time and is furnishing about forty per cent of the total carlot movement. Shipments are about average for this season during the last three years.

POULTRY AND EGGS

Demand for fresh eggs narrowed last week and prices declined further. Receipts showed a decrease under the previous week, however, and as the supply of fresh firsts normally diminishes after July 1, the decline on this grade should be only temporary. Producers of first quality eggs should realize substantial premiums during the next two months. Poultry prices were firm on most kinds last week. Receipts of broilers were large, however, so that prices declined in spite of an active holiday demand.

Chicago.—Eggs, miscellaneous 23 @ 23½c; dirties 22 @ 22½c; checks 22c; fresh firsts 24 @ 24½c; ordinary firsts 22½ @ 23c. Live poultry, hens 21½c; broilers 28 @ 29c; roosters 14c; ducks 20c; geese 12c; turkeys 20c.

Detroit.—Eggs, fresh candled and graded 24½ @ 25½c. Live poultry broilers 44 @ 45c; heavy hens 24c; light hens 18 @ 19c; roosters 15 @ 16c; geese 15c; ducks 25 @ 27c; turkeys 25c.

BUTTER

Butter prices weakened early last week but as demand for both immediate consumption and for storage improved, the loss was speedily regained. Receipts at the four markets during the week were smaller than in the preceding week. Production shows no decrease, however. Holdings of butter in 26 cities on July 1 were, 55,361,111 pounds, an increase of more than

7,000,000 pounds over the same date a year ago. Foreign butter markets are firm and little import butter is expected within the next month. Prices on 92-score creamery butter, Chicago, 39c; New York 41½c; Boston 41½c; Philadelphia 42c; 90-score centralized Chicago 39c; New York 39½ @ 39¾c. In Detroit butter sells for 46 @ 48c.

CHEESE

Cheese prices continued unchanged last week although lower prices were anticipated. Trading was quiet and confined largely to small lots for immediate needs. Twins were in best demand. Held cheese is firm although demand for it is small. Chicago, twins 18½ @ 19c; single daisies 18½ @ 19½c; double daisies at 18½ @ 18¾c; longhorns 18½ @ 19½c.

New York, flats 20 @ 20½c; single daisies 20½ @ 21c; Young Americas at 20½ @ 21¾c.

Philadelphia, flats 20½ @ 21c; single daisies 20½ @ 21c; longhorns 20½ @ 20¾c.

PEACHES

Carlot shipments of peaches dropped off sharply about ten days ago and prices strengthened as the lighter movement became apparent in consuming centers. Georgia Carmens are bringing \$3.25 @ 4 per six-basket carrier in eastern markets. The movement is picking up again and the upturn in quotations may not hold.

APPLES

Very few boxed apples are moving at the present time and new stock is being shipped in larger amounts than old crop barreled apples. Tennessee Transparents are quoted around \$3 per bushel basket in mid-western cities.

DETROIT CITY MARKET

Local red raspberries made their initial appearance on the markets on Saturday morning and sold easily at 75c a quart. Other berries and vegetables were in good supply and the brisk demand cleaned up most good offerings readily. Strawberries were abundant, many were small and in poor condition; good ones moved easily at \$3.50 @ 4.25 a case, but seconds had slow sale. Some cherries were in light demand at \$3 @ 4 per 24-qt. case. The supply of carrots and beets was light and cleaned up quickly at 85c @ \$1 a dozen. The moderate offering of tomatoes moved to higher prices, with fancy stock going at \$3.50 per 14-lb. basket. Celery was a ready seller and most greens moved easier. A few spring ducks retailed at 35 @ 38c per pound. Broilers were in demand, and eggs were higher. Prices: Potatoes 75 @ 80c bu; peas \$2.50 @ 3.50 bu; radishes, round 60 @ 75c dozen bunches; long 80c @ \$1 dozen bunches; rhubarb 40 @ 50c dozen bunches; strawberries fancy \$5 @ 6 per 24-qt. case; No. 1, at \$3.25 @ 4.25 case; tomatoes, hothouse, fancy \$3.50 basket; No. 2, \$2 @ 2.50 per 14-lb. basket; No. 1, \$2.75 @ 3 per 14-lb. basket; gooseberries \$6 a case; turnip tops 50c bu; eggs, wholesale 32c per dozen; retail 35 @ 40c; old hens, retail 26c lb; broilers, retail 35 @ 50c; ducks 35 @ 38c lb.

