

MICHIGAN FARMER

AND
LIVE STOCK
PUBLISHED WEEKLY.

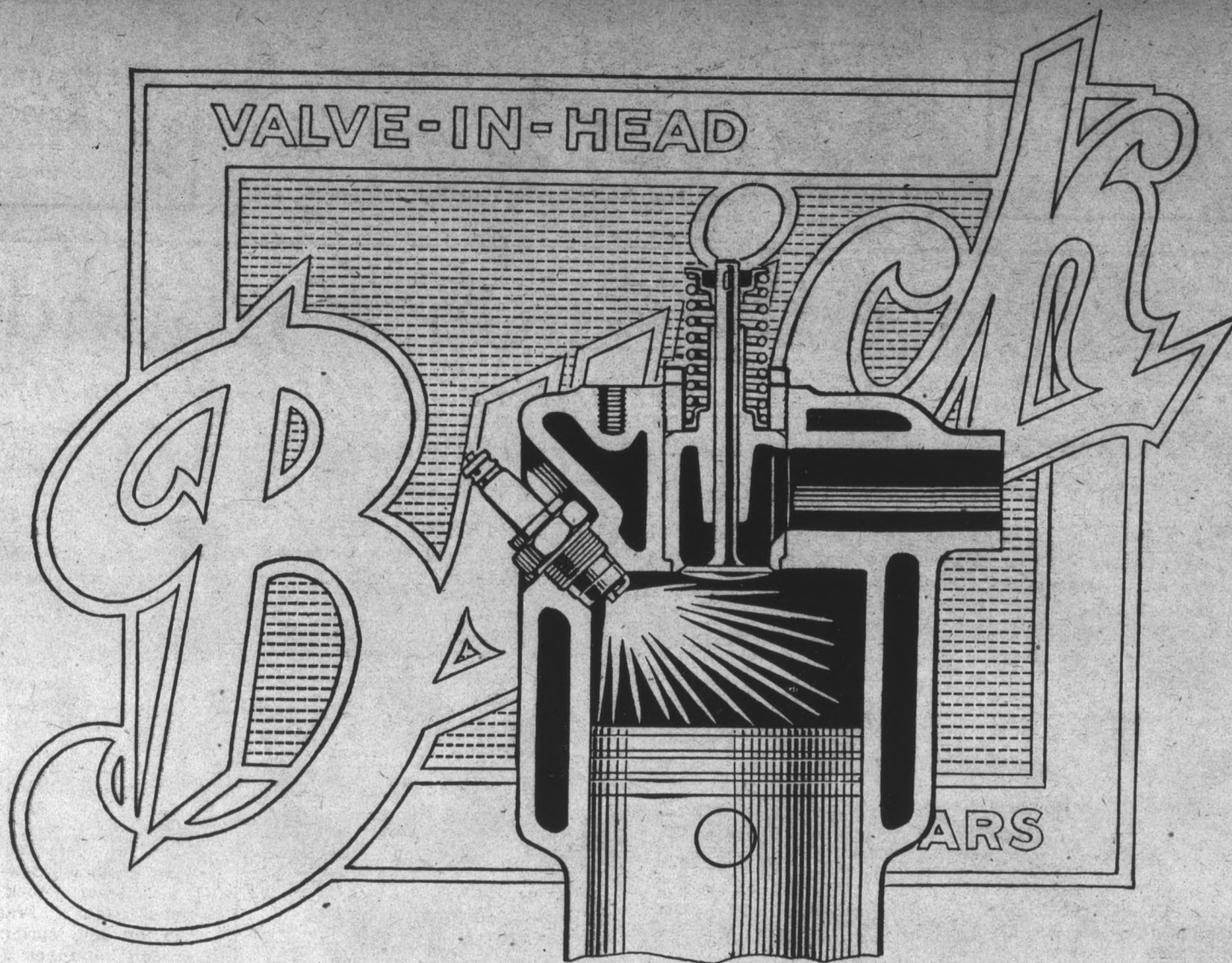
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DETROIT, MICH., SATURDAY, MARCH 1, 1924

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FIVE YEARS \$3.00





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VOLUME CLXII

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 NINE

Beautify the Home Grounds

Some Planning Now and a Little Work In Spring Will Produce Wonderful Results

WHY not fix up the farm home grounds?"

"All right, but there's no money in it," I said.

"No, there isn't," replied George Snyder, "but there's satisfaction and pleasure that money won't buy. That's why we went to the trouble to beautify our farm home grounds."

As I looked from where I stood across a smooth, open, green lawn bordered by trees and shrubs, to a little white house nestling among green leaves and flowers I couldn't help remarking, "What a cozy home." I just knew there must be a happy little wife inside. There was.

"But didn't it take a great amount of time and money?" was my next question.

George laughed. "I planned it in a few winter evenings and carried it out one spring day. It did cost a little—for everything worth while costs something—but the amount was small. The only care it now requires is cutting the grass and spading about the shrubs and pruning them once a year."

I asked Mr. Snyder to tell me how he did it, that I might tell the readers of the Michigan Farmer. Surely, I thought, there are farmers in Michigan who are tired of bleak and barren farm homes and would like to do just what George has done but don't feel quite certain how to go about it.

This is what he told me.

"The first thing I did was to measure the house and grounds and make a sketch of them letting one-sixteenth inch on the paper represent one foot on the ground. Then on this plan I marked the shrubby beds."

"How did you decide where to put them and what size and shape to make them?" I interrupted.

"Well, you see," said George, "I took a short course in landscape gardening at the agricultural college. We were taught there that shrubs should be placed next to the house. They may be grouped down each side of the lawn from the house to the street. Nothing but trees should be planted in the middle of the lawn. Shrubs and flower beds in the lawn are as out of place as the proverbial dress suit in a corn field. In width, the beds may be anything from three feet up. Lay out the beds in broad curves, making them wide at some places and narrow at others. Make them wide and rounded at the corners. That's the way I made mine."

George showed me his sketch and

By Howard K. Menhinick

offered to give me a copy of it together with a list of what he considered the best shrubs, indicating whether they were tall, medium, or low-growing. He was true to his word, and a few days later I received the sketch shown and the following list. The numbers on the sketch correspond to the numbers on the list.

Tall Growing.

1. Bush Honeysuckle (*Lonicera morrowi*). Fragrant flowers in the spring.

5. Winged Burning Bush (*Evonymus alatus*). Interesting "winged" bark and red berries in fall.

Medium-Growing.

6. Bridal Wreath (*Spirea van houttei*). A mass of white flowers in the spring.

7. Siberian Pea Tree (*Caragana arborescens*). Early yellow flowers that look like sweet peas.

8. Deutzia (*Deutzia lemoinei*). Creamy white flowers in the spring.

vulgaris). Red berries in the fall.

13. Japanese Brier Rose (*Rosa rugosa*). Pink or white roses followed by large red fruit.

14. Red-stemmed dogwood (*Cornus sibirica*). Attractive red bark in the winter. One very similar to this grows wild in Michigan woodlots. Get this from your own farm.

15. White Kerria (*Rhodotypos kerrioides*). Single white flowers in May. Good for shady spots.

Low-Growing.

16. Pink Spirea (*Spirea anthony walteri*). Pink flowers nearly all summer.

17. Japanese Barberry (*Berberis thunbergii*). Red berries in winter. This shrub will grow in almost any location.

18. Slender Deutzia (*Deutzia gracilis*). White flowers in the spring.

19. Dwarf Mock Orange (*Philadelphus nanus*). Fragrant white flowers in the early spring.

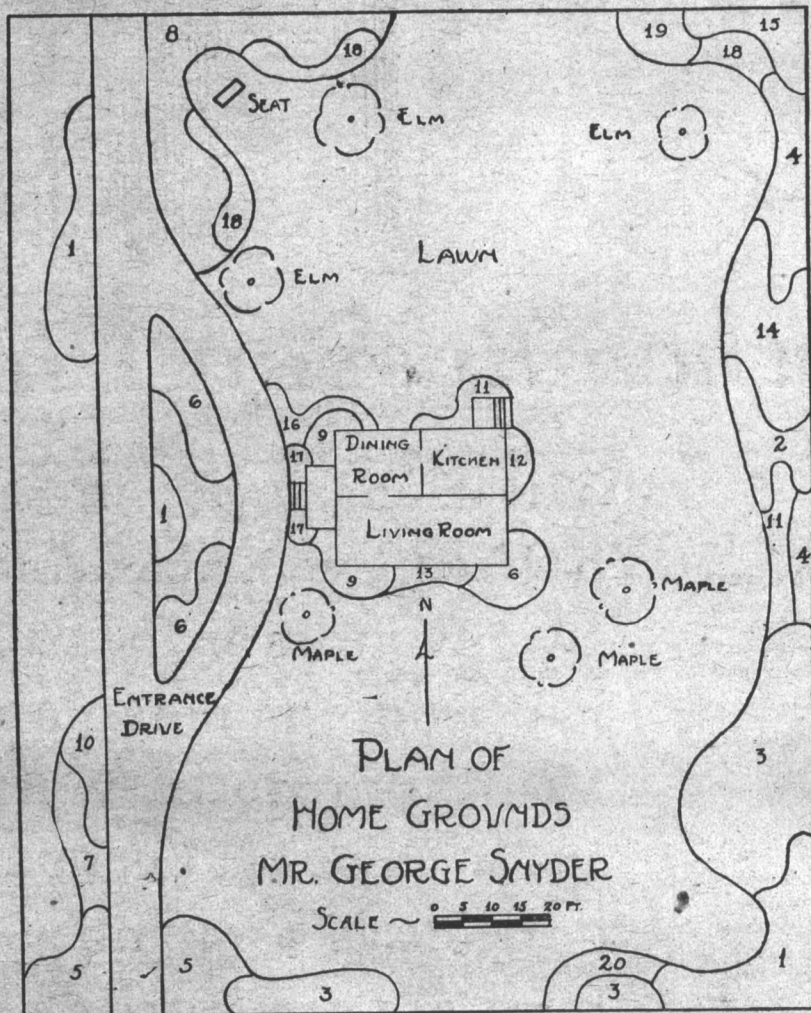
20. Hydrangea (*Hydrangea paniculata grandiflora*). I mense white flower clusters in late summer changing color in autumn.

"You'll notice," continued Mr. Snyder, pointing to his plan, "that I have laid out irregular shaped areas for each kind of shrub and marked the kind. I try to place no three shrubs in a straight line. It has been my experience that it is better to group five or six of one kind together and use only two or three kinds in any one bed. The tall shrubs grow large so I plant them about five feet apart; the medium, four feet, and the low-growing, three feet. Needless to say, I planted the tall-growing ones at the back and the lower-growing ones in front."

"I did this planning during the winter and made a list of the shrubs that I needed."

"In the early spring, as soon as the ground could be worked, I marked out the beds as I had planned them. I spaded them up with a lot of well-rotted manure. Then I went to a local nurseryman, picked out the shrubs so I could see what I was getting, brought them home, and planted them according to the plan."

"You see, after all there's not very much to my landscape gardening but it's pleasant to live with and my wife and I take a great deal of pleasure in our home grounds. I am convinced that it actually helps me to sell my thoroughbred stock for folks say, 'He is successful so his stock must be good.' It is."



Red berries later.

2. Sweet Syringa (*Philadelphus coronarius*). Very fragrant white flowers in the spring.

3. Golden Bell (*Forsythia fortunei*). Yellow flowers before leaves in the spring.

4. Lilac (*Syringa vulgaris*). Well-known flowers about Decoration Day.

9. Pink Weigela (*Weigela rosea*). Pink, trumpet-shaped flowers in the spring.

10. Amoor River Privet (*Ligustrum amurense*). Fine, almost evergreen foliage and black berries in the fall.

11. Snowberry (*Symphoricarpos racemosus*). White berries in the fall.

12. Coral Berry (*Symphoricarpos*

WHEN Granger Whitney, a former engineer, got his fruit farm at Williamston into productiveness, he found that the commission men were not paying enough for the quality of fruit he was packing, so he sent some to friends in Detroit.

These apples were not packed in barrels, but arranged neatly and firmly in bushel boxes. They appealed to the friends who got them, and as a result Mr. Whitney got a few orders for a bushel box of apples per month.

The business has so increased that Mr. Whitney now sells his entire output in this way. He stores his apples on the farm and each month, or in some cases twice a month, sends a

bushel box to the regular customers. In the first and second zones, he sends by parcel post, but when the customer is in the third zone he has found express the cheaper.

Of course, there is much detail connected with this business, especially in writing letters and billing, but this extra detailed work is well paid for in the increased price he gets for his products. The collections are good, as the apples usually go to people in

moderate or well-to-do circumstances.

By the humoring of the customers and this extra detail work, Mr. Whitney has worked up a business in which he sets a regular and unvarying price for his fruit. This year he is getting \$3.00 for McIntosh and Spies, and \$2.75 for the other varieties.

This is the way it figures out. The buyer has been offering fifty cents a bushel for good stock, the commission man promised about seventy-five cents,

while his mail sales net him about \$1.50 for the apples alone. The other \$1.50 to make up the \$3.00 he charges is used up in packing, transportation, boxes, etc.

The varieties Mr. Whitney is using in this business are Wealthy, McIntosh, Wagener and Spy. They all take well with his customers.

His crop of nearly a thousand bushels is being disposed of in this way. The question is, will the continued increase in the production of his young orchard find such a market when it totals several thousand bushels? One is led to believe that it will, for thus far Mr. Whitney has more trade than he has fruit for.

Selling Apples by Mail

A Method that Brings Extra Profits

MICHIGAN SECTION THE CAPPER FARM PRESS



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DETROIT, MARCH 1, 1924

CURRENT COMMENT

A fool and his money are soon spotted.

It is said that competition is the life of trade. We thoroughly believe that compensation would inject much vigor in agriculture.

Let's Start An Honor Roll

To gain greater respect for, and satisfaction from agriculture, is the purpose of a state-wide campaign inaugurated by agricultural leaders in the state of North Carolina on Washington's birthday.

On that day meetings were held in the schools of the state to stimulate activity in a program looking toward an improvement in the farm homes and farms. This, the leaders hope to do by pledging individual farmers to perform definite things. Each farmer who signs one of the pledges agrees to perform at least seven of the following ten items. If he succeeds he will be placed upon the roll of honor and be granted a certificate. The items are:

1. To raise enough corn and hay to carry him through 1925 without buying any.
2. To raise enough meat to supply the family for the year.
3. To have a garden.
4. To provide milk and butter for the family the whole year through.
5. To keep at least thirty hens.
6. To improve the orchard.
7. To work for richer land.
8. To enroll one or more of the children in club work.
9. To add some home conveniences.
10. To beautify the homestead either by painting the house, making a lawn, or planting trees or shrubs.

Why not start an honor roll in Michigan? It, no doubt, could be worked through local farm organizations.

Oil and Mud

OIL and water will not mix. But oil and mud will. Especially when politics is used for a paddle. What a "grand and glorious feelin'" it must give to certain of our noble statesmen down at Washington to have fall into their crucibles, on the eve of a pre-election campaign, a product so adaptable for smearing up the reputations of their political rivals.

Aside from politics there are really but three vital questions involved in the notorious naval oil leases of Elk Hills to Mr. Doheny and Teapot Dome to Mr. Sinclair. These questions are:

First. Were the leases legally made? The courts alone can decide this question.

Second. Were the leases, as made, to the best interests of the government?

Notwithstanding the undoubtedly honest defense of the leases on this ground by Secretary Denby, the consensus of intelligent public opinion is almost unanimously adverse.

Third. Did fraud, hush money or bribery play a part in the making of the leases? Enormous loans that are uncollectable, fat salaries, highly profitable speculations in stocks, and extreme retainer fees look suspicious. Thorough investigations should in time decide this question, and if men are found guilty they should be made to suffer the full penalty of the law, regardless of rank, position or previous governmental station.

A great deal of imagination and exaggeration have found play in this so-called "Oil Scandal." Politicians have found in "Teapot Dome" an ideal means of ruining one another's reputations. Political mud has been spattered, not only upon those involved in the case, but upon those connected with those involved in the case, and upon those connected with those connected with those involved in the case.

So, if you have tanked up your flivver on graft gasoline or rode with anyone who has, better not run for office this year. Your political opponent will surely find it out and your reputation will be ruined.

Such is the exaggerated state of present-day politics. It is bad, very bad, and worse during a presidential election year. The people can be depended upon, however, to size things up about right. Their intuition helps them to distinguish closely between political bunk or mud slinging and the facts.

That is the fine thing about this great country of ours. The people back home, on the farms and in the shops, are too intelligent to be led off into extremes of thought and action; they are the great balance wheel of our western civilization; the power is in their hands; they know it, and can be depended upon to keep the machinery of government tuned up and in order.

Another Marketing Problem

IT is well known that, due to the lack of orderly marketing, the Michigan apple crop does not bring the growers what similar crops do in other states which are in better position to market their crops throughout the consuming season.

The lack of shipping point storage space makes it necessary for the Michigan grower to crowd his fruit on the market at harvest time, the period of the lowest prices, whereas New York and other apple states hold large portions of their crops in storage to be marketed as the demand indicates.

Figures recently presented by the government indicate that there is a peculiar situation in the celery marketing activities of the state, one which perhaps parallels the apple situation.

These figures show that while Michigan grows the highest quality celery in the country, with the possible exception of California, she gets the lowest prices.

New York, a good celery state, got twenty-eight per cent more in price than Michigan. The report also says that New York had 118,806 crates in storage at Christmas time, while no mention was made of storage in Michigan.

It is true that prices are cheaper to growers in sections where a commodity is freely grown beyond its consumptive needs, but Michigan has only about one-fifth of the celery acreage in the country. Therefore, this factor should not make the state hold the lowest place in prices during the past four years as compared with other cel-

ery growing sections. Its consuming centers are not far enough away to make a freight differential a potent factor in the prices.

The conclusion must then be that the Michigan celery growers lack the same facilities for orderly marketing that the apple growers, and it is very likely that further investigation would reveal another good reason why Michigan should have more shipping point storage space.

Stabilizing Land Values

TO the average person much of the joy of living is lost by reason of uncertainties. Fluctuations in values are one of these. Real estate prices are not expected from the list. Wide fluctuations, both generally and locally, have been no small factor in the recent up-setting of agriculture.

In certain cities an unique plan is now being tried: Men qualified and interested in real estate from its various angles are called upon to appraise the value of certain parcels of real estate in each of the important sections of a city. These appraisals are then published for the benefit of all.

Would it not be helpful to agriculture to have similar appraisals made of typical farms in various parts of a county? Owners, buyers, sellers, tenants, landlords, and those striving to learn what it costs to grow potatoes or any other crop would have a very definite interest.

Would not such an appraisal also aid in stabilizing land values and, by avoiding the wide fluctuations of prices in transfers through such a standard, discourage frenzied land speculation?

Son Shows Dad

IN these days of boys' and girls' club work, we frequently find examples of how a junior member of the family wins out in farming contests with father through the use of methods adapted to modern conditions, rather than following those practices useful in pioneer farming.

Here is an illustration taken from life: John Shutt and his son grew potatoes last year on adjoining land. The father used the same type of seed he had always planted. He applied seventeen loads of manure and no fertilizer.

The son used certified seed which was green and sprouted, the same number of loads of manure his father had put on, and 475 pounds of a 4-8-6 fertilizer to the acre.

The results were astonishing, particularly to the father. He secured from his field an average of seventy-five bushels per acre at a cost of \$1.13 per bushel. The lot planted by the son yielded 227.6 bushels per acre at a cost of thirty-six cents per bushel.

This shows how it is possible for one man to lose and another to make a profit under identical soil and weather conditions. To keep on the winning side of the farming game it often becomes necessary to figure on low costs per bushel or pound, rather than on low acreage costs.

Back to the Farm

IT is the general impression that when a young man leaves the farm to go to college, he gets so many new-fangled ideas that they wean him away from the farm. In other words, when the young man leaves for college it is thought to mean "good-bye" to the farm.

The findings of the M. A. C. Alumni Association, however, prove this to be untrue. Four-fifths of those who have graduated from the M. A. C. agricultural course stick to agriculture. The greatest part of this four-fifths go

back to actual farming, others teach agriculture in high schools or in colleges, while a few engage in scientific agricultural investigation work, or as agricultural experts for industrial concerns.

Thus, in various ways, these book farmers do farming much good. Some do it by example, others by teachings, and still others by contributing to farming through their agricultural research.

The degree to which these college men help themselves and others depends upon their ability to use what their college course has given them. College work is not the key to success: it just makes success easier. A college education furnishes equipment; one's success depends on how he is able to use that equipment. What college graduates have accomplished indicates that most of them know how to use what they get at college. The more young men we can get to go to college and then back to the farm, the better it will be for farming.

Talkin'

TALKIN' about talkin', Jim Hudson says there ain't nothin' to it; all you gotta do is to open your mouth and let some noise out. I guess Jim is about right, 'cause I find that talkin' is a lotta what you call unnecessary noise. Like a loose fender on your car, etc., it ain't essenshuff for the 'well-bein' of the world, and besides it's irritatin'.

Talkin' is supposed to be the means of communicatin' we human bein's got given to us by the All Mighty fer the purposes of lettin' other folks know what we want them to know. But talkin' has evolved, so to speak, considerable since Adam was a babe, and my scientific investigashuns of what you call modern talkin' shows it's what you call a effishunt floppin' around of the tongue to keep the other folks from knowin' what you don't want them to know or to make



them believe what ain't.

I think we ought to rise and give the ladies a vote o' thanks fer what they have done fer talkin'. It's since there was more womin that talking has improved, or got worse, I don't know which. But, the fax is, if it wasn't fer the womin there wouldn't be much talkin'. The poets wouldn't have nothin' to rave about and there wouldn't be no scandals nor stories you gotta tell in a whisper, if it wasn't fer them. The womin of the world is responsible fer most of the conversashun of today.

Now, talkin' ain't the only language there is. Fer inst., there is the language of the eyes which talks powerfully loud sometimes. Take Sophie, all she is gotta do is to look at me and I know right away she is wantin' me to get to work. And there is that high school girl down the road, when she looks my way when I meet her, I know right away she wants to ride to town in my oughto. And I guess my face says I want her to, 'cause all I gotta do is stop and she gets right in.

My conclushuns is, you don't have to talk much to give your message to the world. There's Rev. Jasper, his eyes is deep and full; there ain't nothin' covered up in them; they's tellin' the story of honesty and peace. But Banker Penny is got small sharp eyes what says he is shrewd and economical.

When a fellow is talkin' all the time I think there is nothin' surrounded by a lotta noise. If they started a aunti-noise crusade there would be a lotta talkin' what would be stopped, 'cause it's a public newsance.

Guess I've talked enough about talkin'. If I say any more the ladies won't like me.

HY SYCKLE.

Fordson

A new year dawns on the farm with the coming of spring work.

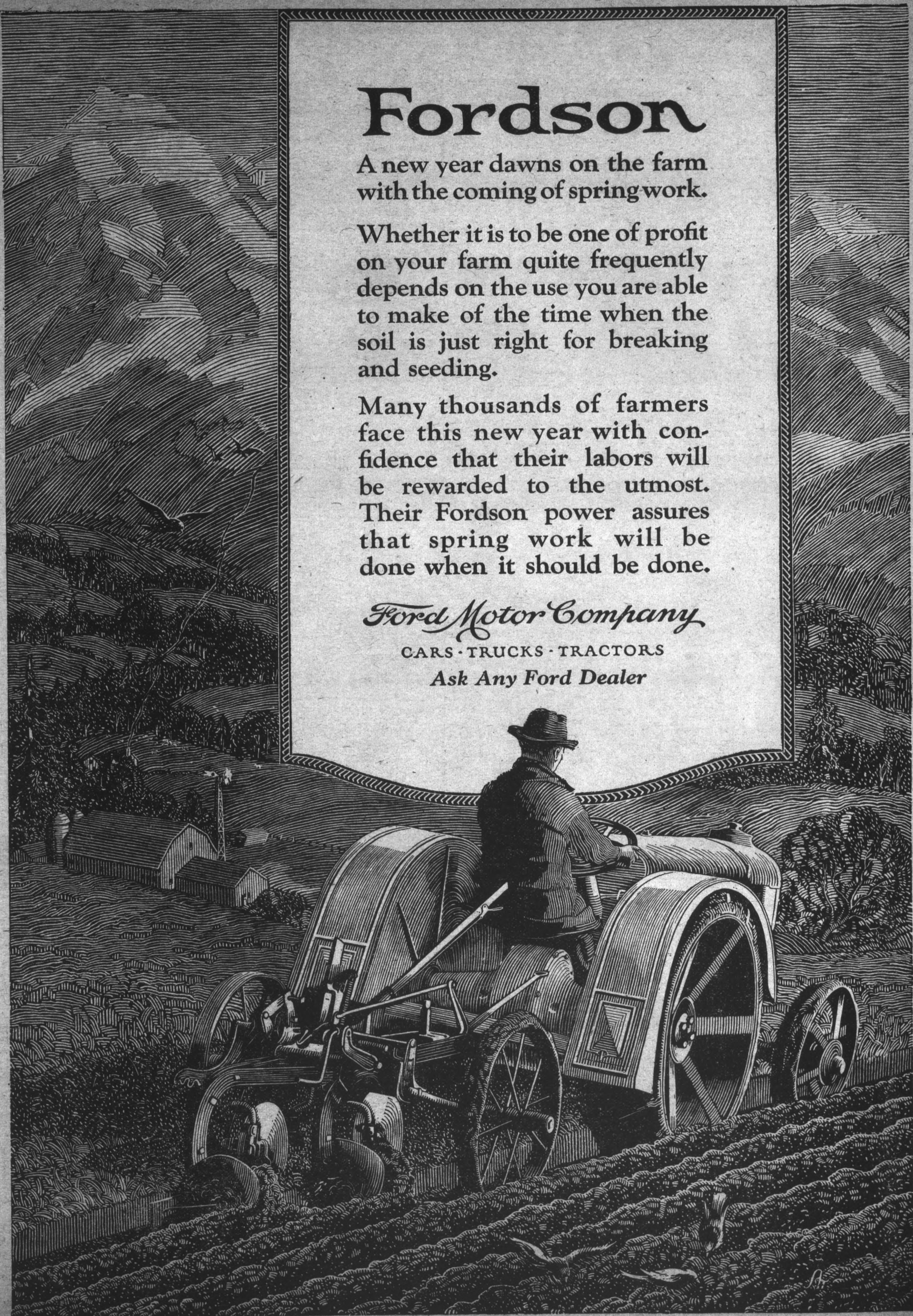
Whether it is to be one of profit on your farm quite frequently depends on the use you are able to make of the time when the soil is just right for breaking and seeding.

Many thousands of farmers face this new year with confidence that their labors will be rewarded to the utmost. Their Fordson power assures that spring work will be done when it should be done.

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It is not only the amount of zinc applied that gives the wire long life, but the coating must be uniform and even to be durable and made inseparably a part of the steel.