HOG PRODUCTION BACK TO NORMAL.

The 1924 spring pig crop was 8,000,000 head fewer than in 1923, according to a survey made by the United States Department of Agriculture. This is a reduction of 20 per cent. Most of the decrease will be apparent in the number slaughtered under federal inspection, since there is no great variation from year to year in the farm or other local slaughter.

The survey also indicates a reduction of 10 to 15 per cent in the 1924 fall pig crop, based on farmers' intentions on June 1. Corn prices have gone up since that date and hog prices have been weak, with prospects of an unfavorable feeding ratio all summer, so that it is probable that the actual decline in fall pigs will be even greater. The crop last fall failed to come up to the intentions report, when similar price conditions prevailed during the summer.

Besides the reduction in numbers of hogs in prospect for the next 12 to 15 months as shown by this survey, producers are marketing at lighter weights than when the corn-hog price ratio was more favorable. In April, the latest month for which the complete record is available, the average dressed weight of hogs slaughtered under federal inspection was 170.2 pounds against 176.5 pounds in April,

Live Stock Market Service

Monday, July 7.

DETROIT

Cattle.

Receipts 428. Market steady.
Good to choice yearlings \$ 8.00 @ 9.75
Best heavy steers 8.50 @ 9.00
Handyweight butchers ... 7.50 @ 8.00
Mixed steers and heifers 7.25 @ 8.50
Handy light butchers.... 6.25 @ 6.75
Light butchers 5.00 @ 6.00
Best cows 5.00 @ 5.50
Butcher cows 4.00 @ 4.50
Cutters 3.00 @ 3.25
Canners 2.50 @ 2.75
Choice bulls 5.75 @ 6.00
Bologna bulls 4.50 @ 5.25
Stock bulls 3.75 @ 4.25
Feeders 5.50 @ 7.00
Stockers 4.50 @ 7.00
Milkers \$45.00 @ 85.00

Veal Calves.

Receipts 457. Market \$2 higher.
Best \$12.50 @ 13.00
Culls and heavies 7.00 @ 11.50

Sheep and Lambs.

Receipts 302. Market steady.
Best spring lambs \$14.50 @ 15.00
Fair 11.00 @ 12.50
Light to common 7.00 @ 8.50
Fair to good sheep 5.00 @ 6.00
Culls and common 1.50 @ 4.00

Hogs.

Receipts 733. Market 10c higher.
Mixed and heavy Yorkers \$ 7.50
Pigs 6.50
Light lights 7.00
Stags 4.00 @ 4.50
Roughs 5.90

CHICAGO

Hogs.

Receipts 69,000. Market is steady to 5c higher than last Thursday's close. Light and killing pigs are 15 @ 25c higher. The bulk of the good weighty butchers sold at \$7.20 @ 7.25; tops at \$7.30; bulk of good 170 to 210 lbs. average \$7 @ 7.15; bulk of packing sows \$6.25 @ 6.50; good and choice sows and

strong weight killing pigs \$6 @ 6.25.

Cattle.

Receipts 27,000. Market consists largely of steers which sold slow, and mostly at 25c lower. Prospects are for further decline; early tops for handy weights \$10.25; some went higher. The bulk of the early sales of yearlings and fed steers took place at \$8.25 @ 9.75; she stock is scarce and uneven, with prices about steady; other grades were mostly steady; bulk of vealers at \$9.50 @ 10; a few choice brought \$11.

Sheep and Lambs.

Receipts 25,000. The market was fairly active with early sales of native offerings around 25c lower; bidding was 50c lower on fat range lambs. Sheep are scarce and steady. The better grade of fat lambs brought \$13.75; a few reached \$13.85; natives largely \$9; fat ewes \$6; feeding prospects steady.

LAMB MARKET HIGHER.

Lamb prices have advanced steadily and are \$1 @ 1.25 higher than a week ago. The country shut off the supply on the extreme break, the southeastern movement seems to be a little higher and the heavy run of range lambs is not yet under way. Feeders took a larger share of arrivals and the dressed lamb market has recovered a fraction of recent heavy losses. Lower prices are likely to be seen, however, as the total supply will more than double in the next three months. Feeders will take a big share of the increase, but the number available for slaughter in August and September invariably is larger than in June. Feeders are taking hold rather vigorously already, as total shipments of feeding and breeding sheep from 12 leading markets in June were around 60 per cent larger than a year ago.

SWINE POPULATION DECREASED.

THE federal pig survey which was taken throughout the United States several weeks ago by rural mail carriers has been tabulated by the bureau of agricultural economics and indicates a marked reduction in the swine industry from the high level of the last two years. The results, as released by Verne H. Church, agricultural statistician for Michigan, and L. Whitney Watkins, state commissioner of agriculture, show that the farmers of Michigan saved 81.2 per cent of the pigs farrowed this spring. In the corn belt states, the percentage was 82.9 and for the United States as a whole, 80.2. The number of sows farrowed this spring as compared with one year ago is 78.5 per cent in Michigan, 79.7 in the corn belt, and 78.8 in the entire United States. The number bred for fall farrowing as compared with last year is 88.7 per cent in Michigan, 89.6 in the corn belt, and 94.1 in the United States. The average number of pigs saved per litter shows some advantage in Michigan over other states, being 5.7 as compared with 5.02 in the corn belt and 5.05 in the entire country.

COUNTY CROP REPORTS.

Cheboygan Co., June 30.—Hay crop will be short, perhaps about fifty per cent of an average. Both fall wheat and spring grains are looking good, the latter is short on account of late sowing. Potatoes are just coming through the ground. Judging from the present indications, fruit will be an enormous crop. Farmers are having a hard time securing help. Hay is selling at \$12 per ton; oats 60c per bushel; wheat \$1; butter 35c; eggs 30c.—J. C.

Van Buren Co., June 30.—Wheat and oats are much below the average. A good acreage of corn has been planted but the stand is poor and the plants small. Clover and alfalfa are bumper crops. Sweet cherries are almost a complete failure, other varieties much better. Strawberries are selling abundantly at \$1.25@2 per 16-quart case. Apples will be a small crop. Grapes are looking good.—S. C.

Bay Co., June 30.—Beans and potatoes are looking fine. Corn is small and of a poor stand. Fruit promises to be a good crop. Plant diseases and insects are not bothering much as yet. Labor conditions are somewhat improved. Hay crop is very short. Wheat looks fine. Little chickens are doing nicely. Wheat \$1.08; corn 92c; oats 56c; rye 60c; barley \$1.60 per cwt; buckwheat \$2 per cwt; beans \$4.10; hay \$16@18 per ton; butter 35c; eggs 24c; wool 30c per lb.—W. D.

Branch Co., June 30.—Corn is about three weeks late and will be about seventy per cent of a normal crop. Potatoes are looking good. The little chick crop is large. Butter-fat is selling at 37c; eggs 23c; wool 35c; clover hay is only a fair crop, while alfalfa will be 100 per cent.—C. H. S.

Genesee Co., June 30.—Regular showers have kept crops growing in fine shape. Corn is looking fine but about two weeks late. Beans show a good stand, but there are reports of insects working in them. Alfalfa is now being cut, while clover and timothy are growing well and will probably produce a high tonnage. Butter-fat 40c; eggs 27c; there is the usual crop of chickens.—L. R. P.

Missaukee Co., July 1.—We had a good rain here Saturday, June 28—the first in nearly two months. Corn, beans and potatoes all look good but are eight to ten days late. Hay will be a short crop. This rain will make a splendid crop of huckleberries. Cream brings 40@41c; eggs 22c; old hens 16c. Not many grasshoppers as yet. There will be a fair crop of plums early, and fall apples, but not many winter apples. Cherries around here were hurt by a late frost.—E. H.