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By this process the zinc is practically a part of the steel, giving it a super-protection that adds many years to the life of the wire. As a result, OUR WIRE FENCE WILL OUTLAST ANY OTHER WIRE FENCE MADE, and its use greatly reduces your fence cost per year—to say nothing of the better protection its staunchness and sturdiness insures.

All our Farm Fences—of every brand—American, Royal, Anthony National, Ellwood and U. S.—are Zinc insulated—at no extra charge.

Some wire fence makers market several qualities—a very small percentage of their total production bearing even good galvanizing, and that usually sold at a marked price advance. It all looks alike. You can't tell the grades apart. We make one grade only.

When you buy this ZINC INSULATED FENCE you are purchasing added years of fence service, without extra charge.

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5000 Loring Plum Trees Given Away

FRUIT TREES GRAPES-BERRIES THAT LIVE AND BEAR BIG CROPS IN THE N. W.

What could give you more pleasure and satisfaction than growing those luscious near California fruits right in your own back yard? Brand's Wonder Northern Grown Fruit trees and berry bushes, now make this possible. And all the best of those wonderful new fruits produced by the Minnesota State Fruit Breeding Farm, are included, too.

5000 Loring Plum Trees Given Away One of those famous Loring plum trees will be given with every \$7.50 order for Brand's wonder fruit trees, berry bushes or other nursery stock. \$15 order, two trees and so on.

BRAND'S NEW SPRING NURSERY CATALOG

Beta and Alpha Grapes are absolutely hardy, and stand on the trellis in Minnesota all winter. Monitor, Red Wing and Underwood Plums are as large and as good as California plums. Zumbra Cherry, large-sweet-Juley, Latham and Redpath Red Raspberries are the two greatest raspberries ever produced—berries 1 in. diameter. FREE CATALOG tells all about our wonderful Nor. Grown Nursery Stock. Oldest Nursery in Minnesota. BRAND NURSERY CO., Box 16 Faribault, Minn.

WASHINGTON NEWS

WHEAT IS UNCOVERED.

REPORTS to the department of agriculture indicate that unfavorable weather in many sections has damaged winter grains. Winter wheat has suffered severely owing to lack of snow cover and repeated freezing and thawing of the ground and in several states in the heart of the wheat belt the condition is low.

FARM LABOR WILL BE SCARCE.

AN extensive shortage of farm labor seems to be due when spring opens. The industries and road work are calling labor from the farms and paying high wages that farmers are not generally able to meet.

RADIOS MUCH USED ON FARMS.

IN an effort to ascertain the extent to which farmers are making use of the radio market news service by installing radio sets in their homes, a questionnaire was sent out by the bureau of agricultural economics in October to 2,500 farmers whose names were furnished by county agents in every state in the Union.

The result of this inquiry seems to indicate that the farmers who own radio sets make practical use of them. In the matter of buying or assembling a set it is found that the farmer folks are as much inclined to make their own sets as the city radio fan.

Of the 1,168 farmers reporting, 614 had manufactured sets, and 554 home-made sets. The average cost of the manufactured sets was \$172.60, and of the home-made sets \$83. Nine hundred and twenty-one farmers used their sets for market reports, 931 for weather reports, and 1,141 for entertainments.

The average cost of all the sets was \$131 each. As there are 200,000 radio sets on farms in the United States this would mean on this basis, a total of \$26,200,000 invested in farm radio for expansion in the radio field with outfits, and an almost unlimited field more than 6,000,000 farmers as possible purchasers of radio sets and equipment.

ELIMINATE MELLON'S INCOME TAX REDUCTION RATES.

THE Mellon income tax reduction rates have been eliminated from the tax revision program by the passage in the house by a vote of 222 to 196 of a substitute tax bill. The amended bill provides normal taxes of two per cent on incomes of less than \$5,000; four per cent on incomes between \$5,000 and \$8,000; six per cent on incomes exceeding \$8,000; a graduated surtax scale beginning at one per cent on incomes between \$12,000 and \$14,000, up to a maximum of forty-four per cent on incomes exceeding \$92,000; and exemption of \$2,000 for single persons and \$3,000 for heads of families.

HOLDS THAT TRUCKS AND AUTOS SHOULD NOT BE TAXED.

THERE is much disappointment in evidence because of the failure of the ways and means committee to provide for a reasonable reduction in the taxes on automobiles, trucks and repair parts. In a letter addressed to congress, Dr. T. C. Atkeson, Washington representative of the National Grange, says that the automobile and motor truck have become so necessary to agriculture and to reasonably agreeable life in the country, that the best figures indicate that one-third of the automobiles in use are owned by

farmers, while the light truck is becoming indispensable to agriculture.

It was the contention of Dr. Atkeson that the present tax on repair parts is unreasonable and every automobile user should be relieved of it. The tax on trucks is a tax on necessary equipment, and should share in any plan of reduction in a bill when other excise taxes are being removed.

WOULD MARK IMPORTED SEEDS.

AN effort is being made to secure amendment to the pure seed law providing for the dyeing with eosin red cloverseed imported from Italy. Tests by the United States Department of Agriculture and a number of agricultural colleges have shown cloverseed from Italy not to be generally adaptable in the United States. It has been sown with unsatisfactory results in many areas.

The amendment to the pure seed law would give the department of agriculture authority to investigate the adaptability of seed from foreign countries and when found not to be generally adaptable to provide means of marking its identity.

AGRICULTURAL LEGISLATION MOVES SLOWLY.

PROPOSED agricultural legislation is making little progress in congress. The bill extending the time limit on the operations of the War Finance Corporation for another nine months has passed both house and senate, and is awaiting the President's signature. The Norbeck-Burness \$75,000,000 crop diversification bill is on the senate calendar. There is slight chance of the McNary-Haugen or the Norris-Sinclair marketing corporation bills getting through this session. Delegates from the northwest are appearing before the house and senate agriculture committees in favor of the McNary-Haugen bill, but some of them insist that the wheat farmers of the northwest are not asking for loans to enable them to go into the dairy business. They have no intention of turning to dairying.

CHILD LABOR AMENDMENT PROPOSED.

AN extensive movement is being promoted in favor of a bill now in congress providing for an amendment to the Federal Constitution which would prohibit the employment of children at manual labor.

Originally the promoters of this proposed amendment were willing that it should apply only to children employed in factories and shops. Now, however, they are referring to the census figures which show that of more than a million children between ten and fifteen years of age who were actively engaged at labor in 1920, more than half were rural children at work on their home farms, and they are also emphasizing the "horrors" of employing children in sugar beet fields of the west and on the commercialized truck farms of New Jersey and Maryland.

In hearings on this child labor amendment bill representatives of the American Farm Bureau Federation told the committee that the Farm Bureau Federation was opposed to the exploitation of children, but was not willing to endorse any proposition that might give extremists among the anti-child labor advocates opportunity to secure or enforce laws that would affect the reasonable employment of children on the farms. A vigorous effort is being made to secure the passage of this bill and have it referred to the state legislatures at the earliest possible moment.

Getting Alfalfa Started

Some Practical Hint by an Old-Time Grower

By Jason Woodman

THIS article applies only to the naturally under-drained "oak opening" sandy loams of southwestern Michigan that are heavy enough so they do not blow, and level enough so there is no serious danger of washing. During the last seven or eight years I have had personal knowledge of many seedings of alfalfa put in on these lands when they were in a more or less "run down" condition. They have been made at all times of the spring and summer, from the latter part of April to the middle of September; preceded by periods of preparation varying from a few days to two months in length. Some have been made with small grains, more of them have been seeded alone. Results obtained have varied from pronounced successes to total failures. The object of this paper is to describe with some detail the method that usually has produced desired results, and to point out some of the practices that experience has shown are not desirable.

Given a piece of typical sandy loam, one of many thousand fields that may be found in these southwestern counties. It no longer grows clover and the good wheat crops it once produced are only a memory. The land is not profitable and will not be until an effective process of soil building has been given it. Without the use of manure or fertilizer, a good stand of alfalfa can be established on this field, and in four years the hay produced by it will pay for the cost of seeding, pay a good rental value on the land, and generally a profit besides. After four years in alfalfa, the land will again produce old-time yields of grain, and at the end of a rotation of two or more crops, it can be reseeded to alfalfa with wheat, rye, or oats, as we used to seed clover.

In order to secure a satisfactory stand of alfalfa on the land referred to, it should undergo a period of preparation lasting five weeks or longer. The lime should be applied at least four weeks before the alfalfa is sown. The field should be seeded after the first

good rain in June. If these requirements are met, it is necessary to plow in April unless the land is fall plowed which, if convenient, is desirable, and the lime should be applied not later than the first week in May. The lime should be ordered early enough so that it will be certain to be on hand when needed. If finely ground limestone is purchased, store it where it will not get wet. Before liming, roll the field with a heavy roller. If ground lime stone is used, apply it when the surface of the ground is dry, and harrow in immediately. Rain will cause it to form little lumps, and it will not dissolve as readily as when the individual particles are thoroughly distributed through the soil. If marl is used, go over it with a plank drag before harrowing in. The plank crushes and spreads out the lumps, making possible a much more even-mixing of the marl with the dirt and it will go into action more rapidly. It should not be forgotten that lime must dissolve before it can act on the soil, and some weeks must elapse after its application before enough has gone into solution to make it safe to sow alfalfa. Experience has shown that the lime should be in the land at least a month before seeding. After liming, harrow with a spring-tooth drag at least once every eight days, or oftener if necessary, to prevent weeds from getting a start.

On June first, the seed-bed should be compact, moist, and absolutely free from weed growth. After the first good shower in June, harrow the ground lightly, and sow the seed shallow. Many a thin, weak stand has resulted from too deep cultivation just before seeding, or from sowing too deeply, or from both causes combined. One of the best seedings I ever saw was put in with a shoe drill. The shoes were raised above the ground, and the seed covered by the chains only. A cultipacker followed the drill, pressing the seed firmly into the shallow covering of dirt. No rain fell on

(Continued on page 308).

Cow Testers' Meeting



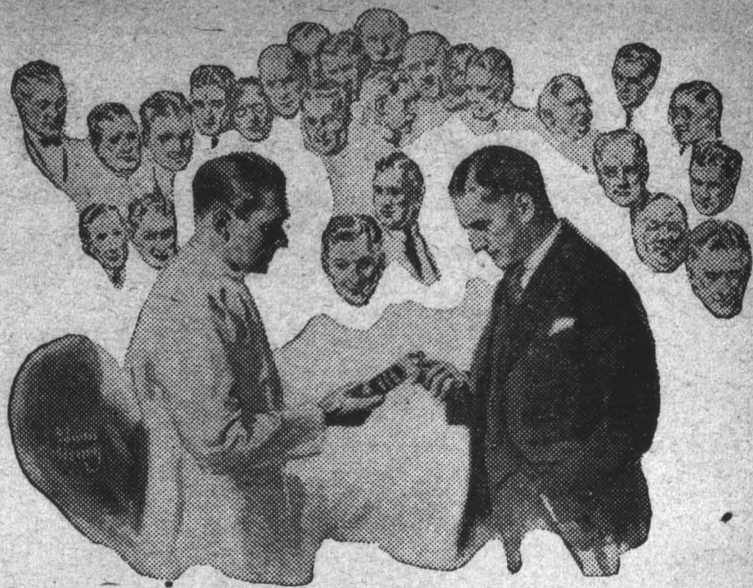
FIFTY-TWO Michigan cow testers were present for the annual cow-testers' meeting held at the Dairy Building, East Lansing, Michigan, on February 1-2.

Various topics of interest to the cow testers in their association work were presented during these days. Prof. O. E. Reed, head of the dairy department, M. A. C., spoke encouragingly regarding the work of the testers.

He mentioned the fact that it was clearly up to the testers for the success or failure of this project, and that he felt the work that they were doing was going a far way toward improving the general condition of dairying in the entire state of Michigan.

Mr. J. E. Burnett, also of the dairy department, M. A. C., brought in some very timely feeding hints for the testers in their association work. Dr. Hallman, of the veterinary department, M. A. C., pointed out that the cow tester can help to bring about a new understanding among stock raisers in regard to the care to be taken of the cow at calving time. All of the extension specialists, H. E. Dennison, J. G. Wells, Jr., J. G. Hays, R. H. Addy and A. C. Baltzer, had occasion to talk to the testers along some of the phases of their work. Mr. Carl Huffman, of the experiment station, gave some interesting facts regarding mineral feed and its relation to the dairy cow.

The annual election of officers resulted in H. E. Simmons, tester of Genesee No. 1 Association, being made president; Jess Bird, Jackson-Rives Association, vice-president; Eldon Barclay, Macomb No. 1 Association, secretary, and Hans Kardel and Raymond Powell as directors of the Association of Michigan Cow Testers.



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GENTLEMEN:

I could not meet you all. So I asked 1,000 men what they most desired in shaving cream.

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We ask a test

This is not written to sell you Palmolive Shaving Cream. We know your situation. You are using a soap which satisfies. You naturally doubt if any other soap is much better.

But we have a shaving cream so immensely better that you will be amazed and delighted. You will adopt it, as millions have done, when you discover its results.

We ask a test at our cost—a ten-shave test. We will then accept your verdict. If we serve you many times better than others we want your patronage. If we fail, we don't. Please, in fairness to yourself and us, mail this coupon to us.

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Getting Alfalfa Started

(Continued from page 307)

this seeding for sixteen days; when it did come, the young plants were two inches tall, strong and vigorous.

Generally, it will pay to clip the young seeding in August. Frequently the alfalfa plants will turn yellow and small dark spots appear on the leaves. The spots and consequent yellowing of the leaves are caused by a fungus; more or less weed growth also develops, shading the young plants. The mower checks both troubles. Close clipping often is injurious to the young plants, so it is desirable to set the mower bar three or four inches high, the bar remaining level, or with the points of the guards tilted slightly downward.

The somewhat lengthy period of soil preparation is necessary for several reasons. First, to provide the "compact, moist seed-bed essential to a prompt and vigorous germination of the seed. Second, to make active the supply of nitrogen needed to keep the young plants growing until the bacteria supplied by the culture have multiplied sufficiently to supply fixed nitrogen from the soil atmosphere. Third, five weeks or more of cultivation is needed to kill weeds. A short period of preparation only stimulates their growth. A longer period kills them out sufficiently so that the young alfalfa plants will have the first use of the plant food in the soil.

Why seed in June instead of later in the summer? June is the best time to escape injury from insect enemies, of which there are at least four species that have occasionally proved destructive to new seedings. Another reason is that we are dealing with a "run down" sandy loam. The young alfalfa plants will not develop as rapidly as would be the case on well-manured soil. A June seeding gives ample time for the growth of a satisfactory top before cold weather.

All the steps are taken that have been recommended; October comes. The new seeding looks fine, the stand is good, the top is well developed, there are plenty of nodules on the roots. The field of young alfalfa is a source of pride and satisfaction to the owner. Then it winter-kills. The plants are not heaved out, but spring finds a large part of them dead and many of the rest sickly and weak. It is mown for hay a year or longer, but the plants are small and the stand thin and spotted. I have seen this happen many times, although less often in recent years. What is the trouble? Sowing southern or foreign-grown seed that is not adapted to our climatic conditions. Northern-grown seed of known origin and approved varieties is as essential to success as proper preparation of the soil, a sufficient amount of lime, and the use of cultures. If the Michigan Farm Bureau performed no other service of value for the farmers of the state, the fact that it supplies us with alfalfa seed on which we can rely, is worth many times what it costs to maintain the organization. I am not saying that we should buy nothing but farm bureau seed. I do say, however, that we should take no chances. Millions of pounds of seed are imported every year, more millions are harvested in the southwestern states. We never hear of "Turkestan," or "Arizona," or other similar seed on the market, and yet somebody buys it and sows it.

To many readers, this article will seem a rehash of what every farmer already knows, but numerous drives through our southwestern counties during the last two or three years have shown me many poor seedings and not a few failures mixed in with the good seedings to be seen on the lands referred to. I saw a number last summer. I expect to see more next summer. Why the failures? Farmers have plowed, limed, fitted and sown fields to alfalfa in periods of ten

days or two weeks. Others have sown too late in the summer and some insect pest has destroyed the new seedings, or a large part of the little plants are heaved out by frost the following winter, or poor seed has been used. Occasional failures are caused by not using enough lime, more often the seed is sown too soon after the lime is applied. Occasionally some farmer tries to make a first seeding with a "nurse crop" of small grain. Such an attempt on our depleted sandy loams is foredoomed to failure.

Only a small percentage of our oak opening farmers are raising alfalfa. There will be many new beginners among them this year. Hoping that a recital of the lessons learned from the experiences of many farmers may be of value, I have prepared this paper.

ILLUSTRATES MUSKRAT FARMING.

MICHIGAN farmers owning wet lands may be interested in a bulletin recently revised and published by the United States Department of Agriculture. It presents the muskrat as a fur-bearer, and sets forth the economic value, as well as the destructive characteristic, of this little animal. The results of muskrat farming are illustrated by several examples. While under certain conditions the muskrat is destructive to gardens, field-corn and fruits growing close to the water, where land crops are not put in jeopardy, considerable income has been derived from the muskrat, both from his fur and for food. It costs nothing to raise and maintain the muskrat, which feeds on water-plants for the most part.

IS FULLY SOLD ON THE SILO.

IN the early spring of 1923 my silage gave out. I had been feeding silage, alfalfa hay, cut corn stover, oat straw, and a grain ration consisting of ground corn and cob, ground oats, ground rye, bran and cottonseed and oil meal.

The first week I was able to keep up the milk flow by feeding more of the alfalfa, in fact, all they would eat without waste. The second week there was a falling off of milk flow. The third week there was still a further decline, and also the fourth week. And the cows were hardly satisfied. Along about that time the snow had gone and I had a sod field that I later planted to corn. On nice days I turned them on that where they could pick at the green grass that was trying to grow, and kept up the regular feeding, all they would eat. There was an increase in the milk flow at once.

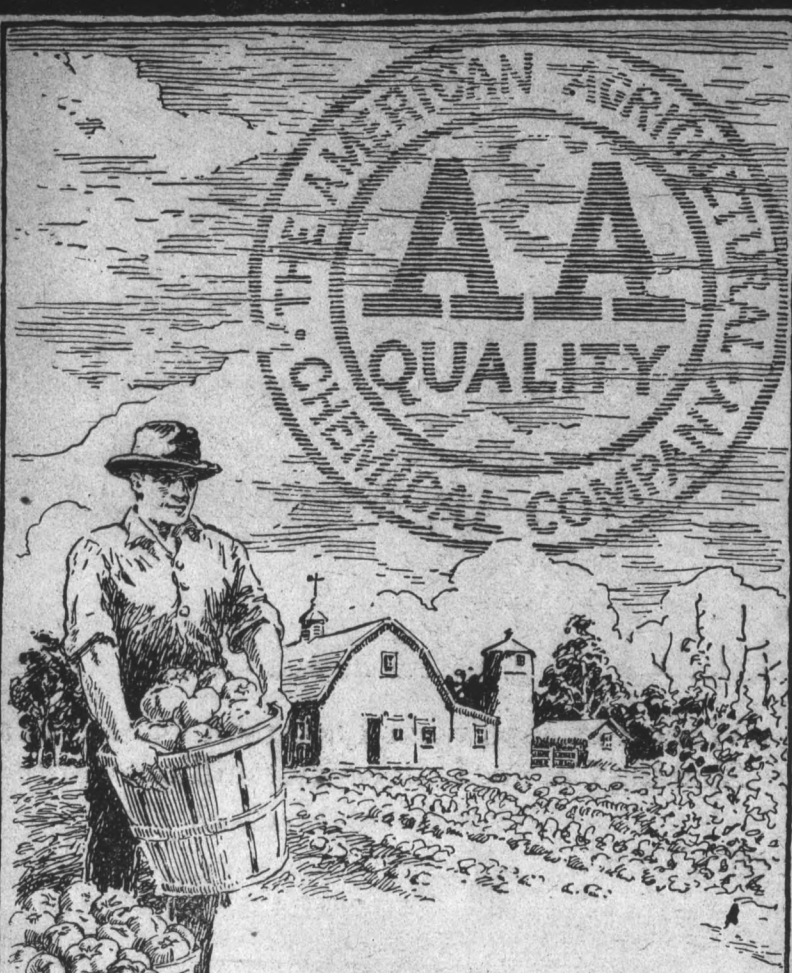
We have had a silo on this farm a dozen years or more, and there is always a feeling of satisfaction when we start the winter with it full to the top. For we know there is a mighty nice lot of feed there that has cost us very little, and after the pasture gets short in the summer and you are lucky enough to have silage left, the cows are home on time after you have started feeding again.

I stand for the silo every time. My plans are set for another one as soon as possible.—Edward P. Jensen.

TAX-EXEMPT SECURITIES STILL POSSIBLE.

THE defeat in the house of the proposed amendment to the Constitution to prohibit tax-exempt securities was encouraging to friends of the farm loan system, which is dependent upon tax-exempt securities for the funds it must have to finance the farmers.

Butter scoring ninety-two per cent. brings from seven to nine cents more a pound than butter scoring eighty-nine per cent. Why not make better butter?



"AA QUALITY" Fertilizers have brought profit to three generations of farmers. They have been a constructive force in American agriculture for over half a century. Their crop-producing records have never been excelled. They represent the best thought and efforts of an organization constantly striving to increase its usefulness to the American farmer. Insist on fertilizers bearing the "AA QUALITY" Trade Mark.

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GOOD SEEDS

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Sour soil means poor crops. Experts agree fertilizer is useless on sour soil—it must have lime. The "Holden" Spreader makes bigger crops. Guaranteed to handle lime in any form, fertilizer, phosphate, gypsum, wood ashes or crushed shells.

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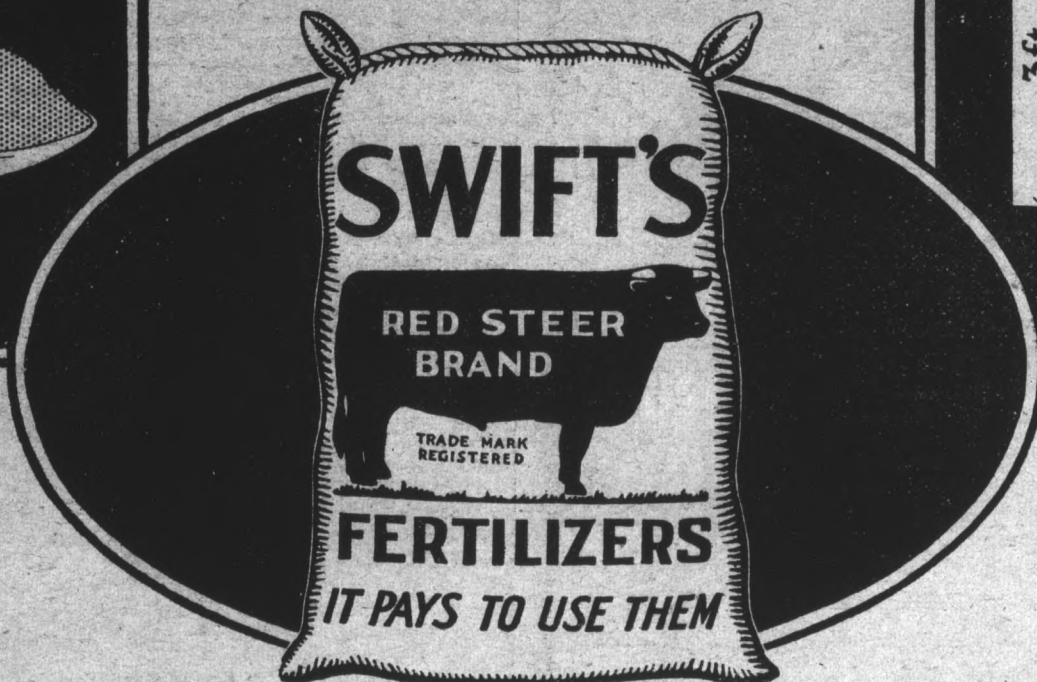
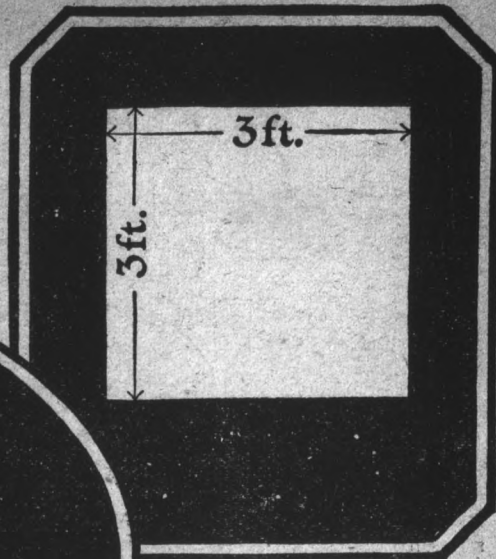




A spoonful of fertilizer to each square yard of ground! Each plant gets so little that it is of the greatest importance the fertilizer you apply should be thoroughly and evenly mixed

Be sure that each plant gets its proper proportion of plant food

An application of 300 pounds of fertilizer per acre is equivalent to about one ounce—a little more than a spoonful—to each square yard of land



Swift's Red Steer Fertilizers are so carefully mixed that each plant gets its full share of each plant food element contained therein. This results in even growth, even maturity and maximum yield

Feed your crops a balanced ration

THE successful livestock feeder knows that in order to get best results, each head of stock must get a properly balanced ration.

The same principle applies to crop feeding. Your crops need balanced rations just as your livestock does—fertilizers that are carefully and scientifically compounded from the best source of plant food obtainable, so processed and thoroughly mixed that each plant is sure of its proper ration.

Why Swift's is preferred

Swift & Company considers the manufacture of fertilizer from the balanced ration viewpoint. Twenty-four large factories, equipped with the most efficient machinery, insure thorough processing of Swift's Red Steer Fertilizers.

Swift & Company, with its access to important sources of raw material, with its expert chemists and agriculturists, is enabled to manufacture fertilizers which supply plant food in the proper proportion and availability.

Every bag of Swift's Red Steer Fertilizers is backed by the more than fifty-year-old Swift reputation for making each Swift product the best of its kind.

Swift & Company, with its 45,000 shareholders, with its investment in factories and lands, with the goodwill of the public which has been built up during more than half a century of Swift & Company service, could not afford to jeopardize its reputation by manufacturing other than a superior product.

Where to get service

Swift's Red Steer Fertilizers are distributed and sold by an organization of more than 7,000 Authorized Swift Agents—successful merchants who are pledged to co-operate with Swift & Company in giving to the farmer quality fertilizers, plus a worthwhile service.

Talk over your fertilizer problem with the Authorized Swift Agent in your town. If you do not locate him readily, write us and we will put you in touch with him.

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Fertilizers for Michigan

It pays to use fertilizers—high analysis fertilizers. This is the message which goes out to the farmers of the land from the agricultural colleges and experiment stations in many states—with definite recommendations, based upon years of research and experiment, as to the fertilizers which will give best results on individual soils and crops.