Veterinary.

CONDUCTED BY DR. W. C. FAIR.

Advice through this column is given free to our subscribers. Letters should state fully the history and symptoms of each case and give name and address of the writer. Initials only are published. When a reply by mail is requested the service becomes private practice and \$1 must be enclosed.

Sore Eyes.—I have fifty head of young cattle on pasture, and nearly all of them have one sore eye, and one steer is affected in both eyes. A white scum seems to cover the eyeball, but the health of the cattle is not affected. Are such cattle fit for beef? H. N., Filion, Mich.—Blow one part calomel and four parts boric acid into eye two or three times a week, and the cattle will soon recover. Yes, the carcass is fit for food.

Loss of Appetite.—Have young cow that has practically lost her appetite, and of course, gives very little milk. E. R. F., Mendon, Mich.—Give one-quarter dram of calomel and one ounce of bicarbonate of soda at dose, twice a day for four days, then give one-half ounce of gentian and one ounce of baking soda at a dose two or three times a day. If grass fails to open her bowels, give epsom salts.

Cow Leaks Milk.—What can be done to prevent a cow between milkings of leaking milk? H. A., Arnold, Mich.—Why don't you milk her three times daily? After milking dry end of teat and apply flexible collodion. Teat plugs are recommended, but unless they are thoroughly cleaned before they are used each time the udder is likely to become infected and ruined.

Acute Indigestion.—My cows have had access to white clover pasture, two of them were found dead in the morning, both seemed to be well the night before. We do not believe they died of bloat. F. K., Holloway, Mich.—Eating too much moist clover was the cause of their deaths. Stable the cows at night time, let them eat dry green clover.

Stomach Worms.—Have some sheep that are not doing well. They are in good pasture but they are poor, inclined to eat rotten wood, grow weak and die. I believe they may have stomach worms. J. J. M., Beulah, Mich.—If your sheep have stomach worms, give three ounces of a one per cent copper sulphate solution as a drench, one dose only. This is a dose for a full grown sheep and is usually very effective treatment for stomach worms.

HUCKLEBERRY BASKETS

Standard quart waxlined paper berry baskets are the best for huckleberries. They have tight corners, resist moisture, and are neat and clean. Prices are as follows, by freight or express f. o. b. cars Lansing:

600 Waxlined paper baskets.....\$ 4.15
1000 Waxlined paper baskets..... 6.25
5000 Waxlined paper baskets..... 30.00

Special prices in larger quantities to dealers or those running marshes.

We offer 16-qt. crates for the above baskets as follows, f. o. b. cars Lansing:

10 16-qt. crates K. D.....\$ 2.10
25 16-qt. crates K. D..... 5.00
50 16-qt. crates K. D..... 9.50
100 16-qt. crates K. D..... 18.00

SPECIAL—We will send sample package of 200 waxlined paper berry baskets, postpaid for \$1.75.

M. H. HUNT & SON,
Box 525, Lansing, Mich.

ABERDEEN ANGUS OFFERING AN OPPORTUNITY

To Obtain a "MISS BURGESS" BULL

We are offering "Burgess of Wildwood," 366749, sired by the world famous Imp. "Edgar of Dalmeny" and out of the imported "Miss Burgess 17th of Kirkton."

This bull is a real herd leader and a splendid show prospect. Price \$500.

We are also able to offer "ENLIGHTENER," a splendid "Enchantress" bull, by "Edgar of Dalmeny." Price \$300.

These animals are ideal types, have soundness, beauty, breeding ability and ancestral quality.

U. S. accredited tuberculosis free herd.

WILDWOOD FARMS, Orion, Mich.

W. E. SCRIPPS, Prop.

SIDNEY SMITH, Supt.

Reduce Your Labor — Increase Your Profits

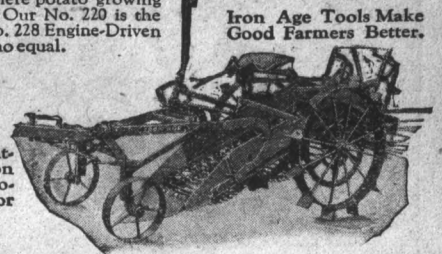
THIS Iron Age Digger is a labor-saver, time-saver and money-maker. It gets all the potatoes without injury. For ease of operation and low upkeep it has no equal. Made of the best materials by skilled workmen from designs worked out and tested by practical farmers. Used in all the big potato sections where potato growing is a science and Diggers receive hardest usage. Our No. 220 is the last word in traction Potato Diggers. The No. 228 Engine-Driven Digger, with automatic throwout clutch, has no equal.

IRON AGE Potato Diggers

Iron Age Diggers, like Iron Age Potato Planters and Iron Age Sprayers and other Iron Age Implements, are long lived. They produce more at less cost. Write us today for full particulars.

FRED H. BATEMAN CO.

633 So. Washington Square, Philadelphia, Pa.



Digger No. 220—Latest Model

MINERAL COMPOUND In use over 50 years
FOR SYMPTOMS OF HEAVES
Booklet Free
\$3.25 Box guaranteed to give satisfaction or money back. \$1.10 Box Sufficient for ordinary cases.
MINERAL REMEDY CO. 483 Fourth Ave., Pittsburgh, Pa.

FOR 50 YEARS
MILLER-BEAN HARVESTERS
HAVE LED ALL IMITATORS.
Write Le Roy Plow Co., Le Roy, N. Y.

SILVER-BLACK FOXES
Pedigreed and registered. Honest service—right prices. Write
The Central Silver-Black Fox Farm
Weidman, Mich.

Holmes, Stuve Co., 2429 Riopelle St.
Commission Merchants. Dressed Beef, Hogs, calves, poultry, Live & Dressed. Provisions, etc. Correspondence Solicited. Ref. Wayne County & Home Savings Bank. Bradstreet. Detroit, Mich. Cherry 7654

CLASSIFIED ADVERTISING

This classified advertising department is established for the convenience of Michigan farmers. Small advertisements bring best results under classified headings. Try it for want ads and for advertising miscellaneous articles for sale or exchange. Poultry advertising will be run in this department at classified rates, or in display columns at commercial rates. Rates 8 cents a word, each insertion, on orders for less than four insertions; for four or more consecutive insertions 6 cents a word. Count as a word each abbreviation, initial or number. No display type or illustrations admitted. Remittances must accompany order. Real estate and live stock advertising have separate departments and are not accepted as classified. Minimum charge, 10 words.

| Rates in Effect October 7, 1922 | | | |
|---------------------------------|----------|------------|---------------|
| Words | One time | Four times | One time |
| 10..... | \$0.80 | \$2.40 | 26.....\$2.08 |
| 11..... | .88 | 2.64 | 27.....2.16 |
| 12..... | .96 | 2.88 | 28.....2.24 |
| 13..... | 1.04 | 3.12 | 29.....2.32 |
| 14..... | 1.12 | 3.36 | 30.....2.40 |
| 15..... | 1.20 | 3.60 | 31.....2.48 |
| 16..... | 1.28 | 3.84 | 32.....2.56 |
| 17..... | 1.36 | 4.08 | 33.....2.64 |
| 18..... | 1.44 | 4.32 | 34.....2.72 |
| 19..... | 1.52 | 4.56 | 35.....2.80 |
| 20..... | 1.60 | 4.80 | 36.....2.88 |
| 21..... | 1.68 | 5.04 | 37.....2.96 |
| 22..... | 1.76 | 5.28 | 38.....3.04 |
| 23..... | 1.84 | 5.52 | 39.....3.12 |
| 24..... | 1.92 | 5.76 | 40.....3.20 |
| 25..... | 2.00 | 6.00 | 41.....3.28 |

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

MISCELLANEOUS

CORN HARVESTER cuts and piles on harvester or windrows. Man and horse cuts and shocks equal Corn Binder. Sold in every state. Only \$25 with bundle ying attachment. Testimonials and catalog FREE showing picture of Harvester. Process Harvester Co., Salina, Kansas.