For Michigan, the Michigan Agricultural Experiment Station recommends the following analyses:

Corn—Sands, light sandy loams: without mixed meadow, manure or green manure, 4-12-0; with mixed meadow, clovers, alfalfa or soybeans or with manure, Acid Phosphate. Heavy sandy loams, silt loams, clay loams: Acid Phosphate. Muck: 0-12-12, 0-8-24, Potash.

Oats, Barley (with spring seeding of alfalfa or clovers)—Sands, light sandy loams: without mixed meadow, etc., 0-12-6, 4-8-6; with mixed meadow, etc., 0-14-4; with manure, Acid Phosphate. Heavy sandy loams, silt loams, clay loams: without mixed meadow, etc., 2-16-2; with mixed meadow, etc., or with manure, Acid Phosphate. Muck: 0-12-12, Potash.

Alfalfa, Clover—Sands, light sandy loams: without mixed meadow, etc., 0-12-6; with mixed meadow, etc., 0-12-6, 0-14-4; with manure, 0-14-4, Acid Phosphate. Heavy sandy loams, silt loams, clay loams: without mixed meadow, etc., or with mixed meadow, etc., 0-14-4, Acid Phosphate; with manure, Acid Phosphate. Muck: 0-12-12, Potash.

Potatoes—Sands, light sandy loams: without mixed meadow, etc., 3-12-4, 3-8-6; with mixed meadow, etc., 2-16-2, 2-12-6, Acid Phosphate; with manure, 0-14-4, Acid Phosphate. Heavy sandy loams, silt loams, clay loams: without mixed meadow, etc., 3-12-4, 3-8-6; with mixed meadow, etc., 2-16-2, 2-12-2, Acid Phosphate; with manure, 0-14-4, Acid Phosphate. Muck: 0-8-24, Potash.

Sugar Beets—Sands, light sandy loams: with mixed meadow, etc., 3-12-4, 2-12-6, 4-8-6; with manure, 0-12-6, 3-12-4. Heavy sandy loams, silt loams, clay loams: without mixed meadow, etc., 3-12-4, 2-16-2, 2-12-6; with mixed meadow, etc., 0-12-6, 2-12-6, 2-16-2; with manure, 2-16-2, 0-14-4, Acid Phosphate. Muck: 0-8-24, Potash.

As Authorized Swift Agent for the sale of Swift's Red Steer Fertilizers, we are co-operating with the Michigan Agricultural Experiment Station by handling the brands recommended above which apply to local conditions.

Come in and let us select the analysis that meets your own soil and crop requirements.



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draft, its ability to penetrate and stay in the hardest ground is exceptional. Simple, short and compact. Has only 1 lever; only 3 adjustments required to prepare it for plowing. Only 57 inches long—operates as a part of the tractor—easily backed in the furrow—enters and leaves the soil instantly. **ENTIRELY FLEXIBLE**—always plows at even depth.

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BULL GETS KILLED.

Bull breaks out of yard, goes down highway to railroad and up tracks until killed by train. There is an old siding and yard at this point, but the gate is always open, and there are no cattle guards at tracks.—J. H. L.

Compiled Laws 1015, Section 8304, provides that while cattle guards are not maintained, the company operating the road shall be liable for all the damages that may result from such neglect.—Rood.

RIGHTS OF VENDOR ON DEFAULT.

I bought a farm on contract. If, through no fault of my own, I fail to meet obligations and interest, can they hold my unsold crops and personal property which the contract doesn't cover?—G. H.

If the payments are not made as required by the contract, the vendor has the right to elect whether he will on that ground declare the contract forfeited and recover his property or insist on the performance of the contract. He may affirm the contract and sue the vendee for the defaulted payments, take out execution, and levy on any property not exempt, including the crops on the property sold; or he may give notice of his intention to forfeit, and sue before a justice of the peace or circuit court commissioner for the possession of the property sold. If he elects the latter course he cannot recover any further payments on the contract.—Rood.

USUAL RENTAL.

The man I rented my farm to says I should furnish horses, tools, feed, cows, pay all threshing bills, silo filling, feed grinding, horse shoeing, all breakages, etc., that is an expense there; then give him one-third of everything that is sold and then buy his share of corn, hay, oats and all rough feed. I find after doing this that I lack \$50 of having money enough to pay the taxes and insurance on the place.—E. A. H.

The common rental practice under the one-third stock lease system i. e., when the landlord furnishes all the live stock and machinery, is for him to get two-thirds of the proceeds and the tenant one-third for furnishing the labor. The expenses, such as threshing, silage cutting, corn shredding, grinding feed, feeds, fertilizers, twine, fuel for threshing if purchased, and veterinary services (except for horses if tenant owns them) are usually divided in the same manner as the proceeds.

A very satisfactory way of dividing the proceeds is to sell the product and divide the money rather than the crops, providing said parties can agree on a satisfactory time to sell produce. The tenant should market the produce.

The farm income not only includes crop and stock produce but live stock increase as well.—F. T. Riddell.

GETTING CLOVER STARTED.

I would like to inquire about sowing red cloverseed in the spring. When is the best time to sow? Will it injure the seed to sow it the latter part of February or the first of March if the ground should be bare so the seed would get in the ground?—E. S. W.

Under very favorable conditions good seedings of clover are frequently secured by seeding the latter part of February and during March when the ground is freezing and thawing. This practice is not as successful on sandy soils as on the heavier soils, neither does it give as good success when the soil is somewhat depleted in organic matter, due to the fact that the seed frequently is not well covered. The practice of seeding at a time when the seed can be carefully covered is be-

coming more prevalent each year.

When wheat is used as a nurse crop, the clover is usually seeded when it can be covered with a spike-tooth drag. When oats or barley are used as a nurse crop, the clover seed is usually sown with a small grain. The customary amount of clover seed to sow per acre is approximately eight pounds. When alsike is included in the mixture, a little less seed is used.

The lack of lime and of available fertility is causing many failures of clover. The method of seeding will not overcome these deficiencies. Poorly adapted seed is also causing a number of failures, and is likely to cause quite a few this coming season. Last year the cloverseeded crop was about forty-five per cent normal in the United States. Large quantities of seed is being shipped into the country, and much of this seed is poorly adapted. Farmers should insist on home-grown seed, since none of the imported seed has been found to equal the domestic.—Megee.

HARD-MILKING COWS.

I have two good cows that are hard milkers. They give their milk in a very thin stream, especially in the start. Would there be any remedy for this?—L. A. B.

The condition of hard milking can be overcome to a considerable extent. It is caused by the failure of the muscles at the end of the teat to properly relax at the time of milking. These muscles extend around the teat. When they contract they close the teat duct and when they relax they do not do so sufficiently to make the opening of sufficient size to allow the milk to flow out freely.

Sometimes when the cow first freshens, a very strong milker can, by using his strength, force the milk through in such a large stream that these muscles are stretched, apparently, and the cow afterwards milks more freely. You can purchase hard rubber plugs, made on purpose, and by inserting them after milking and leaving them in, these muscles will become distended and remain so and the cow will milk more easily.

If you can not buy these plugs, there is no good reason why you can not make some out of some kind of material that won't break, say for instance, sole-leather. They must have an enlargement near the small end so that when forced in they will remain. If they had a uniform taper they would soon work out.

If you use any kind of plugs they should be thoroughly sterilized by boiling before using, and they should also be well oiled with vaseline before inserting.

VIOLATION OF CONTRACT.

I rented a farm last winter. Landlord to furnish everything and give me half of crops, live stock, eggs, poultry and butter. Contract was verbal between him and myself and my wife. We found out later that farm was in his wife's name. In July they ordered us off the place, saying we could not have anything. Later the woman said we could stay. November 3 they again ordered us off, saying we could not have anything. We have worked hard and can prove it by the neighbors. Have eighteen geese, ten ducks, 150 chickens, 400 bushel of oats, 1,000 bushels of corn, and sixteen pigs, five lambs and a calf since we came here. Can they put us off without anything? What must we do to get our share?—J. C.

A married woman may make such contracts personally or through an agent, and the husband may be the agent. The facts indicate a contract. Unless satisfactory settlement is obtained a lawyer should be employed.—Rood.

MID-WINTER HORT. MEETING.

THE Michigan State Horticultural Society will hold its annual mid-winter meeting at Benton Harbor on March 4-5. At this two-day session, subjects of interest to lines of fruit growing will be discussed. There will also be a special election to elect a secretary to take the place now held by Prof. R. V. Gardner, who was appointed by the executive committee to the secretary's office, which was left vacant by the death of T. A. Farrand, last December.

The program of the sessions is as follows:

Pear Production.

Tuesday Morning—Address of welcome by Fred Hobbs, acting mayor of Benton Harbor; response, A. J. Rogers, of Beulah, president of Michigan State Horticultural Society; "Dealing with Pear Blight," Prof. H. A. Cardinell, M. A. C.; "Pruning the Pear for Heavy Production," Prof. Roy E. Marshall, M. A. C.; "Pear Psylla and its Control," L. W. Strickland, Lockport, New York.

Peach and Grape Production.

Tuesday Afternoon—Address, "Dead Arm of Grape and its Control," C. W. Bennett, of M. A. C.; "Experiments in Concord Grape Pruning," N. L. Partridge, M. A. C.; "Cultural Methods in Peach Production," W. S. Perrine, Centralia, Ill.; "Peach Yellows," C. W. Bennett, M. A. C.

Nutrition and Fertilization.

Wednesday Morning—Lecture, "The Intake, Translocation and Use of Mineral Nutrients in the Tree," Prof. F. G. Gustafson, University of Michigan; "The Manufacture, Translocation, Storage and Utilization of Carbohydrates in the Tree," Prof. H. D. Hooker, Jr., University of Missouri; "The Relation of Nutrient Conditions to Fruit Bud Formation," Prof. V. R. Gardner, M. A. C.; "Bearing Habits of the Apple as Influenced by Nutritive Conditions," Prof. F. C. Bradford, M. A. C.

Spraying and Small Fruits.

Wednesday Afternoon—Lecture on "Spraying for Scale Insects," Prof. W. C. Dutton, M. A. C.; "The Making and Use of Oil Sprays," Prof. A. M. Burroughs, University of Missouri; "Raspberry Pruning Experiments," Superintendent Stanley Johnston, South Haven Experiment Station.

PORK RIND REMEDY WORKS.

IN reply to J. J. Hillman, in the Michigan Farmer of February 16, I will say that the pork rind remedy has proven effective this winter. Early in December, rabbits began girdling the trees, so I whitewashed them, hoping that the whitewash would do for the winter. However, as soon as the whitewash wore away, the rabbits started their destructive work again.

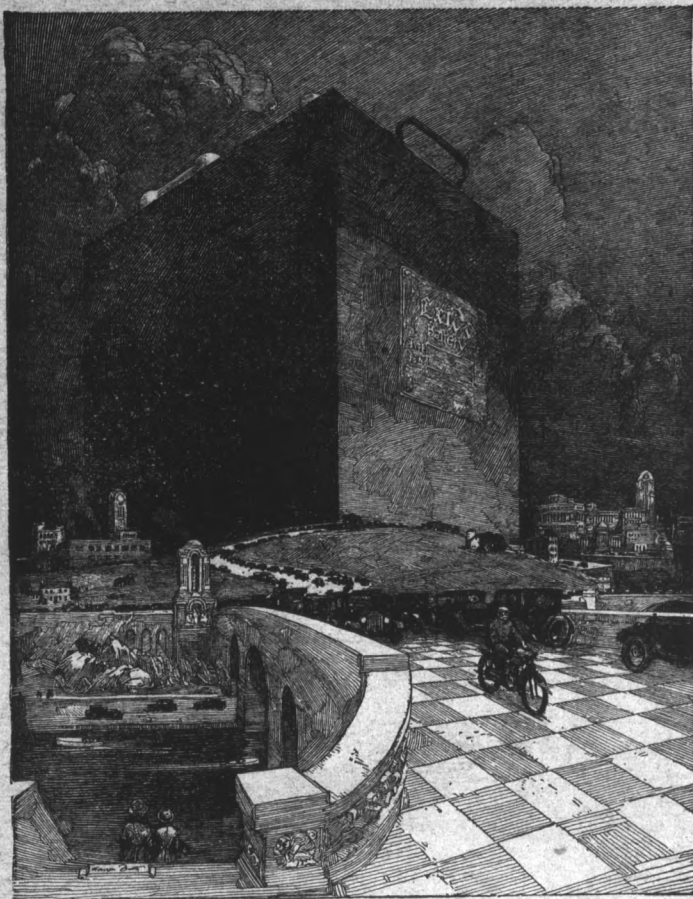
Then I applied the old German remedy which I mentioned in the February 2 issue of The Farmer. No more trees were girdled until we had a blizzard which caused the snow to bank upon a pear tree. The next day that tree was girdled. I greased it to the top right after that and it has not been touched since, although there have been rabbits in the orchard nearly every night.

If Mr. Hillman knows of rabbits eating grease, he has something new under the sun, as the rabbits up here are strictly vegetarian. However, if he doubts that any good could come from Germany, I would suggest that he come here and see for himself.—Henry Drier.

PACK APPLES IN CARTONS.

NEW York state fruit growers were urged to take steps to put their apples on the retail market in less than bushel sealed and trade-marked cartons, in an address by Mrs. Julian Heath, chairman of home economics of the New York City Federation of Women's Clubs. She doubted the practicability of the operation of cooperative buying clubs in New York City.

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Do your battery thinking early

The time to think about your battery is when you buy it. The more real thought you give it then, the less you'll have to worry about it later.

It's the fellow that buys "any old battery" who sits by the roadside ten miles from nowhere and thinks and thinks.

Pick out a battery that has a world-wide reputation among motorists for long, dependable service and you can't go far wrong.

Any Exide owner will gladly tell you that Exide Batteries live a long time and give splendid, ample service during their entire life.

The first cost of Exides is low and their last cost is kept remarkably low because of minimum repair bills and unexpected months of usefulness. You will find them truly economical.

EXIDE PRICES are from \$17.65 up, according to size and geographical location. There is an Exide for every car—and for your radio.

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CLOVER

PER BU. LOWER TODAY THAN LATER. Act quickly, crop short, market advancing. Buy your grass seed now. Our prices are sensationally low. Have wonderful values in Guaranteed High Grade Tested Iowa Grown Clover. Also Sweet Clover, Timothy, Alfalfa, Alsike, Huacahua and all Farm and Garden Seeds. Buy direct from producing section. We can save you big money on seeds. All seeds guaranteed and sold on 60 days approval. Write for FREE SAMPLES, special prices and 116 page catalog. Eastern orders shipped direct from Eastern Warehouses. A. A. Berry Seed Co., Box 831, Clarinda, Iowa

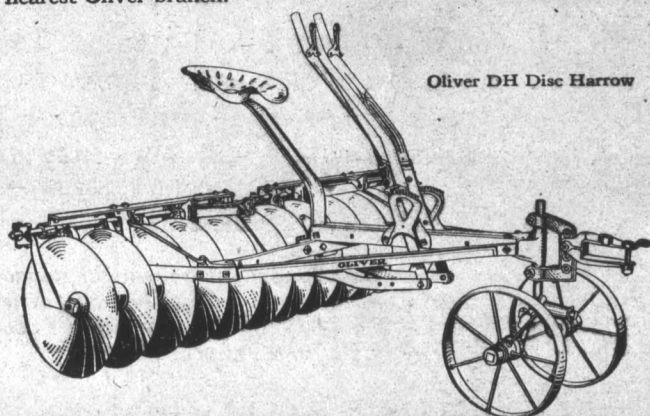


When the water is on the fields and the rivers creep up and out of their banks is no time for work. It is a good time, however, to consider whether your farm equipment is ready for the work days ahead.

Quickly penetrating and easy to operate, the new Oliver DH Harrow, made entirely in Oliver factories, possess all features desirable for proper discing.

Special soil and crop requirements are most adequately met through use of the new DH and the reversible and orchard disc harrows.

For full information and name of your Oliver dealer write the nearest Oliver branch.



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OLIVER

OLIVER CHILLED PLOW WORKS
SOUTH BEND, IND

Mention the Michigan Farmer When Writing to Advertisers

Kill Aphis

This tiny, destructive insect causes dwarfed fruit and culls and is one of the great foes to orchard profits. "Black Leaf 40," the "old reliable" nicotine spray, rids your trees of Aphis, Red Bug, Pear Psylla, Thrips, and other ruinous insects. Equally effective in combination with other standard sprays and saves labor by combining two protective measures. Agricultural Colleges and Experiment Stations recommend it.

Your Dealer has "Black Leaf 40" and new leaflets.

TOBACCO BY-PRODUCTS & CHEMICAL CORP.
Incorporated
LOUISVILLE, KY.

Spray
Black kills Aphis
Leaf 40
40% Nicotine

Studies Bean Problems

*Ways of Preventing Market Sags, Were Considered
by Committee of Producers*

THE Michigan bean crop has so many different angles of approach that one becomes amazed at the various influences which mean less dollars for the growers. In a general way, there is no over-supply to bear the price. At specific times beans are crowded on the market, and the price is lowered because the trade cannot handle them.

All these facts were discussed at a recent meeting of a committee at Lansing whose purpose, in plain language, is to prevent the market sags which take the dollars out of the grower's pocket.

There is a strong feeling among the bean dealers that the farmer is not given the full value for his crop, and, by reason of conditions partially which he may control and partially matters of dealers' control, when the bean market goes to high levels, it benefits a few at the expense of many, and over-stimulates acreage.

The Whereabout of the Profits.

There has been no knowledge of the actual car-shipments out to check up on the crop estimates. There is a strong feeling that the disparity between acreage yields, upon which prices are made, and actual shipments of marketable stock depresses the market. There will be made an effort to ascertain carload shipments, to be used as a check on crop estimates.

To the general public mind, the returns for the bean crop is misleading. Take a fairly average yield of fifteen bushels per acre. The public confounds the \$4.50 price per hundred pounds with bushels and neglects the factor of pick or loss, which this year will average close to eight pounds. The total public view is a return of \$67.50 per acre, or fifteen bushels multiplied by \$4.50. The actual facts are, with a pick of eight pounds, there are only fifty-two pounds of beans per bushel, which at four and one-half cents per pound gives \$2.68 per bushel. This is further reduced by a picking charge of seven cents per pound, or fifty-six cents, or finally \$2.12 for each of the fifteen bushels off an acre, or \$31.80.

During the war the basis of beans was changed from the bushel of sixty pounds to the 100 pound limit. The general public has not kept themselves apprised of this change.

The Storage Problem.

The partial bear influences on the market by farmers is storage in elevators and short-selling by jobbers. Storage, at first glance, looks like a harmless affair, but it is in reality crowding the market. Most elevators are obliged to sell their stored beans to avoid congestion, and the beans are replaced from other incoming stocks. From a trade standpoint, these stored beans are "on hand," while, as a matter of fact, they have been sold.

There have been cases where the temptation on the part of the elevator has been too great, and the stored stock has been sold, speculated with, or pledged as loans, to the loss of the grower. To sell stored stock when the market is advanced and replace it when it sags, results in the bean-grower's own stock being used to depress the market in order to replace sold storage stock. During the current year, elevators have made a profit of fifty to seventy-five cents per hundred by this very method.

"Short selling" is the sin of the elevator operator who "pegs" the market and expects to buy below the value. There is a saying among professional market operators "that he who sells short is wishing back luck on somebody." There should be a test case of future selling in excess of stocks owned either under the state statute of regarding price fixing or restraint

of trade acts of the United States. One of the most strenuous opponents of future selling was the late W. J. Orr, when president of the Michigan Bean Jobbers' Association.

How to Raise Advertising Fund.

Nearly a million bushels of Michigan beans go into cans, and these are advertised in the most exclusive publications, but no mention is made of their being Michigan beans. One cent a bag of one hundred pounds weight would create an advertising fund of around \$50,000 which, judiciously used would create a demand for Michigan beans many times the cost. There is every reason for belief that this one cent invested would return twenty-five cents to the grower.

If each grower who reads this article were to ask his neighbors if he would allow the elevator to deduct one cent per hundred pounds for an advertising fund, it would be interesting to know their attitude if he would write to the editor of the Michigan Farmer.

The lima bean growers of California have advertised extensively, and found it very profitable. Beans are a protein food not supplanting other farm products in that line.

Suggests Cooperation of Seller and Buyer.

One of the ideals of the bean producers is stabilizing marketing. Growers have this in their power if welded into a compact organization. For example, the best knowledge of the extent of the crop and general price level would allow the market to be started, for example, at \$5.00 per hundred, with a sixty-day advance to a summer or spring market of, say, \$5.50. When the monthly quota, which the market would absorb, was reached, let the producers' committee advise withholding beans. There is practically no time when a declining market would not be sustained by a cessation of marketing for ten days or more. Also with the knowledge that the next period would advance prices, buyers would place their commitments. In this way, both buyer and seller would aid in stabilizing the market.

No new Machinery Needed.

Contrary to general opinion, there is no real bear interest in the bean market, but rather a desire to make the crop profitable to the grower. The difficulties of the market are rather easily ironed out by coordinating existing agencies rather than the creating of new machinery. There is a general agreement of the necessary steps to accomplish the ends sought; viz., more profit to the grower if co-operation in selling can be carried out. This cooperation asks for no organization fees or pooling agreements, or any of the expensive selling of stock or construction of buildings, or the visitation of solicitors, but merely the delivery of beans no faster than the market demands. Those who co-operate in such manner are really co-operators in spirit and in truth.

Choice hand-picked beans ought to be staple in every store in the United States at three pounds for twenty-five cents, with a fair profit to grower and handler. With a proper understanding, and an advertising campaign, the Michigan bean grower might plant with an assurance of \$5.00 per hundred for his crop when sold. Instead of asking someone to contract to pay this price, he has it in his control to write this price himself and it will be paid him.—J. McB.

Wheat prices are low because the world wheat acreage for 1923 was the largest on record and the yield for all countries was better than ten per cent above the average of the previous five years.

ACCOUNT BOOKS GUIDE HIM IN HIS FARMING.

EVERYTHING pays on the farm of A. H. Brown, of Freesoil. He knows what he receives from the various lines included in his system of farming, and what is paid out in labor and materials in each. His books, in other words, have guided him to an efficient system of managing his farm operations.

Cows form the hub of the system. He markets his farm crops through them, retaining thereby much of the fertilizing elements of these crops. His milk checks last year totaled \$1,900. Besides, he has added several animals to his young herd of pure-bred Guernseys. Flocks of hens, turkeys and geese also add to the exchequer more than they take out. In the latter, Mrs. Brown has a particularly keen interest.

TESTER SUMMARIZES A YEAR'S WORK.

IN the annual cow-testing association summary drawn up by H. J. Schaner, tester in the South Kent Association, he shows a total of 246 cows were tested, averaging 7,301 pounds of milk and 280.7 pounds of fat.

Mr. Ivan Smith, of Caledonia, Michigan, with six pure-bred Jerseys, had the high herd for the year, averaging 465.4 pounds fat and 8,907 pounds of milk. The high herd in milk production was owned by Mr. Joe N. Wenger, of Caledonia, Michigan. His nine pure-bred and grade Holsteins averaged 10,920 pounds of milk and 367.4 pounds of fat. The high cow in butter-fat production belonged to Mr. Orlo Good, of Caledonia, Michigan. This eight-year-old three-quarters Jersey produced 13,109 pounds of milk and 616.5 pounds of fat. A pure-bred Jersey, five years old, owned by Ivan Smith, made 600.57 pounds of fat and 10,451 pounds of milk. The high cow in milk production belonged to Joe Wenger, producing 15,952 pounds of milk and 481 pounds of fat. This cow was a pure-bred Holstein.

Ernest Ruehs and J. J. Luneke, with pure-bred and grade Guernseys, respectively, had the best production in Guernseys. Mr. Ivan Smith's pure-bred Jersey herd was the only herd averaging better than 400 pounds of fat. Ten other herds averaged above 300 pounds of fat for the association year. Two cows made better than 600 pounds of fat. Fifteen cows made between 400 and 500 pounds of fat, and eighteen cows made 365 to 400 pounds of fat in the association year.

Some interesting comments were made by Mr. Schaner in summarizing the year's work. Seven members out of the twenty-four in the association are feeding alfalfa hay, and five have started new seeding. All members are either using or owning pure-bred sires. Five pure-bred bulls were purchased during the years as follows: Two Guernseys, one Jersey, one Holstein, and one Brown Swiss. All Kent county herds in this association are tuberculin tested.

Four members are without silos. There are fifteen stave silos, eight tile silos and one cement silo in use among the association members. During the year thirty-eight unprofitable cows were sold to the butcher. Two members sold out during the association year—Mr. William Blake, with twelve head of grade Holsteins, averaging \$103.75 per head, and Charles Ward, with twelve pure-bred and grade Jerseys averaging \$105.46 per head. Grade cows in this locality without cow-testing association records are selling for about \$85.

THE SONG OF THE COW-MAN.

THEN pretty soon one cow is done, another bossie is begun, and all the while I'm having fun; but better still—when I am through, I know I've made a bone or two. I know there is cash in what I do.—Exc.

Cream Separator Facts Worth Thinking About!

It is not enough to buy a cream separator that skims *fairly* clean and that runs *fairly* easy—you want one that gets *all* the butterfat down to the last drop and that runs so easily that a child can turn it. In addition, you must get construction that makes many years of good service possible.

In recent tests, the Illinois Cow Testing Association found it a common occurrence, on average farms, for *out-worn, poorly constructed, poorly cared-for separators to waste \$25 worth of butterfat every month. Think of it, \$300 wasted in a single year!* If the machine you are using is failing you in such a manner, you cannot afford to operate it a single week longer, regardless of the so-called "bargain price" you may have paid for it.

It is unnecessary for you to suffer such butterfat losses. You can escape them by throwing out the wasteful machine now and replacing it with a new, efficient McCormick-Deering Ball-Bearing Cream Separator. These modern, easy-running separators represent genuine economy. From the viewpoint of long life, easy-turning, and close-skimming, they outrank all others. You need one on your farm!

If ready cash is not plentiful, ask our dealer for his liberal terms. Let a McCormick-Deering Primrose earn bigger cream profits for you and apply the extra dollars on the easy payments the McCormick-Deering dealer will offer you.

There are five popular sizes—all of standard McCormick-Deering ball-bearing design. Ask the McCormick-Deering dealer about the size best suited to your herd.

INTERNATIONAL HARVESTER COMPANY

606 So. Michigan Ave.

of America
(Incorporated)

Chicago, Ill.



McCormick-Deering

No. 1 (350 lbs. capacity) No. 2 (450 lbs. capacity) No. 3 (650 lbs. capacity) No. 4 (850 lbs. capacity) No. 5 (1100 lbs. capacity)

CERTIFIED N. DAK. GROWN GRIMM ALFALFA seed, direct from grower, fields registered and state inspected. F. UMBACK, LEMMON, S. D.

EVERGREENS Hill's Hardy Tested Varieties Fine for windbreaks, hedges and lawn planting. All hardy, vigorous and well rooted. We ship everywhere. Write for free Evergreen book. Beautiful Evergreen Trees at moderate prices. B. Hill Nursery Co., Box 230, Garden, Ill.

A \$2840 HOUSE FOR \$1891



489 5-ROOMS

LET us ship you direct from our mill all the materials complete for a **Sterling cut-to-fit home**, (not portable) and save you four big profits on lumber, hardware, mill-work and labor, besides a proved 20% saving in waste. Substantially built and lasting. Satisfaction Guaranteed or Your Money Back!

Buying Direct Saves 1/3 ABOVE prices include everything complete—all lumber cut-to-fit (highest grade only), windows, doors, flooring, shingles, lath, glass, paint, varnish, hardware, nails, molding, cupboards—everything plainly marked and easily assembled according to drawings and directions we furnish.

\$1891 Home includes double walls and floors. **\$489 five-room house** includes single walls and floors; for double add \$42.

International Mill & Timber Co. 1902 South Wenona Ave. Bay City, Mich.

FREE CATALOG with many other beautiful homes at \$489 to \$4,797—all at big savings. Catalogs \$73 and up.

EXCAVATORS for DIGGING
MARL
S. O. NAFZIGER
Box 434, Kalamazoo, Mich.

Limestone Pulverizer
From Factory to Farmer \$250
Price two Ton
Reasonable terms. Capacity two tons per hour. Also three ton \$295.00. Why pay more when you can buy direct. Write us for free literature.
Knoxville Pulverizer Co. Knoxville, Tenn.

Try this mixer for 30 days
Concreting on the farm pays. Put down concrete floors, sidewalks, foundations, etc. with a Kwik-Mix. It turns out a wheelbarrow full of concrete a minute. Do away with the drudgery of mixing by hand. Try a Kwik-Mix Mixer, on 30 days' Trial. You will like it and make extra money concreting for your neighbors. The new Kwik-Mix is the best farm mixer on the market. Works as good as a \$200.00 mixer.

Price Reduced
Pay only \$34.00 after 30 days' use or send \$33.00 with order. Write for free catalog on how to use a Kwik-Mix on the farm. It will pay you to write today.
BADGER KWIK-MIX COMPANY.
1122 Cleveland Avenue Milwaukee Wisconsin

Kwik-Mix CONCRETE MIXER Send for booklet FREE

White Blossom SWEET CLOVER \$3.00 Per Bu.
Unhulled. Grow Sweet Clover. Cheaper and better than Red. Grows anywhere. Best fertilizer, wonderful pasture and hay. Big money maker. Crop often worth \$50 per acre. Sow our superior, scarified seed.
A. A. Berry Seed Co., Box 931 Clarinda, Iowa

ALSIKE \$4.40 Per Bu. AND TIMOTHY
Sample Free—Best and Cheapest Seed Known. Contains 10% to 15% Alsike. Our No. 20 grade contains 20% to 25% Alsike, a wonderful bargain. A great hay and pasture combination, easy to grow and ridiculously cheap. Seed all thoroughly cleaned and guaranteed. Write today. Big Seed Guide Free. American Field Seed Co., Dept. 431 Chicago, Ill.

BOWSER'S HEAVY-DUTY GRINDERS
FOREMOST AMONG BETTER GRINDERS
Crush and grind all the grains that grow; fine for hogs or coarser for cattle feeding. Corn in husk, Head Kafirs, and all small grains.
Strength, Durability and Service radiate from every line of these Masterful Grinders. Simple, yet effective in adjustment. Last a lifetime.
LIGHT RUNNING — LONG LIFE — EXTRA CAPACITY
CONE-SHAPED BURRS
10 sizes—2 to 25 H. P. or more. Also Sweep Mills. It pays well to investigate. Catalog FREE.
The D. N. P. Bowser Co., South Bend, Ind.

F.S.R.

Royster's "cured" fertilizer is certified fertilizer

YOU can't look at the ordinary bag of fertilizer and tell how good it is. You have to risk the time and money of a season's work before you **KNOW**. It isn't *known* to be good until you get your money!

Certified Fertilizer

But Royster's "cured" fertilizer is like a certified check.

It is certified by the forty years we have spent in learning the needs of the soil you work.

It is certified by the experience of successful farmers all about you, who say "Royster's fertilizer increased my earnings."

"Cured" Fertilizer is better plant food

It is certified by the "curing"—a feature of Royster's fertilizer which increases its value because of a more complete chemical action, making the plant food readily available to the plant. (Royster's goods age in great bins for four to six months. They are then re-milled and bagged).

Ask for "Royster's"

Stop guessing about fertilizer. Look for the name "Royster" on your bags of fertilizer and you have found the assurance that your crops will have proper feeding from seed time to harvest.

F. S. ROYSTER GUANO CO.,
TOLEDO, OHIO

ROYSTER

Field Tested Fertilizers

F3

Please Mention The Michigan Farmer When Writing Advertisers



Don't let this happen to your apples

Kill the aphids before they have a chance to do serious damage to fruit or trees. Spray with Hall's Nicotine Sulphate. It contains 40% pure Nicotine—the deadliest aphid-poison known.

Being a vegetable extract, it does not harm blossom, fruit or foliage; but it does kill aphids every time.

A ten-pound tin makes 800 to 1100 gallons of spray. The cost is less than 2c a gallon.

When spraying for scab, codling moth, etc., mix Hall's Nicotine Sulphate with the solution and make one spray do double duty.

Buy from your dealer. If he cannot supply you, send us your order along with his name.

Note—Hall's Nicotine Sulphate is also deadly effective against thrips, red bugs, leaf hoppers, psylla and many similar insects on fruit trees and truck crops.



10 lb. tins, \$13.50
2 lb. tins, 3.50
1/2 lb. tins, 1.25
1 oz. bottles, .35

HALL'S

NICOTINE SULPHATE

Hall Tobacco Chemical Co.
3955 Park Avenue, St. Louis, Mo.

Potato Men Get Advice

*Specialists Urge Improvement in Cultural Practices
Grading and Marketing*

THE meeting of the Michigan Potato Producers' Association which was held at the College during Farmers' Week was a very interesting and instructive one. Men interested in various phases of growing, marketing and standardization made addresses.

Mr. R. H. Shoemaker, Grand Rapids representative of the department of markets, submitted a very interesting paper entitled, "Lessons Learned From Market Reports." This paper explained in detail how to read the reports wisely and obtain from them the most information possible. The point was emphasized that the growers by means of the daily market reports could obtain as much information concerning market conditions as could the dealers and shippers.

Mandatory Laws Improve Prices Paid for Our Potatoes.

W. P. Hartman, of the State Department of Agriculture, stated that due to the mandatory grading laws which went into effect in this state last October, that the margin between price received for Michigan potatoes compared with prices received for potatoes from other states was gradually becoming less and less. It is fully expected that the grading laws will prove a most effective means in enabling Michigan potatoes to command top-notch prices on the big markets of the country. Since there are seventeen other states in which the potato-grading laws are now mandatory it is essential that Michigan prepares herself to compete with these states on the markets. Mr. Hartman emphasized the point that public sentiment was back of the grading movement and that the potato inspectors were getting the very best of cooperation from growers and shippers.

Hollow Heart and Color Affect Marketing.

Dr. J. T. Horner, of the Economics Department of the Michigan Agricultural College, reported on the results of investigations made on potato markets. Michigan potatoes commanded a lower price than potatoes from some other states this year because stock from here had a large percentage of hollow heart, and many lots of Michigan potatoes were of dark color.

It was thought that on many markets there was a discrimination against the Michigan potatoes because of color, to the extent of ten cents per hundred pounds. There seems to be a tendency for the consumer to associate dark color with poor quality. Mr. Horner stated that the matter of color was not due to variety alone, but might be caused by poor growing conditions, poor handling methods, and so on. It seems that the Detroit and Toledo markets do not discriminate against dark color. To encourage better grading, Dr. Horner stated that warehouses should be better equipped with grading machinery and well lighted so that the operators could do effective work.

Mandatory Grades Necessary.

Mr. G. V. Branch, Director of Municipal Markets, Detroit, gave an interesting discussion of potato market requirements. He stated that while the premium in price commanded by well-graded stock over that of poorly graded potatoes was quite an incentive for good grading, yet it was necessary to have the mandatory grades if the most effective work was to be accomplished. He deplored the fact that quite a portion of the potatoes placed on the Detroit market were brought in on trucks and were ungraded.

How to Reduce Amount of Hollow Heart.

In discussing the producers' problem it was brought out by Mr. H. C. Moore, potato specialist of the Mich-

igan Agricultural College, that careful cultural methods employed in the field would largely eliminate many of the grading and marketing problems. To lessen the percentage of hollow heart it was recommended that the following practices be carried out by growers:

First. Closer distance of planting. Second. Early fitting of the seed-bed. Third. Earlier planting for the more northern sections. Fourth. Turning under plenty of organic matter in the nature of alfalfa or clover sod. Fifth. Liberal use of stable manure and commercial fertilizer. Sixth. The planting of high-quality seed, preferably certified seed.

To overcome the general dark color it was suggested that the Russet Rural potatoes be planted only on the sandy loam types of soil and that on the heavier soils the White Rural potatoes be substituted for the Russet Rural; that potatoes in the northern section of the state where the growing season is short, be planted earlier so that they will mature before digging time; that more care be used in harvesting, grading and storing potatoes, since bruised and mechanically injured stock turns dark colored and, under favorable storage conditions, becomes moldy.

Winners Farmers' Week Potato Show.

Ribbons and approximately \$100 in cash prizes were given by the Michigan Potato Producers' Association to those showing the best samples of potatoes. While the number of exhibits was small, yet the quality was very good and competition keen.

The following were the winners in the Russet Rural Class: First, E. Sutton, Central Lake; 2d, Clever Brady, Wolverine; 3d, Wm. Shann, Wolverine; 4th, Frank Wyrick, Alanson; 5th, Olaf Nelson, Aloha; 6th, E. M. Moore, Mason.

In the Any Other Variety Class, Joseph Drake, of Sagola, took first prize with White Rurals; George Harrison, Manton, second with White Rurals; A. F. Kipfer, Stephenson, third; John Mosser, Weadock, fourth; C. R. Miller, Manistique, fifth; John Wester, Cheboygan, sixth. Beside the White Rural in this class, other varieties were Early Ohio, Irish Cobbler and Green Mountain.

In the Boys' and Girls' Potato Club exhibit, which included all varieties, Edward Domke, Oqueoc, won first place with Russet Rurals. Second prize was awarded Clinton McDonald, of Millersburg. Robert Click, of Petoskey, won third place. Joseph Drake, Sagola, and Stanley Procter, Salem, won fourth and fifth prizes respectively.

The State Boys' and Girls' Club Championship is decided on the four-point basis, quality, yield per acre, report and profit. On this basis the state championship was won this year by Joseph Drake, Sagola, Michigan. Mr. Drake receives for the state championship the silver cup which is awarded by the Michigan Potato Growers' Exchange.

LIKES THE OAT CROP.

I WAS always quite strong on raising oats as a cash crop. I always calculated that we can produce two bushels of oats where we could one bushel of wheat, as two bushels of oats will usually bring as much as one bushel of wheat, and a little more sure of a crop.

This year my wheat averaged thirty-four bushels per acre, and oats sixty-two bushels. It costs me about \$2.00 per acre less for fertilizer and seed and does not take over one-half the work to put it in, as we are on heavy soil.—I. G. Brunt.

MORE COWS NEEDED.

ARENAC county, as well as other northern counties of the state, need more dairy cattle. Such is the opinion of Prof. O. E. Reed, of the Michigan Agricultural College.

"In the dairy business," says Mr. Reed, "the farmer finds employment for himself 300 or more days of the year. Where a farmer fails to find work for this number of days he is not a good manager. That is the present trouble with the wheat farmers of the northwest. In this respect dairying is unequaled."

The fear of over-production is, in Mr. Reed's opinion, a myth. There has been no over-production of dairy products in seventy years. With health crusades being conducted on all sides, the consumption of dairy products is being urged upon all peoples. Our present knowledge of the requirements of the human diet shows the necessity of a generous use of milk and its derivatives. So long as a high percentage of our population continues to consume oleo, the opportunity of serving the race through the expansion of the dairy business is open.

One farmer upon joining a cow-testing association found that he was realizing a profit of \$31 a month from thirty cows. After talking the matter over with the tester, he was persuaded to purchase some supplementary feed, with the result that during the following month his cows showed a profit of \$190.

Generally, however, farmers in the northern counties should depend almost entirely upon home-grown feeds. Through the generous use of legume hay, silage and grains it becomes possible for the farmer outside the whole milk areas to compete in the central markets in the profitable sale of butter and cheese and cream.

The best results are surest to the man who knows what his cows are doing. To get that knowledge he needs to belong to a cow-testing association. Today, over 2,500 farmers in the state are members of such organizations. The farmers of Genesee county who belong to these organizations are finding that they now can produce milk profitably at a profit, which before would have brought a loss. Better rations to better cows get better results.—M. F. Parker.

SELLING MILK INSTEAD OF CREAM.

We are separating milk at present. Have been offered a good price for the whole milk, \$2.40 per hundred at our door. Would semi-solid buttermilk take the place of the skim-milk we are feeding our chickens and pigs?—H. H.

The quality of the milk not being given one can not give an opinion as to the better plan of disposing of the milk. If your milk tests only three per cent fat, then \$2.40 per hundred is a fair price, but if your milk tests five per cent fat or better, then the price is not very good. Condenseries and creameries are paying fifty-five and sixty cents at the present time for butter-fat, and this, with the skim-milk to feed at home, makes rich milk worth more than \$2.40 per hundred.

The buttermilk will probably take the place of the skim-milk for hens and pigs. But for young calves sweet skim-milk is much to be preferred.



Perhaps the Rope in this Lad's Hands Will Tie Him up to the Live Stock Business.



If We Handed You a Few Hundred Dollars Toward the Cost of a New Barn—

we would not be helping you half so much as we do in sending you the Louden Book of Barn Plans free. This 112-page book shows how to save hundreds of dollars on material and labor in building a barn. But of greater importance, it shows how to arrange it most conveniently, so as to save you hundreds of hours of time and labor every year as long as you use it. And proportionate savings can be made even though you merely remodel your old barn.

Here's a Book It Will Pay You to Have

It has been written by barn building experts who have planned more than 15,000 modern, labor-saving barns for American farmers. Every plan—every recommendation it contains is practical and economical. Illustrates more than 50 up-to-date barns with floor plans; best methods of framing for maximum mow capacity; different types of roofs; proper location of floor levels; etc. Tells about concrete work, ventilation, proper arrangement of stalls and pens—in fact everything a farmer who is going to build or remodel a barn should know.

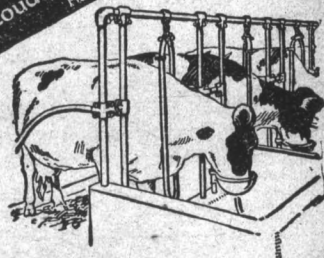
We believe that resultful farming depends greatly upon a convenient, time-saving, well-ventilated barn. It is the farmer's work shop and must be arranged so he can do his barn work easiest and with greatest saving of costly labor.

Write for Your Copy—No Obligation

If you are going to build or remodel a barn, get this Louden Barn Plan Book—there's no cost or obligation attached. We manufacture the old reliable line of Louden Barn Equipment and the benefit of our 57 years' experience in helping thousands of other farmers plan and equip better barns is yours for the asking. Simply tell us the number and kind of stock you wish to house, when you desire to start work and the book will be sent at once. Work out your plans now—while you have time. Mail the coupon today.

THE LOUDEN MACHINERY COMPANY
72 Court Street (Est. 1867) Fairfield, Iowa
BRANCHES—Albany, N. Y.; Chicago, Ill.; St. Paul, Minn.

LOUDEN
BARN PLAN BOOK and SERVICE



Louden Steel Stalls and Stanchions give cows pasture comfort in the barn. Keep cows healthy—increased production—save work. Louden Water Bowls increase milk flow within 24 hours. Lengthen the lactation period. Quickly pay big profits.

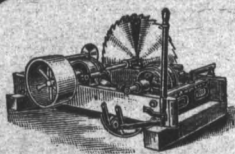


Louden Manure Carrier takes out big loads, saves all this hard work 365 days a year, lasts a lifetime. Easily installed in any barn—old or new. The Loudens also includes Hay Unloading Tools, Power Hoists, Barn and Garage Door Hangers, Manger Divisions, Cupolas, Hog House Equipment, Bull Staff—“Everything for the Barn”

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Without obligation please send me the Loudens Barn Plan Book.

Name.....
Town.....
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I expect to build (remodel) a barn about (date).....
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with a Howell Portable Saw Mill. Turn your standing timber into high price building lumber at the mere cost of sawing. Big demand for lumber, lath and shingles. Keep your engine busy the year round making

Big Money In Custom Sawing for your neighbors. Howell saw mills are made in several sizes suitable for tractors of any size. Also Edgers, Planers, Lath and Shingle machines. Write for free Catalog, B-8.
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The richest acre on your farm

Look for "Planet Jr."

No single farm operation pays so big a cash profit as a well-kept home garden. It yields year-round returns in money saved and better health for the whole family. With Planet Jr. seeders and wheel hoes planting and hoeing your garden is a matter of minutes. They are old-fashioned garden tools what the reaper and binder is to the old hand cradle. Save their small first cost many times over in a season.

Set the boy up to a farm of his own. Manure and plow a piece for him, give him a Planet Jr. wheel hoe and let him earn some money this summer. The new catalogue tells the story. Get one from your dealer or from us.

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Planet Jr. No. 17 Single Wheel Hoe



Free Catalog in colors explains how you can save money on Farm Truck or Road Wagons, also steel or wood wheels to fit any running gear. Send for it today.

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\$24.95 Upward **AMERICAN CREAM SEPARATOR**

On trial. Easy running, easily cleaned. Skims warm or cold milk. Different from picture which shows large size easy running New L.S. Model. Get our easy

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Type 600 Ignition System for **FORDS**



It is not just a timer, but a complete ignition system—Makes a wonderful improvement in Fords—insures quick, easy starts, more power on the hills, smooth running under all conditions. Ask about SPECIAL TRIAL OFFER, giving dealer's name.

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Pyrox beats home-mixed sprays

TIME and labor were never more valuable than now. Besides being a slow, time-consuming, mussy job, home-made sprays can't compare with Pyrox in condition, uniformity and reliability.

Pyrox, a smooth, finely milled paste, is a perfect blend of deadly poison and powerful fungicide that does three things at once: Kills leaf-eating insects and repels flea beetles and leaf hoppers; controls disease; invigorates plants. Extra high in copper. *Ideal for home gardens.*

Pyrox mixes easily with water, sprays through finest nozzles in a fog-like mist that covers foliage thoroughly, and when dry sticks like paint. Based on 25 years' experience with sprays. Jars, cans, drums, barrels.

You can now buy all your spray materials from the complete Bowker line.



Bowker's Arsenate of Lead—Dry powdered and paste. Bowker's Calcide—Highgrade calcium arsenate; quick-acting. Bowker's Bodo—A ready-mixed Bordeaux, 10% copper. Bowker's Lime Sulphur—Concentrated liquid and dry. Bowker's Dusting Materials—Sulphur, Copper, etc. Nicotine Sulphate.

BOWKER CHEMICAL COMPANY
49 Chambers St., New York

Pyrox

the powerful triple-duty spray

Kills bugs—controls diseases—stimulates growth

SELL TO YOURSELF.

DISCUSSING the possibilities of increasing the cost of apple production and marketing. Professor G. F. Warren, of Cornell University, suggested that it would be well for the man in debt to get his debts in federal land bank form as soon as possible. One way to reduce the cost of raising apples, he thought, is to raise all the food and feeds possible and sell them to yourselves at city prices. There never was a time when it paid the farmer larger dividends to raise his own home supplies for his table and stock.

RASPBERRY MOSAIC.

IN a round-table conference on small fruits, Dr. W. H. Rankin, of the Geneva station, spoke of mosaic, a disease which has practically ruined raspberry growing in parts of New York state.

"Four points are essential in the effective control of mosaic in New York plantings," he said. "First of all, the diseased plants must be recognized, and this requires some experience. Second, two roguing are necessary, one in June and another in August. Third, the diseased bushes and all the roots must be dug and carried out of the planting carefully and destroyed. Only in this way can clean plantings be maintained and reliable planting stock obtained." He believed that fruiting plantings of red and purple raspberries containing more than twenty per cent mosaic are not worth the expense of roguing. Plantings less than three years old and containing less than ten to fifteen per cent mosaic may be made reasonably free from mosaic by roguing out the diseased plants.

TOO MANY VARIETIES.

IT is the consensus of opinion of growers and dealers that there are far too many varieties of commercial apples in New York state. President Wilson said there were thirty-eight varieties in his orchard, and he would be better off if there were only four, Baldwin, Rhode Island Greening, Northern Spy and McIntosh. Ralph W. Rees, of the Western New York Fruit Growers' Cooperative Packing Association, said that the association was called upon to pack 150 varieties of apples last season, and that the limitation of packing to not more than twenty-five of the old standard varieties would be beneficial to the packers as well as to the farmers.

CUTWORMS.

Can you please tell me what makes the cutworms get on my corn every year, and it looks as though the lighter the ground the worse they destroy the crop.—D. B.

Cutworms breed in sod land. They are very apt to attack spring-plowed sod if corn is planted on such land, and not only will they work on crops planted in newly-plowed sod, but they will travel from sod land quite a long distance to reach cultivated fields and destroy them. As they travel at night, they are apt to pass unnoticed.

I would advise the use of bran bait, broadcasted plentifully, not only through the corn fields, but especially around the edges and between the corn and sod that may be in the vicinity.

Following are the directions for preparing bran bait for this purpose:

Twenty pounds of bran; half gallon of cheap molasses; a little water; one pound of white arsenic (not arsenate of lead), or one pound of Paris green, and scent with a small amount of amyl acetate (banana oil), or ethyl acetate (acetic ether), and broadcast. This is sufficient for an acre or so of land. Mix very thoroughly.—R. P. Pettit.

More Money from Your Crops

You can do it with seeds that have vitality and life—that are of high germination and adapted to the soil. The work of preparing the land and planting is the same whether you use ordinary seed or pedigreed seed. But the crop tells the story; added profit—of ten double or triple—comes from using hardy, big-yielding, Michigan-grown, Isbell's seeds.



45 Years of Better Seeds

For nearly a half century, Isbell's have been developing yield, vitality and hardiness in seeds. Ceaseless experimenting, careful selection, better growing, sorting and cleaning methods have done this. 200,000 customers have proved this profit-building quality—they plant Isbell's seeds year after year and get bumper crops. We grow our own seed—you buy direct from us, saving money and eliminating all risk of substitution.

This Valuable Book—

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The High Pressure Sprayer

Equipped with a combination nozzle for light or heavy mixtures. Leak-proof shut-off. Can be furnished with an extension for spraying fruit trees. Free Book—"When, What and How to Spray." Write today for your copy or ask your Home Town Hudson Dealer.

The Hudson Misty does fine work on small jobs. Thousands in use. Strong, double seamed, leakproof.

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AN absolute necessity for the successful citrus grove. Unequaled for easy, rapid, thorough spraying. Every desirable style and size. Hand Pumps with easy operating cog gear handle—Power Pumps with automatic pressure control—give powerful penetrating spray that reaches every leaf and blossom, every nook and corner. The Myers line includes Pumps for Every Purpose, Hay Tools and Door Hangers. Ask your dealer or write us. THE F. E. MYERS & BRO. CO. 293 Church St., Ashland, Ohio



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Do the work faster, better and in half the time. Write today for Catalog—Fruit Growers Saw Co., Scotts Valley, N.Y.

Strawberries

Keith's New Land plants pay big profits. One planting insures three good crops. Easy to raise. Keith's plants grown on fresh, virgin soil are strong, healthy, vigorous, deep-rooted and productive.



\$500 to \$700 PER ACRE with plenty of fresh strawberries for the home table. Others are doing it—so can you. Keith's "Ways to Successful Berry Culture" free to customers. Write today for our catalog. It's Free. KEITH BROS. NURSERY Box 902 Sawyer, Mich.

RHODES DOUBLE CUT PRUNING SHEAR Cuts from both sides of limb and does not bruise the bark. Made in all STYLES & SIZES. All shears delivered free to your door. Send for circular and prices.

RHODES MANUFACTURING CO.
301 S. Division Ave. GRAND RAPIDS, MICH.

The Eclipse Spray Pump is simple in construction, durable and efficient. Made in several sizes to meet the various needs.

SPRAY THE MORRILL & MORLEY WAY

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Plant these 4 Best Grapes

Concord Agawam Niagara Worden

Hardest kinds. Once planted and growing you won't part with them for ten times their cost. Large amber-red berries on big bunches. Very sweet. Each 20c; 12, \$1.75; 100, \$12.

Best known grape. Sure to succeed. Fine for grape juice. 15c; 12, \$1.50; 100, \$10. (White Concord). Best greenish-white grape grown. Each 20c; 12, \$1.75; 100, \$12.

Large black berries. Bunches big. Extra early, hardy, sweet. 20c; 12, \$1.75; 100, \$12.

Strong, well-rooted vines. **ONLY 65c** Set of four best varieties. Postpaid and Satisfaction Guaranteed.

Illustrated description telling you how to build this beautiful and useful **GRAPE ARBOR** and illustrated seed and nursery catalog free with every order.

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More and Better

Home Grown Fruit

to eat and preserve.

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to beautify the grounds.

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HAYES Fruit Fog Sprayers

Mechanically perfected—not only guaranteed to develop 300 pounds pressure year in year out, but so simply in construction that there is little to get out of order. Every part is easily accessible. The pump is corrosion-proof.

Pay No More Than You Want. You can pay whatever you want for Hayes Sprayers. We quote them in sizes ranging from 3/4 to 16 gals. per minute, with or without trucks, engines or special equipment. Hayes Power Sprayers vary in capacity only. The smallest maintains same pressure and is as efficient and satisfactory as largest size.

SEND FOR CATALOG showing power sprayers, for every spraying need. A full line of barrels, bucket, wheelbarrow and other hand sprayers at prices that are right.

Distribution and dealers in all principal cities.

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Dept. 63, Galva, Ill.

NEWS FROM CLOVERLAND

ADVISES AGAINST ITALIAN SEED.

THE new agricultural agent of Chippewa county, D. L. McMillan, and formerly director of the experiment station at Chatham, is warning his farmers against the use of imported Italian clover seed in the face of the cloverseed shortage in this country. He points out that Italian cloverseed cannot stand our northern climate. It is southern-grown seed and not the local soils that give poor stands of clover, Mr. McMillan insists.

FINDS A "FLOATER."