2,000,000 CABBAGE PLANTS, leading varieties, early and late. Prepaid, 100 45c; 500 \$1.25; 1,000 \$2.25. Express 5,000 \$7.50. Cauliflower, 100 65c. Satisfaction guaranteed. List free. W. J. Myers, Rt. 2, Massillon, Ohio.

FOR SALE—Complete outfit for distilling Spearmint and Peppermint. Boiler 60x14. Still, etc., also plant roots. For particulars address Mrs. J. H. Milligan, Factories Bldg., Toledo, Ohio.

12-25 TRACTOR—24x42 separator, 6-roll husker and 3-bottom plows. Will separate. Leon Peacock, Paw Paw, Mich.

CULL BEANS \$23 ton, sacks included, f. o. b. Port Huron. Port Huron Storage & Bean Co., Port Huron, Mich.

FEDERAL TRUCK, 3-Ton Hoist Body. 4851 Helen Ave., Detroit, Mich.

REAL ESTATE

CONVENIENT DETROIT—60 Acres with 3 Horses, Cows, 8 Hogs, poultry, tools, furniture, 50 cords wood, etc., included if taken soon; onions yielded \$750 acre this farm; excellent schools, stores, churches; splendid markets; 50 acres loamy tillage, 2 tons hay acre, 10-cow pasture, 36 apple trees, pears, cherries, berries, nuts; good 10-room house, elm shade, large hip-roof barn, poultry house, etc. To settle affairs all only \$5,800, easy terms. Picture and details page 29 Illus. Bargain Catalog money-making farms. Copy free. Strout Farm Agency, 205BC Kresge Bldg., Detroit, Mich.

Ship Your Poultry

Direct to
DETROIT BEEF CO.

Write for our shippers' guide, how to ship live poultry, how to dress and ship dressed poultry.
Detroit Beef Co., Detroit, Mich.

HOGS

O. I. C. & Chester White Big type with QUALITY. All the Grand Champion, O. I. C.'s at Michigan State Fair, 1922 & 1923, were bred at Newman's Stock Farm. Also a few Choice Spring Pigs Cheap. Newman's Stock Farm, Marlette, Mich.

O. I. C.'s Spring pigs, Sired by "Giant Boy" and "Jumbo Bell Boy," also Brown Swiss bulls. MILO H. PETERSON, R. 2, Ionia, Mich.

Hampshire Bred Gilts and Boar Pigs, not your wants. John W. Snyder, R. 4, St. Johns, Mich.

SHEEP

SHEEP will find "Acres of Diamonds" among your grass and woods by turning the grass and woods into hard cash. Are the only live stock on the farm which will return 100% on their investment. Am pricing so that our crop of lambs and wool will BREEDING EWES much more than pay for them. Can you use either Breeding Ewes or Feeding Wethers in car lots to eat your grass? GEO. M. WILBER, Marysville, Ohio.

400 BREEDING EWES

For sale, in lots of 50 or more. Also 300 yearlings. ALMOND B. CHAPMAN & SON, South Rockwood, Mich.

WANT FARM in good condition, well located on good highway—where electric lights and power are available. Give full particulars and price. Port Huron Storage & Bean Co., Port Huron, Mich.

80 ACRES of good Cut-over Land for Sale, at Algonquin Co. F. W. Risse, 1046 Ford Ave., H. P.

FIRST-CLASS grazing or farming land for sale at reasonable prices. Geo. R. Emerick, Harrisville, Mich.

PET STOCK

GERMAN SHEPHERD—Airedales, Collies, Old English Shepherd dogs, puppies. 10c Illustrated instruction list. W. R. Watson, Box 35, Macou, Mo.

COLLIE PUPS, blooded, 10 weeks old. Arthur Bortel, Britton, Mich.