A HOUGHTON county farmer recently found on his land a product not usually associated with Michigan agriculture. This was a "head" of native copper—a "floater"—weighing 483 pounds. It was forty-two inches in height, thirty-two inches in width and about three inches thick. The nugget shows signs of glaciation and is reported to also exhibit the outlines of an Indian's head wrought in the soft metal by an Indian artificer of the distant past. The specimen was sold to the University of Michigan at the current market price of copper.

RESULTS OF GOITRE SURVEY.

THE superintendent of schools of Escanaba, W. E. Olds, has made public the results of a survey of school children of that city, to determine the presence of goiter among them. It appears from figures given out by Superintendent Olds that, of 1,357 children examined, 621 children were found to have enlarged thyroid glands. It is estimated that among girls between the fifth and twelfth grades, more than sixty per cent have enlarged thyroids. The actual percentages are 67.5 for girls and 38.5 for boys. In the high schools of the city only those pupils were examined who presented consent-cards signed by their parents.

SOME FACTS ON CLOVERLAND

TO the farmers in the mining sections of the Upper Peninsula, the taxation of mining property is of great importance. How taxes run in these mining counties is revealed by figures recently made public.

The average per capita tax in these mining counties is put at \$4.07 as compared with \$5.05 in the industrial counties; \$4.00 in the semi-industrial; \$3.86 in the agricultural counties, and \$2.32 in the unclassified counties. In Keweenaw county, which is rich in mining properties, and rather few in population, the per capita tax is \$7.88. In Gogebic, the per capita tax averages \$5.90. In Dickinson the tax is \$2.85 per capita; in Houghton, \$2.97; in Iron, \$5.01; in Marquette, \$4.02. These are all mining counties. Six Upper Peninsula mining counties pay 5.06 per cent of the total state tax.

Hancock, which organized some years ago as a fourth-class city, is now realizing the desirability of bringing in mining properties to help sustain its tax burden, and there is reported a movement on foot for this city again to seek the village status in order that it may become a part of the township adjacent which contains valuable mining properties that could then be taxed for school purposes.

Another suggestion is that buildings in Hancock shall be rated on the basis of cubic capacity in determining their assessed valuation. The copper country in which Hancock is situated has not yet fully recovered from the post-war depression, and the burden of taxation is felt there even more than in some of the strictly agricultural sec-

tions of the state. There were recently reported to be thirty-two idle mine shafts in the district, most of which could again operate were copper prices to rise.

When she is fed a ration of thirty-five pounds of corn silage, ten pounds of alfalfa hay, six pounds of ground oats, six pounds of corn meal and a pound of cottonseed meal daily, Brindle consumes feed that, at present prices, amounts to about thirty-five cents.



SAVE 50¢ A ROLL

Ward's RADIO ROOFING

Regular 85-pound standard weight

Don't confuse this full-weight 85-pound roofing with cheaper, lighter roofing sold at the same price. Lay it over old roofs. There is enough in one roll to cover 100 square feet—yet a roll costs only \$1.85, with nails and cement.

Fire Underwriters Approve it

Radio Roofing is surfaced with red or green slate that beautifies as well as protects it. Resists fire. Not affected by heat and cold.

Ward's 85 lb. Slate Surfaced ROOFING
\$1.85 PER ROLL
Guaranteed 15 Years

We guarantee it for 15 years—it should last many more.

Send for Free Sample

Examine it! Cut it open! Test it. Judge its remarkable quality. Write for free Building Material Catalogue. Order the roofing you need. Catalogue No. 174-800. State color—red or green.

Shipped From	Price Per Roll	Order From
Chicago	\$1.85	Chicago
York, Penna.	1.85	Chicago
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Kansas City	2.00	Kansas City
St. Paul	2.00	St. Paul
Portland, Ore.	2.00	Portland
Houston, Texas	2.45	Ft. Worth
Oakland, Calif.	2.65	Oakland

Add 10¢ for extra long nails
Shipping weight 85 pounds per roll

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OCCASIONALLY we hear from a farmer that he "can't afford" a J. B. Colt lighting and cooking system!

This same man would think nothing of buying a high-priced cow or of putting hundreds of dollars into improving his barn—but he "couldn't afford" to pay a comparatively small amount for an improvement that would save his wife hours of drudgery—that would make his home a bright, cheerful place where neighbors would enjoy calling—that would keep his children on the farm—that would encourage reading, and cleanliness, and other good habits.

The fact is he cannot afford to be without it.

Your family deserves the comfort and conveniences of a J. B. Colt Carbide-gas system. Your wife deserves the saving of energy that results from Carbide-gas cooking and from the Colt self-heating iron. Your whole family deserves the benefits that good, healthy light brings to any home.

The Colt system is perfectly simple, perfectly automatic—no lamps to clean, no parts to replace, no matches. It consists of a generator, buried in the yard, which requires no attention except recharging (average: two or three times a year) with Union Carbide and water, and removal of residue, which then gives useful service as a whitewash, soil corrective, or germicide.

From this "gas-well," the Carbide-gas is carried throughout house, porches, barn, poultry buildings and grounds, by concealed iron pipes.

Write today for complete information on what Carbide-gas lighting will do for you and the very favorable terms on which you can buy a Colt plant.

N.B. Do not be deceived by inferior imitations of the Colt plant. Representatives for the genuine Colt system can furnish credentials.

Union Carbide for use in the Colt system is distributed from more than 150 conveniently located Union Carbide warehouses throughout the country—direct to the user at factory prices. There is one near you.

J. B. COLT COMPANY

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Oldest and largest manufacturers of Carbide lighting and cooking plants in the world

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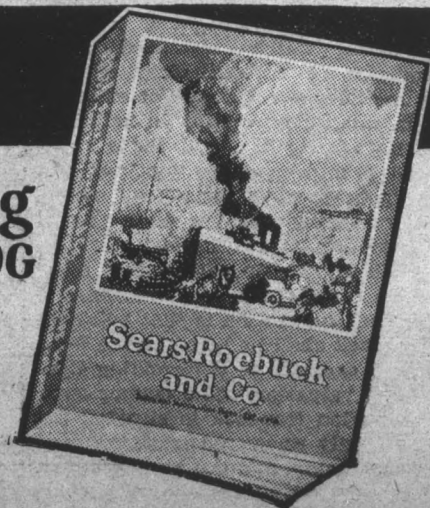
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WORLD EVENTS IN PICTURES



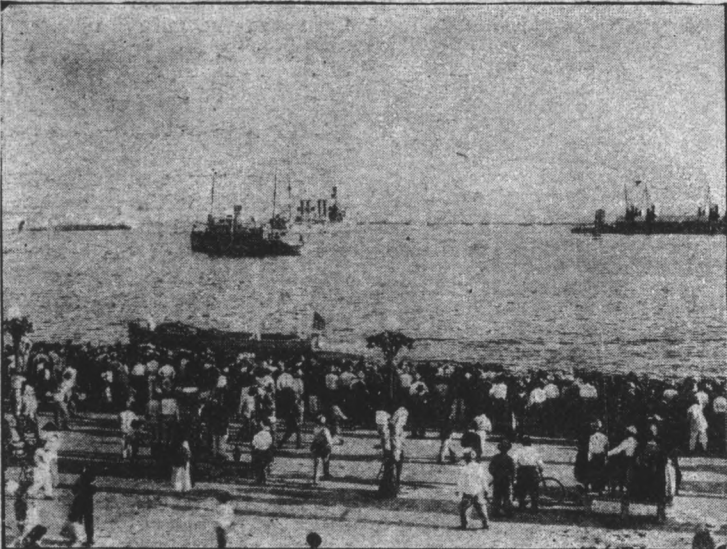
Dr. C. H. Levermore, winner of Bok peace-plan award, with his prize, the \$50,000 check.



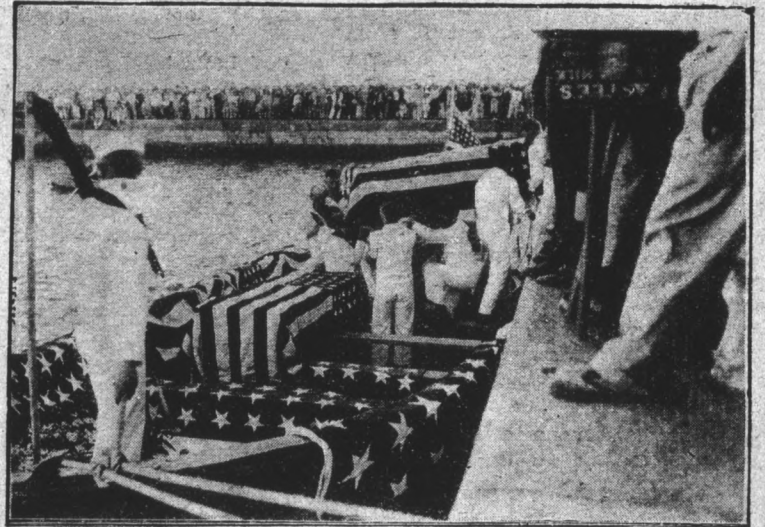
The body of Woodrow Wilson, twenty-eighth president of the United States, on its way to the sepulchre in the Cathedral of Sts. Peter and Paul, in Washington.



C. E. Weber, of Machens, Mo., killed seven prairie wolves within twenty miles of St. Louis.



The American cruiser U. S. S. Omaha swung in the harbor at Vera Cruz, Mexico, as a guard during the recent revolution. Its influence there is shown by the crowds watching it.



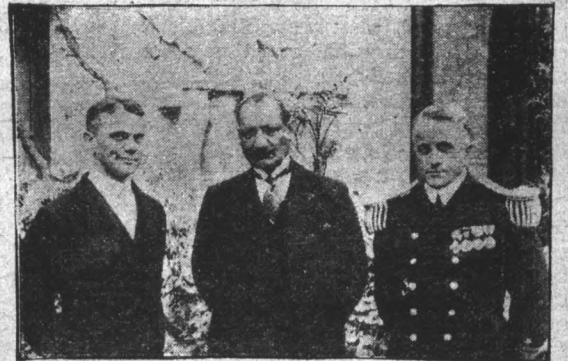
Mexican naval authorities delivered the bodies of Captain Sparrow and his radio officers, victims of the wreck of the U. S. S. Tacoma, at the wharf at Vera Cruz.



Adolfo De La Huerta, with Senora De La Huerta, have left for parts unknown as Huertista forces retreated before the federal troops.



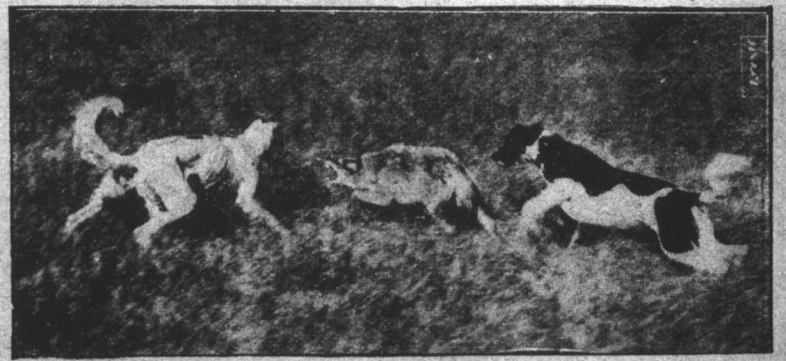
President Coolidge has appointed T. V. O'Connor as chairman of the U. S. Shipping Board.



On invitation of the president of Guatemala, Admiral John H. Dayton, with other U. S. naval officials, paid a visit to that country.



When the St. Lawrence freezes solid, the road to "the hills" is clear and joy reigns in the hearts of ski and snow-shoe enthusiasts in Montreal.



This remarkable hunting picture shows a coyote at the end of a long and desperate unsuccessful race for his life, turning his bared fangs upon his enemy.

WE'LL drop him from the list. How about the bankers?"

We'll have to see. I'm afraid there. I know you'll pardon me for saying it, Barry, but they like to have a man come to them with clean hands. Not that you haven't got them," he interjected, "but—well, you know bankers. What's the money for; running expenses?"

"The mill burned down, you know, without insurance. We have a makeshift thing set up there now—but it's nothing to what will be needed. I've got to have a good, smooth-working plant—otherwise I won't be able to live up to specifications."

"You're not," and the old lawyer smiled quizzically, "going to favor your dearly beloved friend with the order, are you?"

"Who?"

"Worthington."

"The district attorney?"

"That was. Plutocrat now, and member of society, you know. He came into his father's money, just after he went out of office, and bought into the East Coast Machinery Company when it was on its last legs. His money was like new blood. They've got a good big plant. He's president," again the smile, "and I know he'd be glad to have your order."

Houston continued the sarcasm.

"I'd be overjoyed to give it to him. In fact, I think I'd refuse to buy any machinery if I couldn't get it from such a dear friend as Worthington was. It wasn't his fault that I wasn't sent to the penitentiary."

"No, that's right, boy." Old Lawyer Mason was quietly reminiscent. "He tried his best. It seemed to be in those days he was more of a persecutor than prosecutor."

"Let's forget it." Houston laughed uneasily. "Now, to go back to the bankers—"

"There isn't much for us to do but try them, one after another. I guess we might as well start now as any time."

Late that afternoon they were again in the office, the features of Mason wrinkled with thought, those of Barry Houston plainly discouraged. They had failed. The refusals had been courteous, fraught with many apologies for a tight market, and effusive regrets that it would be impossible to loan money on such a gilt-edged proposition as the contract seemed to hold forth, but—There had always been that one word, that stumbling-block against which they had run time after time, shielded and papped by courtesy, but present nevertheless. Nor were Houston and Mason unaware of the real fact which lay behind it all; that the bankers did not care to trust their money in the hands of a man who had been accused of murder and who had escaped the penalty of such a charge by a margin, which to Boston, at least, had seemed exceedingly slight. One after another, there in the office, Mason went over the list of his business acquaintances, seeking for some name that might mean magic to them. But no such inspiration came.

"Drop back tomorrow, boy," he said

The White Desert

By Courtney Ryley Cooper

at last. "I'll think over the thing to-night, and I may be able to get a bright idea. It's going to be tough sledding—too tough, I'm afraid. If only we didn't have to buck up against that trial, and the ideas people seem to have gotten of it, we'd be all right. But—"

There it was again, that one word, that immutable obstacle which seemed to arise always. Houston reached for his hat.

"I'm going to keep on trying, anyway, Mr. Mason. I'll be back tomorrow."

Hospital. There he sought the executive offices and told his story. Five minutes later he was looking at the books of the institution, searching, searching—at last to stifle a cry of excitement and bend closer to a closely written page.

"August second," he read. "Kilbane Worthington, district attorney, Boston, Mass. Acc. by Drs. Horton, Mayer and Brenstein. Investigations into effect of blows on skull. Eight cadavers."

With fingers that were almost fren-

PULL TOGETHER

By James E. Hungerford

We are helped by helping others;
If we give, we always get;
Seeing others as our brothers
Is life's safest, surest bet!
If we give what folks are needing,
It will pay us in the end,
And we just can't help succeeding
In the game of life, my friend.

Cheerfulness is always catching
Certain cure for ev'ry ills;
Happiness is always hatching
In the sunshine of a smile!
Banish gloom, by being cheerful;
Blaze the trail, and set the pace!
And you'll see expressions dreadful
Swiftly fade from ev'ry face!

Life gives back just what we give it;
Give it smiles—and smiles we get;
If we learn this rule, and live it,
We will never know regret;
Give a cheerful word—we'll reap it;
It will come back multiplied,
And will linger—we can keep it
In our "treasure chest," inside.

Get together! Pull together!—
Is the spirit that will win!
If the gales of life we'd weather,
We must buck 'em, with a grin!
Help yourself, by helping others;
Grab an oar and joint the crew!
Pull together with your brothers,
And they'll win the race—for you!

row. I'm going to get that money if I have to make a canvass of Boston, if I have to go out and sell shares at a dollar apiece and if I go broke paying dividends. I've made my promise to go through—and I'm going!"

"Good. I'll be looking for you."

But half an hour later, following a wandering, aimless journey through the crooked streets, Barry Houston suddenly straightened with an inspiration. He whirled, he dived for a cigar store and for a telephone.

"Hello!" he called, after the long wait for connections. "Mr. Mason? Don't look for me tomorrow—I believe I'll not be there."

"But you haven't given it up?"

"Given up?" Houston laughed with sudden enthusiasm. "No—I've just started. Put the date off a day or two until I can try something that's buzzing around in my head. It's a wild idea—but it may work. If it doesn't, I'll see you Thursday."

Then he turned from the telephone and toward the railroad station.

"One, to New York," he ordered hurriedly through the ticket window. "I've got time to make that seven-forty, if you rush it."

And the next morning, Barry Houston was in New York, swirling along Seventh Avenue toward Bellstrand

zied, Houston copied the notation, closed the book, and hurried again for a taxicab. It yet was only nine o'clock. If the traffic were not too thick, if the driver were skilful—

He raced through the gate at Grand Central just as it was closing. He made the train in unison with the last drawing cry of the conductor. Then for hours, in the Pullman chair car, he fidgeted, counting the telegraph posts, checking off the stations as they flipped past the windows, through a day of eagerness, of excited, racking anticipation. It was night when he reached Boston, but Houston did not hesitate. A glance at a telephone book, another rocking ride in a taxicab, and Barry stood on the veranda of a large house, awaiting the answer to his ring at the bell. Finally it came.

"Mr. Worthington," he demanded. The butler arched his eyebrows.

"Sorry, but Mr. Worthington has left orders not to be—"

"Tell him it is a matter of urgent business. That it is something of the utmost importance to him."

A wait. The butler returned.

"Sorry, sir. But Mr. Worthington is just ready to retire."

"You tell Mr. Worthington," answered Houston in a crisp voice, "that he either will see me or regret it. Tell

him I am very sorry, but that just now, I am forced to use his own methods—and that if he doesn't see me within five minutes, there will be something in the morning papers that will be, to say the least, extremely distasteful to him."

"The name, please?"

"It doesn't matter."

"Are you from a newspaper?"

"I'm not saying. Whether I go to one directly from here, depends entirely upon Mr. Worthington. Will you please take my message?"

"I'm afraid—"

"Take my message!"

"Directly, sir!"

Another wait. Then:

"Mr. Worthington will see you in the library, sir."

"Thanks." Houston almost bounded into the hall. A moment later, in the dimness of the heavily furnished, somewhat mysterious appearing library, Barry Houston again faced the man whom, at one time, he had hoped never again to see. Kilbane Worthington was seated at the large table, much in the manner which he had affected in court, elbows on the surface, chin cupped in his thin, nervous hands. The light was not good for recognizing faces; without realizing it, the former district attorney had placed himself at a disadvantage. Squinting, he sought to make out the features of the man who had hurried into the room, and failing, rose.

"Well," he asked somewhat brusquely, "may I inquire—"

"Certainly. My name's Houston."

"Houston—Houston—it seems to me—"

"Maybe your memory needs refreshing. Such little things as I figured in probably slipped your mind the minute you were through with them. To be explicit, my name is Barry Houston, son of the late William K. Houston. You and I met—in the courtroom. You once did me the very high honor to accuse me of murder and then tried your level best to send me to the penitentiary for life when you knew, absolutely and thoroughly, that I was an innocent man!"

CHAPTER XVII.

THE former district attorney started slightly. Then, coming closer, he peered into the tense, angry features of Barry Houston.

"A bit melodramatic, aren't you?" he asked in a sneering tone.

"Perhaps so. But then murder is always melodramatic."

"Murder? You don't intend—"

"No. I simply referred to the past. I should have said 'reference to murder.' I hope you will pardon me if any inelegance of language should offend you."

"Sarcastic, aren't you?"

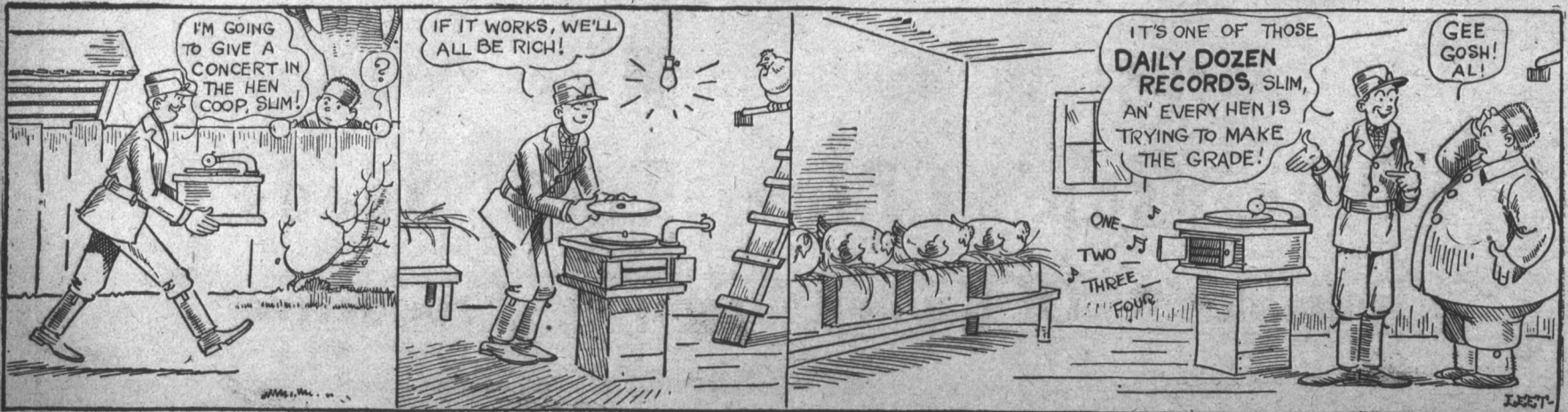
"I have a right to be. Knowing what I know—I should use more than sarcasm."

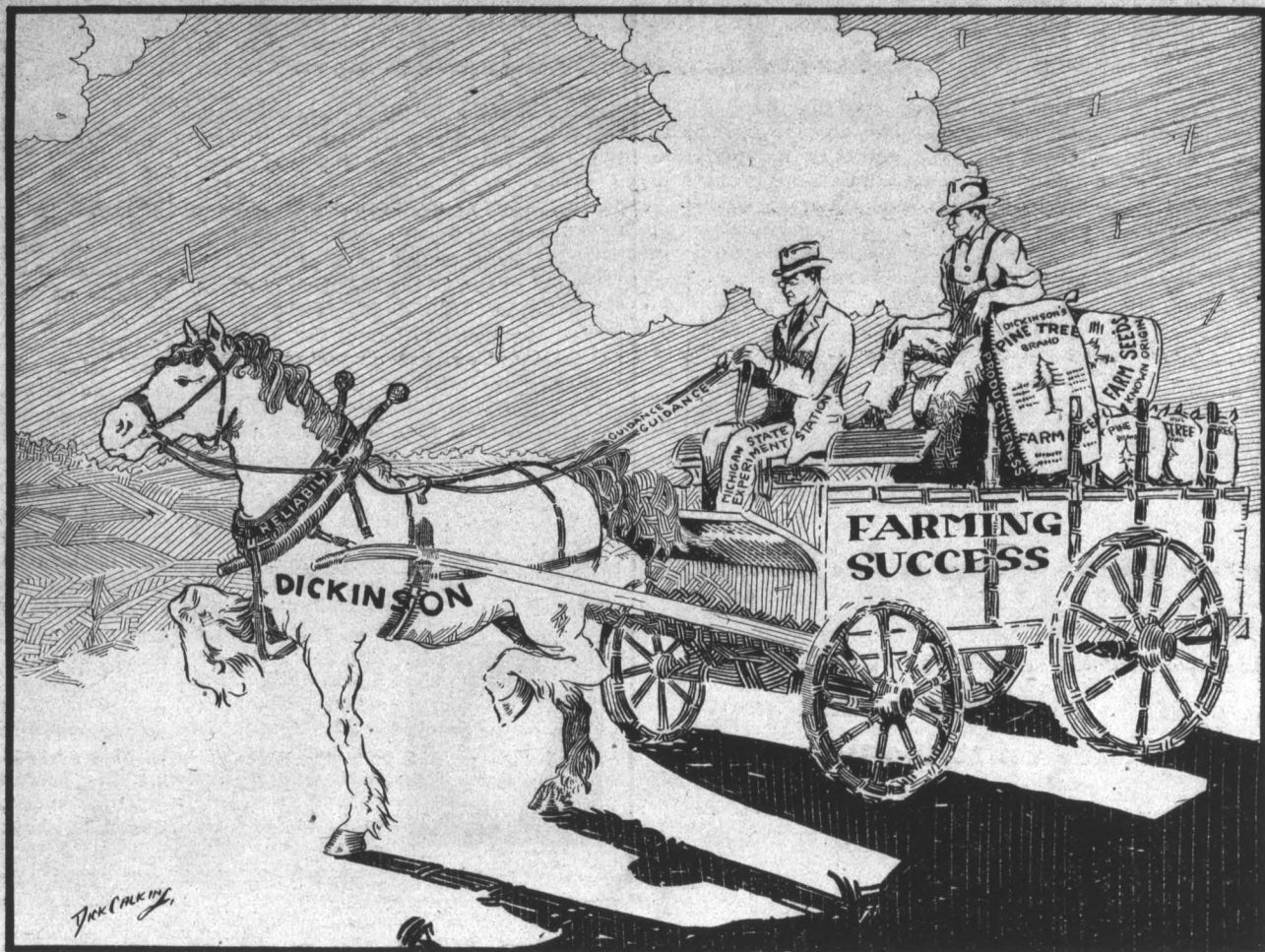
"If I'm not mistaken, you have. The butler spoke of some threat."

"Hardly a threat, Mr. Worthington." Houston was speaking coldly, incisively. "Merely what I have heard you often call in court a statement of fact. (Continued on page 323). —

AL ACRES—Al Speed's Up His Egg Plant by Power of Suggestion.

By Frank R. Lee.





Red Clover

Farmers:

Professor J. F. Cox, of the Michigan Agricultural College, and other prominent agricultural authorities, strongly recommend INCREASED CLOVER ACREAGE.

We give below the summary of a special report on Red Clover prepared for The Albert Dickinson Company by Professor Cox. We urge you to read it and be guided accordingly.

- No. 1.—Italian Clover Seed is worthless for seeding purposes under Michigan conditions.
- No. 2.—Domestic Red Clover grown in the Northern States or in Canada and the "Corn Belt" area, is well adapted to Michigan, but Oregon seed is unadapted.
- No. 3.—Imported Red Clover actually grown in England, Northern Europe and Northern France, is acceptable in case properly adapted Domestic Seed is not available.
- No. 4.—Farmers who wish to sow Red Clover should buy seed of Known Origin and from thoroughly dependable sources properly labeled.
- No. 5.—Professor Cox definitely states that the matter is not one of germination, but of adaptation and productiveness.
- No. 6.—Last, but not least—Professor Cox and other prominent Agricultural authorities, urge farmers to increase their Clover acreage this Spring thus helping to prevent a still shorter Clover acreage in Michigan next year.

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Samuel, Boy and Man

Our Weekly Sermon—By N. A. McCune

THAT Samuel was a good boy and became a good man was to be expected, once we look at his mother. She was of the type that brings forth exceptional sons. Wesley's mother was a woman of extraordinary intellectual and spiritual keenness, and St. Augustine's mother is the explanation of St. Augustine. Scott's mother loved poetry. The little boy, Samuel, hearing the voice of the Lord at night is one of the indelible pictures of the Bible. Childhood is the period when the unseen things, the beauties of imagination, are unspoiled by bad conscience or foolish philosophy. Fairies, heroes, giants, are real people, and—God is a real Person. It is as easy for a little child to talk about God as it is for his grandfather to talk about the price of wool. "Trailing clouds of glory do we come from God who is our home."

After hearing the voice of the Lord, it was settled what Samuel was to be.



He was to be a prophet. Many life issues are decided when we are too small. To get at life-decisions one must begin before college, and very often before high school. One night a tiny French lad attended the Christmas service with his parents. Watching the brightly burning candles, he fell asleep and dreamed he saw the infant Jesus. He never forgot the dream, and it determined the whole course of his life. He became Bernard of Clairvaux, one of the really great religious figures of the twelfth century.

NOT long ago, died Prince Kropotkin. A Russian, he had been imprisoned, had escaped and had lived for many years in England. He devoted his life to attempting to better the condition of his people. When the soviet government gained control Kropotkin ventured to go back. In what manner he died is not known. His devotion to democracy and brotherhood sprang from childhood experiences. He was the son of wealth, and belonged to a noble family. One day a household servant, Makar, is ordered whipped with one hundred lashes with the birch rod, for some trivial offense. Little Kropotkin cannot eat his dinner. When Makar returns he rushes out into a dark passage, catches his hand and tries to kiss it, but Makar snatches it away saying, "Let me alone; when you are grown up, will you not be just the same?" And the little prince screams, "No, no, never!"

The man Samuel is like the boy Samuel. "Speak, for thy servant heareth," says the boy. "Prepare your hearts unto the Lord, and serve him only," says the man. "And Samuel grew and the Lord was with him," was said of the youth: "God forbid that I should sin against the Lord, in ceasing to pray for you," were his words in old age. Impressions in childhood, decisions in boyhood, visions in youth, are making and unmaking manhood every day.

THREE men sat in a safe talking. They had finished their meal, but seemed not in haste. One was a business man of sixty or so, the second a superintendent of city schools, the third the minister in a country town. Said the money-maker, "I don't take much stock in these new-fangled country schools, these what do you call 'em, concentrated—" ("consolidated," put in the superintendent), "yes, consolidated schools. All this money put into fine buildings with gymnasiums, swimming pools, dining-rooms and so forth, is pretty nearly as bad as wasted. Give me the old-fashioned country school with one room every time.

They produced real men. The little kids could sit and listen to the older classes recite and that made them ambitious to go on."

"Yes, but you forget," said the superintendent, leaning forward and pointing with a long forefinger that had made many a boy sit up and go to work, "You forget, Charles, that it wasn't the one-room country school that made men. The men were made in spite of the one-room school with the stove in the corner. What made the men were the chores that awaited them night and morning; the cows that had to be milked and the horses that had to be fed and bedded down. There isn't any substitute to this day for some steady chores that have got to be taken care of every day in the year. If we had a few chores for boys in the city we would have better luck. The modern country school with several rooms and several teachers is simply adding that much more of value to country life, for boys, because they still have the chores. Once you get a first-class school in a community, the people wouldn't go back to the old-fashioned school house if you made them a present of one." "Well, you've got the professional side of it down fine, of course, but I'm unconvinced. This talk about improving country life has very little in it. Keep the land up, raise good crops, and rural life will take care of itself."

THERE is more to life than a living," said the country preacher. "You wouldn't want to live in a city where there are no theaters, no churches or hospitals or lecture courses. Once rural fathers enjoy living in the country, and they will teach their boys the same philosophy. That's what I'm trying to do—to make living in our burg so worth while that the people won't want to move away. Did you ever read Wilson's book on the 'Evolution of the Country Community'?" The business man admitted he didn't read much but the papers. "Here's a copy in my grip. I was reading it on the train this morning. It's the kind of book you like to take to bed. Take this: 'Farmers will attend an auction, and go a long way to a horse-race or a fair, without any intention of buying or selling. The fundamental service rendered by the county fair and the auction is an opportunity afforded to converse.' That wouldn't go very well with the auctioneer, but it's true."

The other day a man was making a survey of a village in Illinois from which most of the best families had moved. "What would make farm life more attractive?" he asked. "A community center, with diversified amusements. You can't raise boys on corn and alfalfa, like you can hogs. They require a more mixed diet." "Well," said the money-maker, "You fellows seem to have conspired against me. You've got the facts and figures, and maybe you're right. I never thought of it that way. I presume the rural life in America is pretty bare in many localities, and ought to be improved. But it does cost a lot of money." "Not nearly so much as candy, face powder and cigarettes," said the preacher. "But of course," put in the school superintendent, "candy, face powder and cigarettes are necessities, while schools and churches—" "That'll do," said the business man.

SUNDAY SCHOOL LESSON FOR MARCH 2.

SUBJECT:—The Revival Under Samuel. I Sam. chaps 1 to 7.
GOLDEN TEXT:—Direct your hearts unto Jehovah, and serve him only, I Sam. 7. 3.

A man can have more friends than he needs if he has plenty of money and isn't particular.

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3.45 per 100 sq. ft.

Think of it. We can now sell Excell Metal Roofing, 28 gauge corrugated at only \$3.45 per 100 sq. ft. painted. Galvanized, only \$4.80. If you have been waiting for metal roofing prices to come down, here they are—direct from factory prices—lower than you can get anywhere else. Send for our New Catalog covering all styles Metal Roofing, Siding, Shingles, Ridging, Ceiling, etc., will save you money.

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AMERICAN SEED CO., Lancaster, Pa.



Doings In Woodland

How Rolly Rabbit Changed Old Grumpy Fox

THERE goes old Grumpy Fox," said Rolly Rabbit as he saw him pass on his way to the Woodland post office one fine morning. "That old fellow hasn't smiled in so long, I'm afraid he has forgotten how."

"Has he always been like that?" asked Bruin.

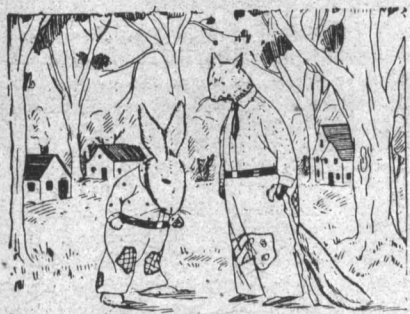
"Ever since I can remember," answered Rolly.

But it was right then that Rolly resolved to see what he could do to make old Grumpy Fox smile and be happy like the other Woodland folks.

And so it was when old Grumpy returned from his morning trip to the post office that Rolly was out by the front gate fixing its broken hinge.

"Good morning, Mr. Fox," said Rolly Rabbit as he came near. "A fine day it's going to be."

Old Grumpy Fox snorted and glared at Rolly, and looked even more



"Good Morning, Mr. Fox," said Rolly.

to shake a little, but he said again, with a broad smile on his face, "Good morning, Mr. Fox. A fine day it's going to be."

"Bah," said Grumpy Fox. "I can't see anything fine about this day. The bright sunshine hurts my eyes," and he went on down the road, his cane poking the sand at every step.

The next morning Rolly was fixing the latch on the gate when Old Grumpy passed.

"Good morning, Mr. Fox. It's a beautiful morning, don't you think?" he said.

"Oh, it'll do," said Grumpy, and his voice was almost gentle. This surprised Rolly so much that he decided to carry his plan further.

The next afternoon, Rolly knocked at Old Grumpy's door, and in his hand he carried a big sack.

"Come in," said Old Grumpy Fox, as ugly as he could. But when he saw it was Rolly his expression changed and his voice was gentle.

"I have brought you some of my sugar cookies," said Rolly, placing the big sack in Grumpy's lap.

Right then a strange thing happened. Big tears began to roll down Old Grumpy's cheeks.

"No one has ever been so good to me before," said Grumpy between sobs.

"Perhaps you haven't been good to them," said Rolly.

"Well, I guess I have been rather cross," admitted Old Grumpy Fox. "Since you have been so kind to me, I can see what kindness means to others."

Soon after that Old Grumpy Fox became known in Woodland as Old Smiley Fox, because he did so many things to make others happy that he was always happy himself.

A NOTE FROM AUNT MARTHA.

Dear Little Folks:

The postman brought me a nice lot of letters from you this week. Marguerite Adams says that when she scolds her dog he climbs up in the

chair and rolls his eyes and looks at her. I wonder if a scolding affects Marguerite that way.

From Grand Rapids comes a letter from Henrietta Westers, only five years old, and says she walks one mile to school every day. That's quite a long walk for a big girl.

Floyd Mackley wants to know how to play a new game. Here's one, Floyd, called "Statue Tag" that I hope you will like. To make themselves safe when "it" is about to tag them, the players kneel with arms outstretched. Each new one to be "it" has the privilege of changing the position required to make the players safe. The more ridiculous the positions, the better the game. Sincerely,

Aunt Martha.

THE WHITE DESERT.

(Continued from page 320).

In case it wasn't repeated to you correctly, I'll bore you with it again. I said that if you didn't see me immediately, there would be something extremely distasteful to you in the morning papers."

"Well? I've seen you. Now—"

"Wait just a moment, Mr. Worthington. I thought it was only civil lawyers who indulged in technicalities. I didn't know that criminal," and he put emphasis on the word, then repeated it, "that criminal lawyers had the habit also."

"If you'll cease this insulting—"

"Oh, I think I have a right to that. To tell the truth, I've only begun to insult you. That is—if you call this sort of a thing an insult. To get at the point of the matter, Mr. Worthington I want to be fair with you. I've come here to ask something—I'll admit that—but it is something that should benefit you in a number of ways. But we'll speak of that later. The main point is this: I am thinking very seriously of suing the city of Boston for a million dollars."

"Well? What's that to me?" Worthington sighed, with a bit of relief, Houston thought, and walked back to the table for a cigarette. "I haven't anything to do with the city. Go as far as you like. I'm out of politics; in case you don't know, I'm in business for myself and haven't the least interest in what the city does, or what any one does to it."

"Even though you should happen to be the bone of contention—and the butt of what may be a good deal of unpleasant notoriety?"

"You're talking blackmail!"

"I beg your pardon. Blackmail is something by which one extorts money. I'm here to try to give you money—or at least the promise of it—and at the same time allow you to make up for something that should, whether it does or not, weigh rather heavily on your conscience."

"If you'll come to the point."

"Exactly. Do you remember my case?"

"In a way. I had a good many of them."

"Which, I hope, you will not handle in the same way that you did mine. But to recall it all to your recollection, I was accused of having killed my own cousin, Tom Langdon, with a mallet."

"Yes—I remember now. You two had some kind of a drunken fight."

"And you, at the time, if I remember correctly, had a fight of your own. It was nearing election time."

"Correct. I remember now." Then, with a little smile, "Quite luckily, I was beaten."

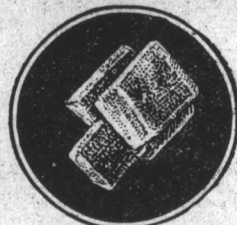
(Continued next week).



and Now

as newer needs changed old-time methods of packing salt, so has modern farm use made vital a

salt that is Quick dissolving!



ORDINARY SALT

The sides of ordinary Cube salt are so smooth and flat that they fit closely together. Moisture in the air joins these and forms lumps that are wasteful.



ORDINARY FARM SALT

Under the microscope these flakes are shown to be like crystals of ice—hard and non-porous. That is why they are slow-dissolving and form lumps.



COLONIAL SPECIAL FARMERS SALT

There are no hard flakes or cubes in Colonial Special Farmers Salt to form lumps. Note that they are like flakes of snow—soft, filmy and porous.

You use less of Colonial Special Farmers Salt because it is all salt—pure salt with all the moisture removed. And it does not form in wasteful lumps. A 70-pound bag is as big as a 100-pound bag of ordinary salt.

COLONIAL SPECIAL FARMERS SALT

Colonial Special Farmers Salt beats Block Salt for cattle feeding. It is pure, evaporated Salt—never causes sore tongues or sore mouths—always insures animals getting enough.

WITH native instinct the Indian and even man before him, sought licks and cliffs from which to chop his precious stores of salt. Generations following have solved the problem of getting salt supplies. And with the great developments that made those supplies possible there has come a new and scientific understanding of salt and its uses. Now it is known that there are amazing differences.

Ordinary salt is Cube shape. Like a block of ice such salt is of a hard and comparatively non-porous form, slow to dissolve—slow in penetration. The second looks like Crystals of glass—flaky but hard. It too is slow dissolving and of low penetrative value.

Colonial Special Farmers Salt is a soft, porous Flake—not unlike a snowflake. Salt MUST DISSOLVE TO ACT! That's why any salt for satisfactory general farm use must first be a QUICK DISSOLVING SALT!

Cheap Salt Is a Dangerous Economy

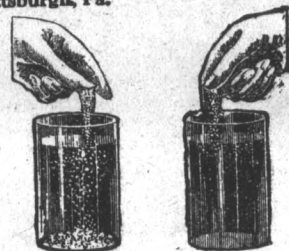
Compared with the finished value of the meat to be cured or the butter to be made or in baking or table use, the difference in salt cost is only a fraction of a cent. Yet on the action of the salt depends the final quality and value of the finished product. You avoid all dangerous risk by using Colonial Special Farmers Salt. Always packed in a branded 70-pound bag. The linenized material makes fine toweling.

Send for "Meat Curing and Butter Making on the Farm," a valuable book of information.

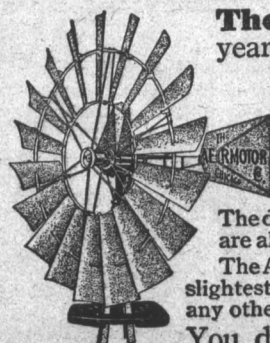
THE COLONIAL SALT COMPANY

Akron, Ohio

Chicago, Ill. Boston, Mass. Buffalo, N. Y. Atlanta, Ga. Pittsburgh, Pa.



The WINDMILL with a RECORD



The Auto-oiled Aermotor has behind it 9 years of wonderful success. It is not an experiment.

The Auto-oiled Aermotor is the Genuine Self-Oiling Windmill, with every moving part fully and constantly oiled.

Oil an Aermotor once a year and it is always oiled. It never makes a squeak.

The double gears run in oil in a tightly enclosed gear case. They are always flooded with oil and are protected from dust and sleet.

The Auto-oiled Aermotor is so thoroughly oiled that it runs in the slightest breeze. It gives more service for the money invested than any other piece of machinery on the farm.

You do not have to experiment to get a windmill that will run a year with one oiling. The Auto-oiled Aermotor is a tried and perfected machine.

Our large factory and our superior equipment enable us to produce economically and accurately. Every purchaser of an Aermotor gets the benefit from quantity production. The Aermotor is made by a responsible company which has specialized in steel windmills for 36 years.

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JELL-O

America's most famous dessert
—for high teas

Jell-O makes a perfect dessert for tea suppers, whether the meal is formal or just family. It is a temptingly pretty dish, with a fine fruity flavor that everyone enjoys and children shout over! Jell-O is prepared in a few minutes and set away several hours before it is time to set the table. Ask for a Jell-O Recipe Book, and try some of the novel Jell-O salads and desserts.

THE GENESEE PURE FOOD COMPANY
LE ROY NEW YORK

RECIPE

Raspberry
Bavarian Cream

Wash one box of berries; sprinkle with four tablespoonsful of sugar. Dissolve a package of Raspberry Jell-O in three-fourths pint of boiling water; when cold and still liquid, whip. Then fold in the raspberries and juice. Set in a cold place to harden. Serve with whipped cream and garnish with fresh berries.

Woman's Interests

Equip Your Medicine Cabinet

It Will Heal the Bruises and Cut the Doctor Bills

THE handy little medicine or emergency kits now on the market are handy in emergency cases, and one should be found in every household. But most housewives wait until an accident happens or some member of the family is suddenly taken sick, before they think about being prepared. Only a little forethought and attention is necessary to have your medicine cabinet supplied so that you will be prepared for any ordinary emergency, and it will also come in handy when any of those little troubles occur, such as sonny cutting his finger, or sister burning her fingers while baking bread. A cut finger is only a small matter, but a little infection may make a serious thing of it. Blood poison often results from a pin prick that has not been given proper care.

Those little white enameled cabinets are convenient, but lacking one of

For a smallest sized jar of vaseline, five drops of carbolic acid is used. Set the vaseline in a vessel of very hot water until it is melted. Then add the five drops of carbolic acid, and stir until the vaseline has hardened.

Carron oil is a mixture of equal parts of linseed oil and lime water, and is the finest treatment for burns that I have ever used. The correct way to use this is to quickly bandage the burned parts tightly and then pour the carron oil over the bandage.

Sterilized bandages may be bought at the drug store, or made at home, and they are just as good. Any old, soft white goods that has already outworn its original usefulness, may be used for bandages. Tear them in strips varying in width from one inch to three inches. Sew enough of each width together to make a roll an inch and a half through. Do not make a harsh seam where the bandage is joined, but lap the edges and sew. After the bandages are tightly rolled they should be put in a sterilized quart fruit jar and a sterilized lid set lightly on. Then it should be put in pressure cooker and heated for ten minutes, or for half an hour in a hot oven. They are then ready to seal and put in the medicine cabinet until needed.

Boric acid is a splendid disinfectant and a wonderful drawing agent. A level teaspoon of the powder is used to a pint of hot water. If the afflicted part is a hand or foot, it may be placed directly in the solution, just as hot as the patient can stand. Otherwise, wool cloths wrung out of the hot solution may be applied to the wound or sore. In case of an angry looking wound that looks as though it might turn into blood poison, the solution should be used about every forty minutes during waking hours. For boils, carbuncles, etc., use the solution every time the sore becomes painful.

PASS IT ON.

Cut old stockings in strips and as they are good black they make such wonderful carpet rags for crocheted or braided rugs.

To mothers who have babies entering the creeping stage, this suggestion means less work over the washtubs. I discovered this by accident. Put baby into a round cake tin, on the floor. Mine was about an inch high, and place toys just out of his reach. He will soon learn to hitch along in his tin and wait on himself, thereby saving mother's back and baby's rompers and stockings. They soon enjoy skating over the floor and amusing themselves.



Mrs. L. G. and daughter, of Coleman, Mich., know how to dress to pick berries. Mrs. L. G. says she is glad the berries are back in the field instead of by the road. (A prize winner).

these, a satisfactory and attractive one may be made at home. But do not make the mistake of getting it too small.

Any home medicine cabinet should contain the following: A jar of carbolated vaseline, a bottle of turpentine, a bottle of iodine, a jar of some standard dry surgical dressing powder, a bottle of carron oil, one of wood alcohol, one of carbolic acid, a good laxative, a good gargle, and a box of boric acid.

Carbolated vaseline is expensive, but may be made at home, with a very small expenditure of time or money.

Montgomery Ward & Co. Wall Paper

You, too, may as well save from one-third to one-half on YOUR wall paper.

Ward's paper is not cheap paper. It is all standard quality, made lower in price by manufacturing in immense quantities.

Think of papering an entire room 10 x 12 feet, side walls, border and ceiling, for only 82 cents.

Choose your paper from actual free samples of all the newest, best patterns—tapestries, fabrics, "all-overs" and stripes. Prices from 3 cents to 35 cents per single roll.

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To learn the best methods of curing meat, write to E. H. Wright Co., 843 Broadway, Kansas City, Mo., and get absolutely free a new \$1 Book. "Meat Production on the Farm", which tells all about meat curing. Free to farmers only. Send name today.



20 Yds Remnants \$1.98

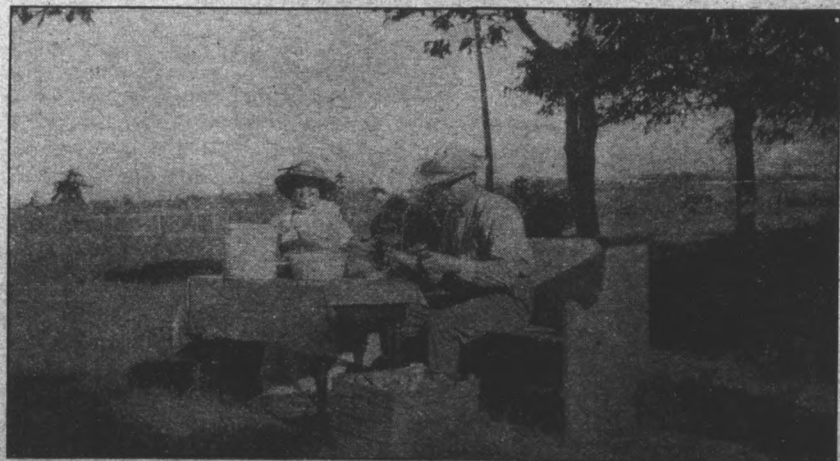
Just send us a money order for \$1.98 and we will send you, postage paid, 20 yards of first-class piece goods in remnants from 2 to 6 yards. Every bundle includes such materials as linens, voiles, percales, chambrays, crapes and serims. You cannot make your own selections of goods. Bundles are worth double our price. This is a wonderful, money-saving, get-a-

quainted bargain. Remember, we pay delivery charges. If you are not pleased, return it at our expense and we will cheerfully refund your money. Order by No. 9, 20 yards of piece goods, prepaid, \$1.98. Walter Field Co. Dept. 2 2101 Chicago

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Wonderful values in high-powered but low-priced land, within an hour's ride of Washington, the most interesting city in the country. 5 to 500 acres of fine farmland available for all kinds of farming. Good roads to Washington, an hour away, and to Baltimore, seventh city, two hours away. Bus, railroad and steamer lines to both cities. All the advantages of the city, with the profit opportunities of fertile but low-priced farmland. Send for the whole story.

Southern Maryland Immigration Commission, College Park, Md.



When Mother Has Help Like This, it is Real Fun to Make Apple Marmalade Out in the Sunshine. (A Prize Winner, Mrs. D., of Hudsonville).

HOME-MADE RECIPE FILE.

THE thing that I call my chief convenience is a recipe file, made from an ordinary box of light wood, four inches wide, twelve inches long and about three inches deep. I made cards of heavy pasteboard to fit, and put a large letter on a projecting corner of the card in red ink—such as P for pies, etc. I cut two dozen pieces of heavy writing paper to go with each card naming the recipe for each kind of cooking. Then I arranged the large index cards and their corresponding recipes in alphabetical order and put the box in a drawer in the kitchen cupboard.

Now I can bake without wasting precious time turning leaves and reading clippings.—Mrs. G. R.

HINTS TO HOME-MAKERS.

Window Cleaning Bag.—Make a bag of several thicknesses of soft cloth and fill it with pulverized pumice stone. Stitch several times to keep powder from sifting through, dampen

In Paper or in Bulk

IN some of the letters I have received recently there has been some discussion about the buying of food in packages. The time has come when the housewife can buy everything from dried corn to sugar in sealed paper packages.

I would like an expression of our readers as to whether they prefer this method of buying food or of buying it in bulk, as in the past.

For the five best letters on this subject we will give each writer a three-piece kitchen knife set.

Address your letters to Martha Cole, Michigan Farmer, Detroit, Mich., before March 6.

pad, wipe window pane and polish.

Sand Bag for Sick Room.—For the sick room make a hot sand bag by drying clean sand in the oven of the range for at least twenty-four hours. Fill a flannel bag with the sand, and heat in oven as often as it cools. Make several cotton covers to slip over the bag when it is taken from the oven, as these launder easily.

Lemons and Prunes.—Adding a sliced lemon to each pound of prunes when they are cooked, is a decided improvement.

Picking Up Glass.—The safest way

to pick up fine pieces of broken glass is to wet a woolen cloth and brush it over the glass. The particles will cling to the wool. Wrap cloth in paper and burn.—L. M. T.

THE INTERRUPTIONS.

ONE of the hardest conditions that some busy housewives have to contend with is that of being constantly interrupted in their daily work. A stream of unexpected happenings, especially where there are little children, wears away in large portions the precious time. It is hard to keep patient, serene; hard not to feel nervous, worried, and driven in the face of this ruthless upsetting of our plans. We think that all these distractions make life very difficult, but there is another way of thinking about it.

It is better not to figure time too closely lest we become helpless slaves of the clock. We should always allow largely when reckoning with minutes, just as we have to make up our minds that there will be an unforeseen amount in our cash accounts which come under the head of incidentals.

The efficiency experts when economizing time and strength, divide work so that there are short shifts with intervening spaces of time for muscle rest or mental change by a different occupation.

Now, why can't we view our daily round of varied duties in the same way and make up our minds that, when these interruptions occur, we will not be distracted, thereby, but will think of them only as grateful changes between shifts of work? And it may be that our efficiency, as well as our peace of mind will be increased.—Alice A. Keen.

EASILY MADE CLOTHES CLOSET.

A SUBSTITUTE for a clothes closet may be made with two shelves the same size—twelve inches wide and the length desired. The first one placed at the top of baseboard—the other above it at a convenient height. Then a narrow board is fastened to the under side of the lower shelf where it joins the wall. Double clothes hooks are fastened to the under side of the shelf, thus utilizing all the space. Fasten two curtains on rods at the top and bottom (opening in center). Other shelves can be placed in lower—for hats, shoes, etc.—Mrs. F. K.

We think in grooves, says the psychologists. These grooves may be channels to success or ruts to failure. Keep out of the ruts.

Know the Reason

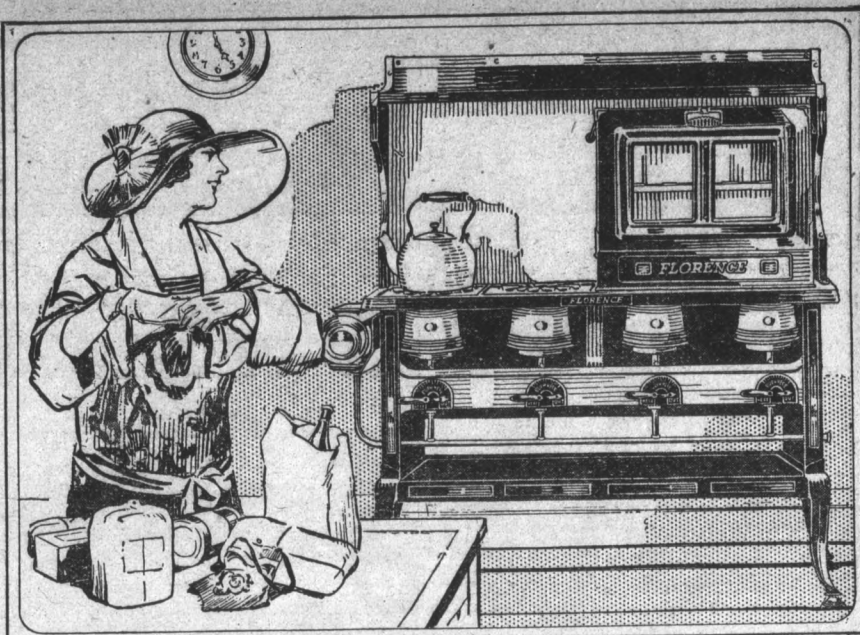
EVERY parent follows with great interest each step of development in their children. Baby's first smile, his first step, the first time he lisps "mamma" or "papa" are memories in every mother's and father's life which time cannot efface.