BABY CHICKS

BABY CHICKS ready each Monday. Last hatch July 21st. White Wyandottes, \$12 per 100; Banded Rocks and S. C. or R. C. Reds, \$11 per 100; Anconas, White or Brown Leghorns, \$8.00 per 100; Heavy Mix, \$9.00 per 100; Light Mix, \$7.00 per 100. Rocks and Reds—all blood-tested. H. H. Pierce, Jerome, Mich.

PURE-BRED CHICKS—reduced prices. Banded Rocks, White Wyandottes, Reds, Buff Orpingtons, Light Brahmans, 100, \$10; 50, \$5.50. Postpaid, 100% delivery. Member International Chick Ass'n. Earlville Hatchery, Earlville, Illinois.

CHICKS—All Popular Varieties. Egg production and Standard Quality. State Fair Winners. No better chicks available at same price. Extremely low prices after May 20th. Litchfield Hatchery, Litchfield, Mich.

QUALITY CHICKS—Postpaid, Leghorns, 10c. Rocks, Reds, Orpingtons, Wyandottes, Anconas, 12c. Lt. Brahmans, 15c. Assorted, 7c. Catalog gives quantity price. Missouri Poultry Farms, Columbia, Mo.

S. C. BUFF LEGHORN Baby Chicks from good laying strain. Willard Webster, Bath, Mich.

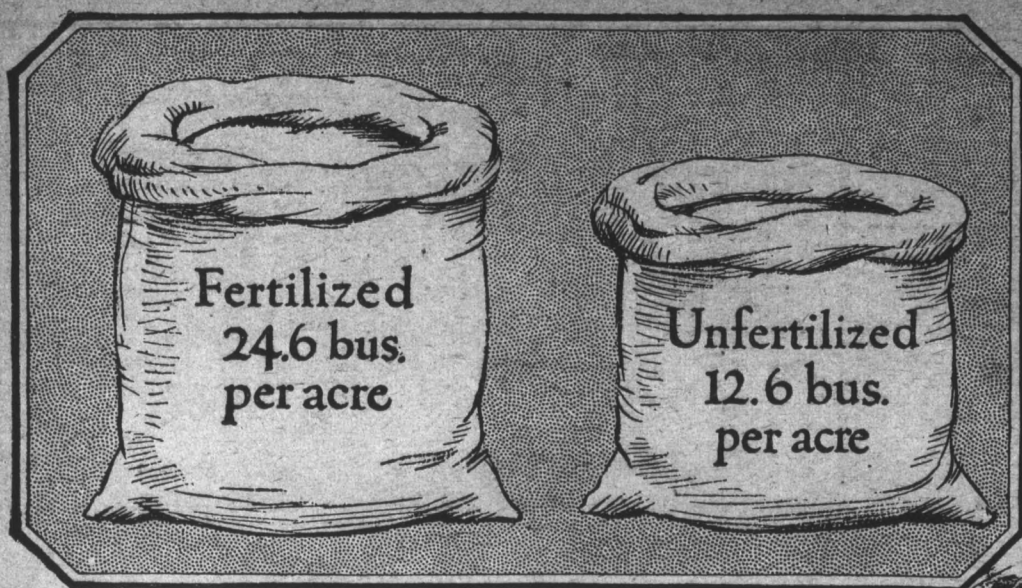
RICHARDSON'S ROCKY RIDGE pure Parks strain Banded Rock Baby Chicks, \$15 per 100. Hanover, Mich.

POULTRY

TURKEY EGGS from our famous Mammoth Bronze, Bourbon Red, Narragansett, and White, Holland Rocks, \$4.00 for 12 eggs; \$7.50 for 24, prepaid. Hens either breed, \$6.00 each, two for \$11.00. All orders filled promptly. Walter Bros., Powhatan Point, Ohio.

WHITE HOLLAND TURKEYS—Addressed, stamped envelope for quick reply. Alden Whitcomb, Byron Center, Mich.