When that child first enters school, this interest in his development naturally follows. But, if the child enters this new period of his life handicapped by defective vision, disastrous consequences are sure to follow. In his class work he is unable to see the work at the board clearly, and in his reading the words become jumbled. By his extra effort to see more plainly, he soon becomes tired, both mentally and physically.

Inattention will be the first impression the teacher will receive of him, and his fellow pupils will soon consider him stupid, dull or lazy. As the child continues to be outclassed in his schoolroom and his playground activities, a reaction detrimental to his progress is evident. He becomes discouraged, sullen and oftentimes rebellious. On the teacher's list he is placed as a stupid child. His parents, if they do not place the blame of his lack of progress with the teacher, try to make amends for this condition by demanding that he do more home study.

This second course may cause even more trouble by creating a greater strain on the child. But in it also lies the means for the solution of the problem. If this home-work is carefully supervised by one or the other of the parents, they are given the opportunity to study the child when he is working, and, to discover, if possible, the cause of the trouble.

Because no member of the family has ever worn glasses is no reason to cover up the needs of the children. We would then urge every parent to consider their children's eyes. If there is any reason to suspect that they are having trouble with them, it is a great injustice to fail to have them attended to immediately. Neglect in this, as well as in other cases, is sure to bring disappointment and regret.



She does not dread getting supper, for it is quick and easy with the Florence Oil Range

How much of your time do you spend in the kitchen?

Quickness and comfort in cooking are two of the assets of the modern oil stove. There's a third—

NO woman wants to stay in the kitchen a minute longer than is necessary. It depends upon the stove whether getting meals is slow drudgery or whether it is done quickly and in comfort.

When you have a Florence Oil Range, you have no long wait for the stove to get going—there is no shaking to be done, no coal to carry, no uncertainty. You merely turn a lever, touch a match to the Asbestos Kindler and in a few moments you have an intensely hot, clean blue flame.

The flame is close up under the cooking. The heat goes into the food, not into the iron of the stove or into the kitchen. You can cook every dish for the biggest dinner on this modern range. And you use a Florence only when you need it for cooking. This means comfort, and it means something more—

It means economy

Add to the quickness of a Florence Oil Range and its great convenience the fact that it cuts down expense, and you realize that there is every reason for your owning one of these modern stoves.

The flame in the big burners is a gas flame. It is not a wick flame. What you burn is the vapor from kerosene, and kerosene is both a cheap fuel and one you can always get.

An object of beauty

With blue or white porcelain enamel, ink-black frame and nickel trimmings, the Florence Oil Range makes even a dingy kitchen look bright and modern.

You will appreciate, once you examine a Florence, the many refinements of this range. An ingenious device on each leg makes it easy to set it level on an uneven floor. The metal reservoir is light in weight and non-breakable. The movable oven, for use on any kind of stove, has the "baker's arch" and the patented heat-spreader, which take most of the guess out of baking.

Seeing is believing

The Florence Oil Range will quickly convince you, when you examine one critically at a hardware or furniture store. If you don't know the name of the nearest store where the Florence is sold, write us for the address.

Send us your name and address so we can mail you our booklet "Get Rid of the 'Cook Look'." There is no charge and you will find it full of useful information.



The Big Burners keep the flame close up under the cooking. This means economy of fuel.



The Florence Leveler on each leg enables you to set the stove level on an uneven floor.

Florence Stove Company, Dept. 632, Gardner, Mass.

Makers of Florence Oil Ranges, Florence Ovens, Florence Water Heaters, and Florence Oil Heaters

Made and Sold in Canada by McClary's, London, Canada

FLORENCE OIL RANGE

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ALADDIN

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ALADDIN

Aladdin catalog contains seven different plans; some with in-set porches, grade and inside cellar entrances, 2 and 3 bedrooms.

Price includes all lumber cut to fit; highest grade interior woodwork, siding, flooring, windows, doors, glass, paint, hardware, nails, lath, roofing, with complete instructions and drawings. Freight paid to your station. Permanent Homes—NOT PORTABLE. Many styles to choose from. Write nearest mill today for FREE Money-Saving Aladdin Catalog No. 766

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with the self-balancing bowl. Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. Runs so easily, bowl spins 25 minutes after you stop cranking unless you apply brake.

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Catalog tells all—WRITE
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HOUSEHOLD SERVICE

Use this department to help solve your household problems. Address your letters to Martha Cole, Michigan Farmer, Detroit, Mich.

PREPARING FOR KALSOMINE.

My husband caught a coon. Can you tell me how to tan the hide for a coat collar? The wall in my dining-room is very rough. How should I smooth it so as to kalsomine it?—Mrs. A. B.

If you will write the U. S. Department of Agriculture, of Washington, D. C., for their tanning bulletin No. 1055, they will give directions for tanning the coon hide.

Regarding the walls in your dining-room, if you would dress the surface with a thin coat of plaster to cover the roughness, it would then be ready to kalsomine and would give a smooth surface.

POLISHING THE STOVE TOP.

Please tell me how to care for a polished top stove.—Mrs. H. L.

If you will rub your stove top with a cloth to which has been added one tablespoonful of melted vaseline, it will take off the spots. Rub the stove while it is yet hot.

If anything is spilled on the stove, it may be scraped off with a blunt knife before rubbing. Add a small amount of the vaseline to the cloth from time to time to keep it well oiled.

Roll the cloth up tightly and keep in a tin can to avoid fire.

TO WASH WOOL.

Can you tell me how I can wash wool so it can be used in making comforters? The wool I have is from western sheep and is very fine and

nice and I never have had any experience in this line.—Mrs. E. L. B.

This information has been previously published but if Mrs. E. L. B. will send stamped self-addressed envelope I will be pleased to help her.—Martha Cole.

WATER-PROOFING LEATHER.

Can you tell me what to put on my shoes without injury to the leather to keep them from soaking water.—T. R.

To water-proof your shoes, apply the following:

Melt slowly four ounces of raw linseed oil, five ounces of boiled linseed oil, four ounces suet, four ounces beeswax and apply to the leather while warm.

TO SWEETEN RANCID LARD.

Can you please tell me if lard has become rancid if anything can be done to sweeten or improve it?—Mrs. M. F.

Boil rancid lard in equal amounts of water, allowing it to cool in the same kettle. The lard can be removed when cold. Any sediment or water scraped from the under side should be thrown away. If necessary, repeat this operation two or three times, using fresh water each time.—Mrs. M.

To clarify lard use white lye made with wood ashes or the concentrated. Use one tablespoon of concentrated lye dissolved in one-half cup of water for half a kettle of lard. Watch carefully as it quickly boils over. Skim and drain after boiling one and one-half hours. When a little cool, you will be surprised to see how sweet and white it will be. You will think when it is boiling you have soap, but it will become clear.—Mrs. M. C.

Salads to Tempt the Family

AND what kind of a salad shall we serve? Thus spoke the chairman of a committee on "eats," and no one could tell. Cabbage salad was finally decided upon although it has been served for—Oh! I don't know how many times. And so it goes. The same old kinds of salads served day after day. And is it any wonder we get tired of them and ask for new ones? When I came home from that committee meeting I sat down and began to think, and look up salads that have proved favorites with my family.

The first ones are vegetable salads and are splendid fillers in this time of the year. The first is the tomato and string bean salad. Besides being appetizing in flavor and appearance, this salad has the advantage over some, in that it can be made of either fresh or canned vegetables. To prepare the salad, place a tomato, fresh or canned, in the center of a plate, garnish with a lettuce leaf, and around it place several piles of three or four canned string beans. Over this pour salad dressing. The dressing was made as follows: One cup of vinegar brought to the boiling point, into this pour a sauce of two tablespoons of flour, two tablespoons of sugar, a little salt, and one beaten egg.

Another attractive as well as appetizing salad is found in the water lily salad. This salad is excellent when a light meal or lunch is desired. One hard-boiled egg for each person, remove the shell and cut the egg into halves lengthwise. Remove the yolks, mash and season with salt and pepper, and vinegar. Cut the halves of the whites into three or four pointed pieces, cutting from end to end of the half. Place these in a star-shape on salad

plates garnished with lettuce leaves. Form the yolks into a ball and place in the center over the ends of the egg whites. Serve with the dressing mentioned above.

Perhaps the favorite salad of all is the "Humpty Dumpty Salad," consisting of tomatoes, hard-boiled eggs garnished with pieces of stuffed olives. From the center of a tomato remove enough of the tomato to accommodate the end of an egg. Place the tomato thus prepared, on a lettuce leaf. Cut the eggs into halves, crosswise, remove the yolk and mash and season with salt, pepper, and vinegar. Replace the yolk in the white and force this into the depression in the tomato. Place the pieces of olive on the yolk and serve with dressing.

The date and English walnut salad proves to be a salad of high food value. Choose whole dates, wash and dry between a clean towel. Remove the stones and place half an English walnut meat inside and press the date together. Serve five or six of the dates in a star shape on lettuce leaf, and instead of serving salad dressing my family enjoy it more if served with a spoonful of whipped cream. This salad is a special friend with the young folks, although the old ones seem to appreciate it too.

There are many more and many ways to fix them up so they will be a little different—even cabbage salad may be varied, and celery may be cut into thin pieces, diced green peppers or pimentos added. And just at this time of the year it seems as though our appetites need a sort of "sharpener," too, and it keeps one busy trying to plan something a little different from day to day.—Mrs. M. J. H.

A Better Job Now!

Why take small pay from uncertain jobs? Why be buffeted around from this to that, not knowing whether you will have a job tomorrow or not? You can change all that. Learn the auto repair business. Have a job at good pay wherever you go. Later have an independent business of your own. If you are mechanically inclined, a few weeks training at Detroit can start you to real success.

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Wells & Richardson Co., Burlington, Vt.

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If your car is not mentioned here send name and model for particulars and our guarantee on the Agents wanted.

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You can drive any car in heaviest traffic without shifting gears. Starts off on high in any weather without priming or heating—no jerking or choking. No more fouling spark plugs or carbon in cylinders. No leaking of gas into crank case. Try it 30 days on our guarantee of money back if not entirely satisfied. No strings to our guarantee. **YOU ARE THE JUDGE.** Anyone who can handle a wrench can attach it. No boring of new holes or changing of operating mechanism. Write today. **AIR-FRITION CARBURETOR CO.** 895 Raymond Bldg., Dayton, Ohio, U. S. A.

100 DOLLARS IN PRIZES

For best reports on lasting quality of our EMPIRE FENCE, compared with other kinds in use on the same farm. NONE but thoroughly reliable statements count as we have records of all sales for 20 years. Write for conditions.

BOND STEEL POST CO., 31 East Maumee St., Adrian, Mich.

DON'T WEAR A TRUSS

BE COMFORTABLE—

Wear the Brooks Appliance, the modern scientific invention which gives rupture sufferers immediate relief. It has no obnoxious springs or pads. Automatic Air Cushions bind and draw together the broken parts. No salves or plasters. Durable, Cheap. Sent central to prove its worth. Beware of imitations. Look for trade-mark bearing portrait and signature of C. E. Brooks which appears on every Appliance. None other genuine. Full information and booklet sent free in plain, sealed envelope.

BROOKS APPLIANCE CO., 323 State St., Marshall, Mich.

We Tan your order from your Cattle, Horse and all kinds of Hides and Furs, Men's Fur Coats, Robes, Caps, Gloves, Mittens, Ladies' Fur Coats and Fur Sets. Repairing and remodeling latest styles. Ship us your work and save one-half. New Galloway Coats, Robes, Gloves and Mittens for sale. We are the oldest Galloway tanners; 36 years continuous business. Free Style Catalog, prices and samples. Don't ship your hides and furs elsewhere until you get our proposition.

HILLDALE ROBE & TANNING CO. Hillsdale, Mich.

Sell TIRES DIRECT FROM FACTORY

We want one to advertise each locality to use and advise Armour Cords. You can make big money and get your own tires free by simply sending us orders from friends and neighbors. No Capital or Experience needed. We deliver and collect direct. Pay you daily.

Most Liberal Tire Guarantee Ever Written

Armour Cords are Bonded against Accidental Damage, Wear and Tear, Tread Separation, Blistering, Blow-Outs and Rim-Cutting for 10,000 miles. We are actual manufacturers. Write today for Great Special Offer to Agents and low Factory Prices.

ARMOUR TIRE & RUBBER CO., Dept 100 DAYTON, O.

--FISH--

New Winter Caught Frozen Pickerel, round 8 1/2¢ per lb.; headless and dressed, 10 1/2¢; Bayfish, large, 7¢; Pike, 14¢; Salmon, 14¢; Flounders, 10¢; Gold Eyes, 10¢. Packing charge, 35 lbs., 25¢; 50 lbs., 30¢; 100 lbs., 35¢. Smoked Tullibee White, 10-lb. basket, \$2.00; Smoked Bluefish, \$1.00. Write for complete price list. **JOHNSON FISH CO., Green Bay, Wis.**

RURAL HEALTH

By Dr. C. H. Lerrigo

GETTING CURED AT HOME.

MOST people are very credulous about cures for the ailments of the body. They believe almost every claim that is made in print even though the printed matter is admittedly an advertisement inserted for the purpose of getting dollars from their pockets. And they believe anything that any neighbor reports. If the neighbor declares "such and such a thing cured me," they are eager to try it regardless of the fact that they have both a different trouble and a different personality. Such innocent unthinking faith is pathetic; doubly so because it often grows from a great need.

Today, I have a letter from a woman reader in which she asks three things. She desires something to rub on a cancerous growth which her husband suffers—something that she can use at home. She would like some medicine to put in her ears to cure catarrhal deafness. And she quotes an old advertisement of several years back and asks if I feel pretty sure that the material advertised will cure her kidney trouble. You may judge the kind of answer I was obliged to write and how sorry I was to write it.

Yes, I was sorry for the woman's delusions. Yet how many of you are cherishing like delusions on a slightly different scale. You go along neglecting your physical welfare until calamity is upon you and then you ask for some "home treatment." Please let me say once more that it was never the intention of this department to supersede the family doctor. The best service I can do for you is to tell you how you may keep your health, how you may prevent illness, and urge you to go to the doctor while your ailments are in their first stages and thus save yourself from these incurable things that are beyond any form of treatment.

HANDS SLEEP.

My hands go to sleep every night. Can you tell me the cause of it and what to do for it?—A. S.

The trouble is either with the circulatory apparatus or with the nerves that control it. Such a condition is not necessarily an indication of danger, but anyone having this trouble should certainly have a careful test of heart action and blood pressure. This will determine the cause and after that a plan of treatment may be worked out.

BLOOD PRESSURE TOO HIGH.

What can I do to reduce my blood pressure? It is now 200 and I am forty-six years old, in general good health otherwise. Can't stand any excitement, and am very nervous.—Mrs. C.

A blood pressure of 200 at the age of forty-six is not a mere happening. There is some real source of underlying irritation, probably a hidden infection. The only sensible thing is a very searching examination to discover what that is and clear it up.

ACCURATE DIAGNOSIS NEEDED.

I am seventy-three years old, otherwise in good health for one of my age. Have never had any disease of urinary organs, yet when I urinate it is painful. Can retire at ten o'clock and do not need to arise until five. But there is always more or less pain present and frequent urinating during the day. Would you advise some operation in my case?—W. H. S.

In spite of the fact that you are not troubled through the night it is yet possible that your trouble is due to an enlarged prostate gland. But it may be from some other cause, such as a stone in the bladder. The first thing for you to do is to get an accurate diagnosis.

GOLD SEAL

As Good NOW as In Grandfather's Day—

GRANDFATHER was hard to satisfy. But it is a noteworthy fact that he was satisfied with Goodyear "Gold Seal" rubbers and boots. Grandfather's buying judgment fifty years ago, and "Gold Seal" extra-quality, formed the solid foundation upon which our steady growth has been built.

There has been no change in the extra-quality that made "Gold Seal" rubber footwear famous half a century ago. When you buy "Gold Seal" rubbers or boots today you get exactly the same quality goods that grandfather got—the utmost in wear, comfort, and snug fit.

Ask for and insist on being supplied with "Gold Seal" rubber footwear. The "Gold Seal" label identifies the genuine. Look for it. Our nearest office will be pleased to direct you to the "Gold Seal" store in your town.

GOODYEAR RUBBER COMPANY
General Offices: 787-789 Broadway, New York

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Kansas City, Mo., 807 Baltimore Ave. San Francisco, Cal., 639 Mission St.
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"Gold Seal"
Half-Cyclone Mud Rubber
Hugs shoe snugly—will not
slip off in mud. Extra-
heavy grey sole. All
points of wear strong-
ly re-inforced. Im-
proved shape.

Look for the "Gold Seal"

GOODYEAR RUBBER CO.
GOLD SEAL
1872

Like the Sterling Mark on Silver.

When Writing to Advertisers Please Mention The Michigan Farmer

Square Deal Fence Leads

New "Galvannealing" invention stops destructive rust.

Square Deal's stiff, picket-like stay wires that make fewer posts necessary; its well crimped line wires that spring back into place after every shock and strain and its famous Square Deal knot guaranteed never to slip—all these facts make Square Deal the fence that stands tight and trim, looks better and raises the value of your farm.

2 Books FREE
Ropp's New Calculator tells you your grain and livestock profits; measures capacities of cribs, wagons, silos; figures interest, wages; contains commercial law, parcel post rates, etc. Sent with Square Deal catalog. Both books FREE to Land Owners. Write today—find out how to cut fence costs with "Galvannealing."

Stops Rust

"Galvannealed" newly discovered rust-resisting fence wire, is guaranteed to last 2 to 3 times longer in any standard test than ordinary galvanized wire, therefore, should give you many years more service at a much lower cost. Fence this time with "Galvannealed."

Specify "Galvannealed" Square Deal Fence or the regular type will be furnished.

Keystone Steel & Wire Co.
4936 Industrial St., Peoria, Ill.

KITSELMAN FENCE

GET IT FROM THE FACTORY DIRECT

"Saved \$22.50 on 150 Rods," says William J. Heft, R. 2, Wyandotte, Mich.

"Saved \$25 on 125 rods" declares Charles Renville, Pence, Indiana.

You, too, can save money on Fence, Gates, Posts and Barbed Wire by buying direct from our great mills. Lowest Factory Prices. Prompt shipments. Every article guaranteed satisfactory.

Better Fence—Greater Savings

New Fences have been added to our big line; many present styles have been made heavier. More than 100 styles and heights from which to choose. Every rod made to give you longest service at lowest cost.

Direct from Factory to Farm We Pay the Freight

Write now—today—for our Free 100-page catalog filled with real money-saving values in Farm, Poultry and Lawn Fence, Gates, Steel Posts and Barbed Wire.

KITSELMAN BROS., Dept. 278 MUNCIE, INDIANA
America's Oldest Fence Manufacturers

GET MY LOW PRICES on FENCE GATES, POSTS, FENCE ROOFING-PAINTS

My Big NEW catalog is filled from cover to cover with Bigger, Better values than ever this season. You'll be glad you sent for my New Bargain Book when you see the big savings I am giving my customers. My plan of selling Direct From Factory saves you 1/3 or more. Write today for my 104 page catalog giving low

FREIGHT PREPAID
prices on Fencing, Gates, Steel posts, Barb Wire, Roofing and Paint. Every page a page of real bargains. Quality and satisfaction guaranteed. Write for catalog today. **JIM BROWN, BROWN FENCE & WIRE CO., Dept. 2808 Cleveland, O.**

FENCE GATES POSTS ROOFING PAINT

New Low Prices On Miller Baby Chicks-Season 1924

Buy your chicks this season from an established hatchery. MILLER HATCHERIES is one of the finest in America. We hatch twenty popular varieties from stock which have been culled and bred for heavy egg production. 1,500,000 chicks via prepaid parcel post at the following low prices:

Varieties	50 chicks	100 chicks	500 chicks	1,000 chicks
Barred Rocks, R. and S. C. Reds, Anconas, R. C. Brown and S. C. Buff Leghorns	\$7.50	\$14.00	\$65.00	\$125.00
White and Buff Rocks, W. W. and Black Langshans	8.50	16.00	75.00	140.00
S. L. Wyandotte, White Orpington, S. C. Black Minorca	8.00	15.00	70.00	135.00
Buff Orpingtons	8.00	15.00	70.00	135.00
Golden Wyandotte	11.00	20.00	95.00	175.00
Light Brahmas and W. F. Black Spanish	13.00	25.00	115.00	200.00
S. C. White and S. C. Brown Leghorns	7.00	13.00	60.00	110.00
Assorted	6.50	12.00	55.00	100.00

Order direct from this advertisement or send for our FREE CATALOG, 21st SUCCESSIONAL Season. Over 12,000 pleased customers in United States and Canada. Member, Missouri State, Mid-West and International Baby Chick Associations.

MILLER HATCHERIES BOX 651 LANCASTER, MISSOURI

PURE BRED BIG VALUE CHICKS

Best paying standard varieties from healthy free range utility flocks, carefully inspected, culled, and Hogan tested. Quick maturing. High Egg Production. Each

	25 Chicks	50 Chicks	100 Chicks	500 Chicks	1000 Chicks
S. C. White L. B. L. Buff L.	\$3.25	\$6.25	\$12.50	\$60.00	\$120.00
S. C. B. Minorcas, S. C. M. Anconas, as Barred Rocks, S. C. R. I. Reds	3.75	7.50	15.00	72.50	140.00
White Rocks, R. C. R. I. Reds	4.00	8.00	16.00	77.50	150.00
White Wyandottes	4.25	8.50	17.00	82.50	160.00
S. C. White, S. C. Buff Orpingtons	4.25	8.50	17.00	82.50	160.00
Mixed, All Breeds	2.50	5.00	10.00	50.00	100.00

Wolf Hatching & Breeding Co., Dept. 5, Gibsonburg, Ohio

Great Northern Hatchery Pure Bred Selected Flocks 100% Live Delivery

Strong, Sturdy, Northern-grown Chicks. Selected, pure-bred stock. Healthy Flocks on free range insure strength in every chick. Order from this Ad.

	50	100	300	500	1000
Leghorns (S. C. White and Brown)	\$7.00	\$13	\$38	\$62	\$120
Barred Rocks	8.00	15	43	72	140
White Rocks	9.50	18	53	85	165

Mixed Broiler Chicks, \$10 per 100 straight. Hatched under best conditions in Newtown Incubators. Every Chick carefully inspected. 100 per cent live delivery guaranteed. Reference, State Commercial Savings Bank, this city. Write for prices on special matings. **GREAT NORTHERN HATCHERY, Box 56, Zeeland, Michigan.**

Early Maturing Baby Chicks

Quality Type Dependability Production

Our chicks are from flocks selected for their early maturing habits. This means high-producing individuals. These flocks are headed by cockerels from high-producing blood lines. Cullled by experts. Each flock personally supervised. Pure-bred. From \$10.00 per hundred and up. We have a limited number of superior grade chicks from special matings. 230-302 egg strain. B. P. Rocks, R. I. Reds, W. P. Rocks, W. Wyandottes, W. Leghorns, Anconas.

Write for description and prices. 100 per cent live delivery. Ref., Milan State Savings Bank. **MILAN HATCHERY, Box 4, Milan, Mich.**

Highest Quality Certified Baby Chicks

From Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State. Pure-bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, well-hatched Chicks from tested Hoganized free-range stock that make wonderful winter layers. Chicks sent by Insured Parcel Post, Prepaid to your door, 100 per cent live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks, giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality chicks before placing your order.

W. VAN APPELDORN, R. 7, Holland, Mich

CHICKS

We can save you money on Ancona and White Leghorn Chicks. Send at once for catalog and prices. We insure your chicks for one week.

M. D. WYNGARDEN R. 4, Box 80 Zeeland, Mich.

Early Maturing Baby Chicks

Early maturing means that our stock has been selected and mated to produce fowls capable of making high yearly records. Great winter layers from pure-bred flocks under our own personal supervision. They are carefully culled and mated and from flocks headed by cockerels of high producing blood lines. Our best quality chicks have rooded breeding on both sides. B. P. Rocks, R. I. Reds, W. P. Rocks, W. Wyandottes, W. Leghorns, Anconas. Sent prepaid to your door. 100 per cent live delivery guaranteed. Write for illustrated catalog and price list. Low prices on quality chicks, \$12.00 per hundred, and up.

The Keystone Hatchery and Poultry Farms, Lansing, Michigan

HUNDERMAN'S First-Class Chicks \$10 AND UP

We are heavy producers of first-class Chicks. Flocks on free range. Cullled by expert. 100 per cent Live Delivery Guaranteed. Order today from this Ad. and get Chicks when you want them.

	50	100	300	500
English S. C. White Leghorns	\$6.50	\$12.00	\$36.00	\$57.50
Barred Rocks, S. C. Reds	8.50	16.00	48.00	77.50
Single Comb R. I. Reds	9.00	17.00	50.00	82.50

Mixed Chicks—\$10 per 100 straight. Blue Hen Incubators. Reference: Zeeland State Bank. Order today. You take no chances. Catalog Free. **HUNDERMAN BROS.' POULTRY FARM, Box 25, Zeeland, Michigan.**

CHIX FREE CHICK OFFER

Our Tom Barron Strain White Leghorns pay big dividends. We breed and hatch only one kind—the best. Our pure-bred chicks are strong, husky and easy to raise. Get our circular and **FREE CHICK OFFER** before buying eggs, chicks or breeding stock. It will surely pay you. **PROGRESSIVE POULTRY FARM, P. Ver Hage, Mgr., Zeeland, Mich.**

BABION'S QUALITY CHICKS

Varieties	Prepaid Prices on	25	50	100	500	1000
Pure English White, Brown & Buff Leghorns	\$4.00	\$7.00	\$13.00	\$32.00	\$120.00	
Barred Rocks, Reds, Anconas	4.25	8.00	15.00	32.00	140.00	
Wh. & Buff Rocks, Wh. Wyandottes, Minorcas	4.75	9.00	17.00	32.00	160.00	
Sil. Wyandottes, Orpingtons	5.50	10.00	19.00	32.00	180.00	

Prices quoted are for chicks hatched from OUR GOOD UTILITY FLOCKS. Chicks from OUR EXTRA SELECTED FLOCKS will be \$3.00 per 100 higher and Chicks from our Fancy Stock of BLUE HIBBON PENS will be \$5.00 per 100 higher. Postpaid. 100 per cent guaranteed. Bank references. You cannot go wrong. Order from this ad. Thousands satisfied. Ten years' experience. Our Slogan, the best chicks are cheapest, not the cheapest chicks the best.