Mention The Michigan Farmer When Writing Advertisers



Double your wheat yield per acre

ACTUAL results over a long period of years obtained by Experiment Stations of six of the leading winter wheat states show the following average acre yields:

With fertilizers 24.6 bushels
Without fertilizers . . . 12.6 bushels

Increase due to fertilizers 12.0 bushels

Yield and quality determine your profit. By a liberal use of Swift's Red Steer Fertilizer, you can increase your profit by growing a large yield of good quality wheat.

In addition, Swift's Red Steer Fertilizer practically assures a good catch of clover—more hay after your wheat harvest.

Use Swift's Red Steer Fertilizers on wheat

Selection of fertilizer is most important. Swift's Red Steer Fertilizers are based on years of practical experience and careful research work. Only the best and most productive forms of plant food are used in their manufacture. They are backed by the Swift reputation for quality, zealously maintained for over 50 years.

Look for the Red Steer on the bag. It is your guarantee of highest possible quality.

Your Experiment Station advocates late planting to avoid the Hessian fly. The use of Swift's Red Steer Fertilizers enables you to plant late and still give your crop a quick, vigorous start, with the heavy top growth and strong root system which are needed to withstand winter freezing and heaving.

Let the A. S. A. help you

The sign of the A. S. A. (Authorized Swift Agent) signifies service to the farmer. Let the A. S. A. help you increase your per acre yield of wheat. Discuss with him your farming problems—learn from him the benefits that you may expect from Swift's Red Steer Fertilizers, the analysis you should use and the amount to apply.

In co-operation with your County Agent and your State Agricultural College, the A. S. A. and Swift & Company are striving to give the farmer a worth while service.

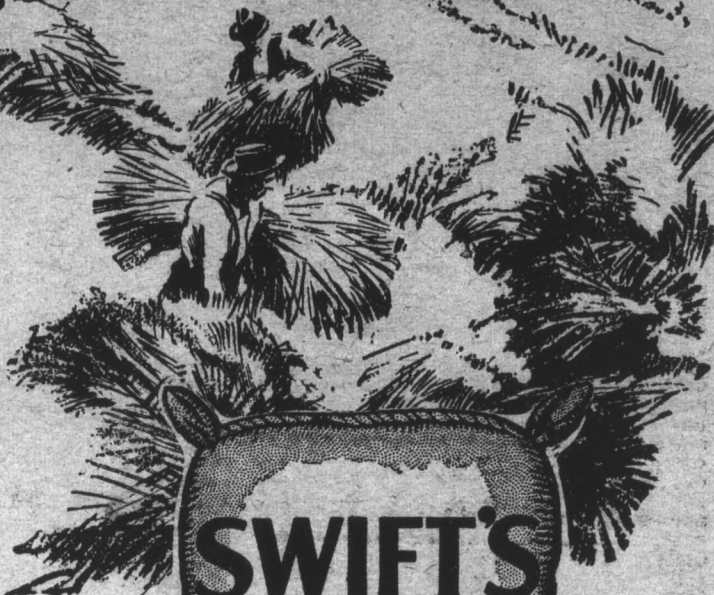
Be sure of a large yield of better quality wheat and a good clover catch by a liberal use of Swift's Red Steer Fertilizers.

Look for the sign of the A. S. A. If you do not locate it, write us.

Swift & Company

Fertilizer Works, Dept. 45

Hammond, Ind.



A. S. A. says:

Our Agricultural College and Experiment Station have made definite recommendations as to the best analyses of fertilizer to use. The Michigan Agricultural Experiment Station recommends these analyses for wheat and rye:

Sand, light sandy loams, heavy sandy loams, silt loams and clay loams—With no mixed meadow, manure or green manure in rotation, 2-16-2 or 2-12-2; with mixed meadow, clover, alfalfa, or soy beans, or manure, in rotation, acid phosphate.

Muck soil—0-12-12 or muriate of potash.

Swift & Company is co-operating with the Michigan Agricultural Experiment Station and heartily endorses these recommendations, and is giving the farmer full plant food value by selling such analyses.

You are invited to call and discuss your fertilizer needs. Let us tell you how others are making a good profit by a liberal use of Swift's Red Steer Fertilizers.



asa
Authorized Swift Agent

"IT PAYS TO USE THEM"