BABION'S FRUIT AND POULTRY FARMS, Flint, Mich.

Farm Poultry

FEEDING FOR EGG PRODUCTION.

BY R. G. KIRBY.

M. R. C. G. CARD brought out the following points at the institute poultry program which are of value in the care of the farm flock. Wheat and cracked corn, equal parts by weight, make the best scratch grain. Oats and barley are not so good, as they are bulky feeds with heavy hulls. About fourteen pounds per day of scratch feed is necessary to keep up the bodily weight of 100 birds so their weight can govern the feeding.

Besides the morning and night feed of scratch grain, it often pays to scatter a few handfuls in the litter during the day when going through the houses. This helps to keep the hens busy. A good dry mash consists of equal parts by weight of bran, middlings, ground oats, corn meal and meat scrap. It is a general rule that the hens should eat about fifty per cent mash and fifty per cent scratch grain, but it is found that hens which are producing heavily may eat more than fifty per cent mash.

It is the mash that contains the material for manufacturing eggs. Bran furnishes the bulk in the ration. Ground oats are often hard to get without too much hull. They should be ground as fine as possible. Meat scrap is better than tankage for feeding the poultry. Semi-solid buttermilk is used in feeding the contest pens at the rate of two and one-half pounds per day per 100 hens.

Mineral matter is essential in the hen's ration, and the charcoal is useful as a tonic. The oyster shell furnishes lime, but is not a substitute for grit. Green feed helps to increase fertility and keep up egg production throughout the year.

Sprouted oats or sprouted barley are a fine source of green feed. They should be fed when the top development is short and the root growth large. A square inch per bird per day is about right. Alfalfa meal is not advised as there is too much bulk for the price you pay for it. If alfalfa is raised on the home farm, it is all right of use as a source of green feed for the hens.

Cabbage is second in value to sprouted oats, and with plenty of cheap cabbages it might not be necessary to sprout oats. Silage is not recommended for poultry feeding. Potatoes are all right if cooked. The use of a wet mash is not advised in the spring when nature naturally stimulates egg production, but it is sometimes useful in the summer when production falls and there is a need of stimulation. The wet mashes are not advised for winter feeding. Noon is the best time for giving the wet mash if any is used.

A fresh supply of water must always be kept at hand. It is found that the drip system of supplying water attracts the attention of the hens so they will drink a larger quantity.

Clean litter is always necessary for the best results and wheat straw is the most satisfactory, as oat straw breaks up more readily. The hens like to work in clean litter, and a change is advisable every ten days or two weeks. Do not use mouldy straw for poultry house litter.

The only value in artificial lights is due to the increased day. Morning lights are advised at 4:30 or 5:00 a. m. A dimming device is needed if you use night lights. Keeping the perches folded up during the day encourages exercise. Changes in feed should be made gradually over a period of ten days to two weeks to prevent a reduction in egg production.

MARKET POULTRY.

IN his discussion of market poultry before the Michigan Poultry Producers' Association, D. E. Hale, of Chi-

BEST CHICKS

We've been told we do business in an "old fashioned" way. Perhaps we do. We know that we always try to absolutely stick to the truth in our advertising and to test everyone fairly and squarely. If that is being "old fashioned" we're glad we are old fashioned and we believe our customers are glad too, for they keep on buying from us year after year.

Our chicks are all from pure-bred heavy laying strains. They have been hogan tested and carefully culled and selected for many years to bring them to their present high standard of health, strength, vitality and heavy winter laying. Our flocks are all certified by the Michigan Baby Chick Association. Our prices are low and we guarantee 100% live delivery. We advise you to order early. Write for Free Catalog.

City Limits Hatchery, Holland, Mich.

Pure Bred Baby Chicks

Certified stock from famous strains Tom Barron and Hollywood White Leghorns—strong, healthy, vigorous baby chicks, hatched in the finest hatchery in Michigan—deliveries guaranteed—absolute satisfaction or your money back. Book orders now for early delivery and get our attractive low prices.

Capacity of 150,000 eggs to a setting permits us to quote best prices for guaranteed pure bred baby chicks. Also let us quote you prices on Barred Rock Baby Chicks and other popular breeds. Send for Free catalog and prices. Write today. **SUPERIOR POULTRY FARMS, Zeeland, Mich., U. S. A. Box 200**

CERTIFIED CHICKS "BRED TO LAY" STRAINS

Best Quality Certified Chicks pay big profit. Our Chicks are from our own Free Range flocks of Sheppard's Famous 331 egg strain of Anconas, heavy winter layers of large white eggs—Hollywood and Tom Barron S. C. White Leghorns; and Everlay S. C. Brown Leghorns. Park's strain Barred Rocks. Carefully selected and rated by experts and certified by Michigan Baby Chick Ass'n. Bred for quality and high egg yield for 11 years on our own farm. Strong, vigorous, full of vitality. 100 per cent live delivery guaranteed. Low prices. Illustrated catalog Free. Townline Poultry Farm & Hatchery, Dept. M, Zeeland, Mich. Member Mid-West and International Baby Chick Ass'n.

PURE BRED CHICKS

Tom Barron Imported and Hollywood strains S. C. White Leghorns, Sheppard's Famous S. C. Mottled Anconas and Park's Bred to Lay Barred Rocks. All free range flocks, carefully culled and certified by experts and bred many years for high egg production. Pedigreed males from 250 to 280 egg strains and from hens that produced leading pen in Michigan's International Laying contest, head our flocks. Eggs from these famous strains hatched with scrupulous care in our Modern Mammoth Incubators produce strong, husky, peppy chicks that are easy to raise and become marvelous layers. Chicks are shipped postpaid, 100% live delivery guaranteed. Write for our big free illustrated catalog. **Silver Ward Hatchery, Box 29 Zeeland, Mich**

S. C. White Leghorn CHICKS

\$11.00 per 100 Postpaid

Extra Selected Stock, \$13.00 per 100, postpaid. 100 per cent Live Arrival Guaranteed. Hatched from heavy laying flocks. Free range. It will pay you to buy our Egg-Bred Chicks. Circular free. **OTTAWA HATCHERY & POULTRY FARM, Route 10, Holland, Michigan.**

EGG-BRED CHIX

200-egg Strain S. C. English Type White Leghorns and Brown Leghorns. Large looped-comb, deep-bodied type. 12 years of breeding for high egg-production. Carefully selected breeders, headed by large, vigorous males, combined with many years of highly successful hatching methods, gives you chicks that will bring you success. 100 per cent live arrival guaranteed. Write for catalogue and prices today. **ROYAL HATCHERY AND FARMS, R. 2, Zeeland, Mich. S. P. Wiersma, Owner.**

Quality Leghorn Chicks

CHAMPION LAYERS

Hollywood and improved English Barron strains of 250-287 egg lines. The most profitable hen.

	50	100	500	1000
\$8.00	\$14	\$67.50	\$130	

Liberal discount on early orders. Bank Ref. 100 per cent live arrival. Valuable catalog free. **HIGHLAND POULTRY FARMS, Holland, Mich., R. 9, Box C.**

64BREEDS Most Profitable chickens, ducks, turkeys and geese. Choice, pure-bred northern raised. Fowls, eggs and incubators at low prices. America's great poultry farm. At it 31 years. Valuable 100-page book and catalog free. **R. F. NEUBERT Co., Box 914, Mankato, Minn**

Biggest Hatches

Strong Chicks

That's what you'll get with a Champion Belle City Hatching Outfit. My Free Book "Hatching Facts" tells how—gives newest ideas and quick—est ways to make poultry pay big with my

\$13.95 Champion \$21.95 Belle City

140 Egg Incubator 230 Egg
Double Walls Fibre Board—Hot Water Copper Tank—Self-Regulated Safety Lamp—Thermometer & Holder—Egg Tester—Deep Nursery. **\$6.95** buys 140 Chick; **\$9.95** buys 230 Chick Hot-Water Double Walled Belle City Brooder. Save **\$1.95**. Order both. **140 Size Incubator and Brooder, Only \$18.95** **230 Size Incubator and Brooder, Only \$29.95**

Express Prepaid

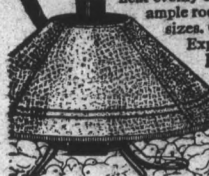
East of Rockies & allowed West. **Low Prices on Coal and Oil Canopy Brooders** come with catalog. With this **Guaranteed Hatching Outfit** and my **Guide Book** you can make a big income, besides sharing in my **\$1000 in Gold** and other prizes. Save time—Order now or write today for my Free Book "Hatching Facts." It tells an interesting story.—Jim Rohan, Pres. Belle City Incubator Co. Box 14 Racine, Wis.



BOWERS Colony Brooder

Burns any fuel—costs less

This brooder raises more and better chicks at lowest cost. Stove is sturdy, safe, air-tight, self-regulating—best in world to hold fire. Burns soft coal—cheapest brooder fuel—perfectly. Also hard coal, wood, etc. Automatic regulator maintains uniform heat night and day. Canopy spreads heat evenly over chicks; gives pure air, ample room. 500 and 1,000 chick sizes. Guaranteed. Lowest prices. Express prepaid E. of Rockies. **FREE—\$3.00** stove pipe outfit sent free with brooder if you order NOW. **F. M. BOWERS & CO.** 1423 W. Wash. St. Indianapolis, Ind.



SOFT HEAT INCUBATOR

26 points of superiority over other makes
Most practical incubator discovery and improvement to all time. Result of 30 years study and manufacturing experience of L. N. Porter, the incubator master. Thousands endorse it. Make good guarantee. **FREE** Big book on SOFT HEAT Method includes a comparison of other makes. Send your name on postal for your copy today! **PORTER INCUBATOR CO.** 333 Porter Ave., Blair, Neb.



"IT FILLS THE BILL"

The "SELF-SERVE" dry mash feeder, designed by a practical poultryman; sold at a price you can afford to pay. Non-clogging, holds 3 1/2 bu. Fowls cannot roost on cover nor touch feed with feet. Price \$10 F. O. B. Eckford. Chick size \$1.50. Send for free booklet. Manufactured by

IRA. P. HAYES,

Eckford, Michigan

140 EGG Incubator
EXPRESS PREPAID \$13.85
Made of California Redwood, covered with galvanized iron, double walls, air space between, built to last for years; deep chick nursery, hot water heat, copper tanks. Shipped complete, set up, ready to run, express paid, east of Rockies.

140 EGG INCUBATOR WITH BROODER \$19.75
260 EGG INCUBATOR, ALONE, ONLY \$23.50
260 EGG INCUBATOR, WITH BROODER \$32.90
30 days' trial—money back if not O. K.—FREE Catalog Ironclad Incubator Co., Box 91 Racine, Wis.

Let the "SUCCESSFUL" RELIEVE YOU OF HATCHING WORRIES
Mail a postal—Get our offer. Poultry lessons free to every buyer. Booklet, "How to Raise 48 Out of 50 Chicks," sent free on request. Catalog FREE. Make green, egg-making feed in "SUCCESSFUL" Grain Sprouters.

31 Years of Big Success
Des Moines Incubator Co., 368 Second St., Des Moines, Iowa

Detroit-Alliance INCUBATOR 140-EGG CAPACITY
Has all the features that insure big hatches—double walls, copper tank, complete nursery, perfect heat control through automatic trip burner, "Tyco's" thermometer held so chicks can't break it when hatching. Detroit Brooders, too. Write for low combination price today!
Detroit-Alliance Incubator Co. Dept. 21 Alliance, Ohio **FREIGHT PREPAID**

PLANS FOR POULTRY HOUSES!
All styles, 50 illustrations; secret of getting winter eggs; send copy of "The Full Egg Basket." Send 25 cents. INLAND POULTRY JOURNAL, Dept. 60, Indianapolis, Ind.

cago, stated that producers pay most of their attention to production and neglect marketing. In an experience in Chicago with direct marketing he found that cooperation failed because they would not cooperate, the human factor was lacking. In connection with a poultry journal he had producers sign blanks telling of the eggs and poultry they could supply direct. After giving talks to certain ladies' clubs they promised to be customers.

These lists were exchanged and a container was devised for parcel post shipments. Due to the fact that the customers wished to pay the first of the month instead of receiving the shipments, and because of other misunderstandings due to a lack of confidence between buyers and sellers, the plan was not a success.

The buyers for clubs and hotels in the large cities want their market poultry exactly the weights they require for serving certain portions of a uniform size. If they wish a certain number of birds weighing two pounds they do not want birds above that weight even at the price of the lower weight. They have to serve even portions and will not take what they don't want if the producer is willing to give it to them for nothing. Chicken graders receive \$110 per week because they are expert in rapidly sorting fowls according to weight and quality.

Hotels like to buy of dealers who can furnish large quantities of guaranteed eggs on short notice. Supply and demand governs the market price. Egg cases must be uniform in size and quality of the contents. It is suggested that some breeders of Leghorns might use their equipment for brooding chicks of the heavy breeds early for broilers and then raise the Leghorns afterwards. In some of the best hotels only the breasts of four-pound broilers are broiled, and the remainder of the bird goes into the soup kettle for the help. That is one reason why wealthy buyers have to pay \$1.00 or \$1.50 for one small portion. The large hens are used for club sandwiches and chicken a la king.

In fattening poultry the confinement in crates breaks down the muscular tissue and produces soft meat in its place. A good fattening ration consists of sixty per cent corn meal and forty per cent oatmeal mixed with buttermilk. The big hens are the easiest to sell. Among the meat breeds, Mr. Hale prefers the Light Brahmas and next come the Rocks, Orpingtons and other heavy breeds. Leghorns are egg machines and there is not enough meat on them, so they go to the low-priced restaurants. People become tired of turkeys and geese sooner than they do of chickens. But the turkeys and geese are in demand at the time of the holiday market so do not try to ship all the chickens for the holiday trade.

The stewards of the hotels know the market and predict lower egg prices because of the quantity of cold storage eggs which are held in Chicago. The middle west will dominate the egg market because we are near to the grain and milk supply and should be able to produce eggs cheaper than some other sections.—K.

RHODE ISLAND REDS VIGOROUS.

Can you tell me if Rhode Island Red chickens are more susceptible to disease than any other breed of poultry? Mine have tuberculosis, or at least, all signs of it. White lumps appear on the liver and heart, they become lame and finally die. I have a mixed flock of Barred Rock and Rhode Island Reds, the Reds seem to be affected the most.—Mrs. S. S.

The Rhode Island Reds as a breed are usually considered vigorous and thrifty as any other breed, and I think your losses are due to the disease among certain individuals and are not a reflection on the stamina of the breed. If you suspect tuberculosis in the flock it usually pays to have a veterinarian inspect the birds and make recommendations.

"Congratulations! You've Certainly Solved Our Baby Chick Problem"

Science's Latest Gift

Makes Big Hit with Poultrymen

When we announced in our advertisements last month that Science had at last discovered a preventative for leg weakness in baby chicks—

When we told how we had successfully combined this latest Scientific discovery with Ful-O-Pep Chick Starter and that this feed that would greatly reduce leg weakness and death losses was now available to all poultry raisers, the immediate and hearty response from poultrymen was convincing proof that we had supplied a very urgent need.

FUL-O-PEP CHICK STARTER

will solve your baby chick problem. Ful-O-Pep Chick Starter with its Cod Liver Oil Content is extremely rich in A and D Vitamins and this combined with the other health-giving ingredients that compose Ful-O-Pep Chick Starter, produces such strong bones and healthy vigorous growth that leg weakness and other diseases are greatly reduced.

Ful-O-Pep Chick Starter—Science's latest gift to poultrymen is now available to poultry raisers everywhere—your feed dealer has it or can get it for you. Just as Ful-O-Pep Egg Mash has helped poultrymen to greatly increase their egg production, so will Ful-O-Pep Chick Starter enable them to raise more of their hatched chicks.

Write for Free Illustrated Circular

Write today for big illustrated circular telling all about this new and important discovery, how and why it will greatly reduce your baby chick losses. Just fill out coupon, mail to us and this valuable circular will be sent you by return mail.



The Quaker Oats Company

Poultry Service Dept.
1628 Railway Exchange Building
Address :: Chicago, U. S. A.



RURAL POULTRY FARM

Producers of High Grade Certified Chicks

From CERTIFIED 260-290 Egg Pedigreed Hollywood and Barron English White Leghorns, RURAL S. C. Brown Leghorns, Anconas and Barred Rocks. Pullets reported laying at 4 months. Fine, instructive catalog FREE, showing pictures of our birds, breeding establishment, etc. If you want the most for your money, investigate.

RURAL POULTRY FARM, Dept. 110, R No. 1, ZEELAND, MICH.

DON'T LOSE BABY CHICKS

GERMOZONE, for 25 years the reliable remedy, will rid them of Roup, Colds, Bowel Trouble, etc., and keep them healthy. "A wonder worker." Used by hundreds of thousands. Get it at drug or seed store, or order of us by card—75c and \$1.50 sizes, delivered. Postman will collect. No extra charge. Order today.

GEO. H. LEE CO. Omaha, Nebr

LEE'S LICE KILLER

The Old Reliable Has proven itself year after year the one sure way to rid poultry of lice, mites, bedbugs, body lice and such vermin. Paint or spray on roosts, etc. No dusting, dipping, greasing, handling. Get it at your drug or seed store, or write us for particulars and valuable free book. **GEO. H. LEE CO.** Omaha, Nebr

Whittaker's Reds Chicks

And eggs for hatching. Rose and Single Combs. Michigan's greatest color and egg strain. Bred from fourteen generations of winter layers. Write for free catalog. Interlakes Farm, Box 39, Lawrence, Mich.

Baby Chick Feeders and Fountains

Simple—Sanitary—Automatic Used and Endorsed by the largest Hatcheries and Poultry Farms in the United States.

We want to send you our Catalog of POULTRY SUPPLIES.

—IT'S FREE—
THE McCURDY MFG. CO.
DEPT. B, ADA, OHIO.

CHICKS: Strong, Healthy. From Heavy Layers. S. C. Tom Barron Eng. White Leghorns, Brown Leghorns, 12c; Shepherd's Anconas, 13c; Assorted Chicks, 10c. Class A flocks therefore we sell no Class B, but Class A chicks only, 100 per cent safe delivery. Postpaid. No money down with order. Catalog free. **80S HATCHERY, Zeeland, Mich., R. No. 2 M.**

140 EGG Wisconsin ONLY \$13.25 Freight Paid

Just think of it! This fine, California Redwood Wisconsin 140-Egg Incubator, with double walls, dead air space between, hot water heat, copper tank and boiler, double glass door, nursery, self-regulating—everything complete, set up ready to run, for only \$13.25, freight paid east of Rockies. With 140-chick hot air brooder, only \$17.75.

180 Egg size, only \$15.75 with Brooder, both \$22
You take no risk buying Wisconsin. We give 30 days trial—money back if not pleased. If you prefer larger machines we have them up to 1000 eggs.

30 Days Trial Why Pay More

Wisconsin WICKLESS Colony Brooders

For those who want Colony Brooders here is the finest on the market. Automatic control—can't go out—can't overheat—burn steady blue flame—no wick—no troubles. Look at these

Express Paid Prices 24 in. Canopy, 125 chick, \$9.95
32 in. Canopy, 300 chick, 15.55
42 in. Canopy, 500 chick, 17.75

Write for our New 1924 Catalogue or order direct from this ad.
WISCONSIN INCUBATOR CO.
Box 120, Racine, Wis.



—Inspected and Approved—



Baby Chicks
From Best Egg Laying Strains in the World
Tancred, pedigree-sired and Tom Barron, S. C. White Leghorns, S. C. & R. C. R. I. Reds, Parks' Barred Plymouth Rocks.
Our flocks are all on free range, closely culled, inspected and approved by Michigan Baby Chick Association. Every bird is healthy, has size, type and color.

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

LAKEVIEW POULTRY FARM, R. 8, Box 5, Holland, Mich.



PIONEER POULTRY FARM
STOCK OF EXCLUSIVE ENGLISH ANCESTRY.

CHICKS' CHICKS
Tom Barron Strain
Highest quality English White Leghorn chicks, deriving their notoriety from their ancestors, which were imported direct from England. Prices right, liberal discount on early orders. Write tonight for free illustrated circular. PIONEER POULTRY FARM, Box A, R. 10, Holland, Mich.

BABYCHICKS

The season of 1924 opens with some fine breeding pens in the 10 varieties of **PURE-BRED PRACTICAL POULTRY.**

Barred Rocks, Anconas, White Rocks, Leghorns—White, Rhode Is. Reds, Brown, Buff Orpingtons.

In the White Leghorns a Superior Egg Quality in the D. W. Young American type and in the English type.

It is now time to be looking after your Chicks for this season. Send for our descriptive matter and price list. You will be interested in the egg records our customers report.

Cockerels—A few unsold in Barred Rocks, and White Wyandottes.

STATE FARMS ASSOCIATION, Masonic Temple, Kalamazoo, Michigan.

PURE BRED BABY CHICKS

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

Wh. Leghorns	50	100	500
Bd. Rocks, R. I. Reds	\$7.00	\$13.00	\$62.00
Wh. Wyandottes, Wh. Rocks	8.50	15.00	72.00
		16.00	77.00

Postpaid. 100 per cent live delivery. You take no chances. Ref., Farmers' & Mechanics' Bank, this city. No catalog. Order from this ad.

WASHTENAW HATCHERY, R. 5, Ann Arbor, Mich.

WORLD'S CHAMPION LAYERS

Hollywood and Improved English S. C. WHITE LEGHORNS. The American Bantam Hens: 250-300 egg bred line. Large White eggs. Winners at National Shows and Egg-Laying Contests.

HIGHEST QUALITY CHICKS from certified tested hens mated to high power pedigree sires. Discount on early orders. Valuable **INSTRUCTIVE CATALOG FREE.**

DEVRIES' GRANDVIEW POULTRY FARM, R.R. 6, Zeeland, Mich.

Baby Chicks S. C. W. Leghorns

Pedigreed Certified
Michigan's Largest S. C. W. Leghorn Farm, over 2000 Birds. Hatch our own eggs only. Supply limited. Order early. One trial will convince you. Free Circular.

SIMON HARKEMA and SON, R. 1, Holland, Michigan

BETTER CHICKS MORE OF THEM

Barred Rocks, 50, \$8; 100, \$15; 500, \$22.50. Anconas, 50, \$7.50; 100, \$14; 500, \$27.50. White Leghorns, 50, \$6.50; 100, \$12; 500, \$25.00. Chicks from well-culled, vigorous, high-producing, free range flocks. Order direct from this ad. and avoid disappointment. Prompt Delivery. Our 9th year. Good Reference. DILIGENT HATCHERY, Route 11 Holland, Mich.

Wishbone Hatched CHICKS

The finest day-olds money can buy. Strong, big from free-ranged stock. All popular varieties. Shipped by parcel post. Write for moderate price list.

Wolff's Hatchery, R. 11, Holland, Mich.

Chicks with Pep

Try our lively and vigorous chicks from bred-to-lay and exhibition hens. They will make you money for they have the quality and egg-laying habit bred into them. A trial will convince you.

All leading varieties. Safe delivery. Prepaid. Prices right. Bank reference. Big illustrated catalog free.

Holgate Chick Hatchery, Box M, Holgate, Ohio

Baby Chicks \$12.00 per 100 and up. We are listing 12 varieties of pure-bred and circulars. Clinton Hatchery & Poultry Farms, Wilmington, Ohio.

OUR BOYS AND GIRLS

A Few Lucky Letters

What Some Merry Circlers Have to Say

Dear Uncle Frank:
School has started again. That is just awful, for it just spoiled my vacation.

There are no clubs around here, so a group of us girls got together and formed a sewing club. My father gave me a calf to raise about four years ago, and a year ago I sold it for \$100. That wasn't so bad.

I have bobbed hair and do not wear knickers and do not use powder. I guess Harold wouldn't have so much to say because I have only my hair bobbed.

Uncle Frank, how do you like sleigh riding? I think winter is the best season there is. It is just the time of year your cheeks get red.—Your niece, Laura Wagar, M. C., Trenton, Mich.

Winter is O. K. as long as it does



Douglas and Clifford McArthur, Cousins, Lachine, Sunning Themselves.

not get too cold. The trouble is that my nose gets red instead of my cheeks. I hope you get another calf to raise.

Dear Uncle Frank:
This is my semi-annual. I write just about every six months.

We have lovely weather. The thermometer has been as low as thirty below in the wind, and there's just snow and snow and more snow!

I think Clarissa is a pessimist. Where did she ever get such horrid ideas regarding this thriving circle. I wish she'd let me know for I laugh so much I would like to know of something to sober me for a while.

I'm going to raise some crop this summer to supply me with money for my junior year. Aren't I ambitious?—Your M. C. niece, Polly Livinicky, Stephenson, Mich.

You are apparently one of those semi-occasional writers. Clarissa is not a pessimist—she just has good imagination. I judge you are one of the Ha-Ha girls.

Dear Uncle Frank:

I was the last one home from school as I got in the house, they all burst clean the school house and build the fire every morning. My sisters and brothers come home first, and as soon as I get in the house, they all burst out, "I bet you don't know what you got." After guessing a while they told me I got a button and a membership card. I tell you I was awful glad. I am very much pleased with them both. I thank you very much.

I think I'll give up the janitor business and get home first to find out what I get. Don't you think so, Uncle Frank?—Yours very truly, I. A. Sall, R. 2, Bangor, Mich.

I am glad you all enjoyed the arrival of the button and card so well. No, don't give up your janitor job. A job is always worth keeping. Besides, if you quit you will come home and be disappointed in not getting anything.

Dear Uncle Frank:

Say, cousins, are you disappointed because Uncle Frank is only thirty? I am not. I think that a club for young people should be led by a young person. How many agree with me?—Your niece and cousin, Myrtle Dupont, R. 1, Allegan, Mich.

Because somebody said I was thirty doesn't make me so. I feel like twenty because I think I can still run like sixty. But I am neither twenty nor sixty.

Dear Uncle Frank:

What do you think about chain letters, Uncle Frank? I don't think there is any sense in them. In my way of

thinking, you are just wasting postage stamps.

Are you interested in basket ball games, Uncle Frank?

I think it is great fun to see the quick action of the players as they shoot the ball from one to the other. The game also makes them think and act quickly, and develops sportsmanship and respect for the other fellow, as well as developing the muscles of the body.—From your niece, Elva McClintic, M. C., Homer, Mich.

I agree with you about chain letters. The threats and promises they contain are worthless and harmless. Yes, I like basket ball but I have not played it for years.

Dear Uncle Frank:

Did you ever snowball when you were smaller? It's lots of fun. We had a snowball fight in school. Boys against the girls. We fixed them. We showed them that girls are just as smart as boys, so far as that's concerned.

With all good wishes, good-bye, another niece, Rose Sasek, M. C., R. 4, Owosso, Mich.

It was some accomplishment for you girls to beat the boy at snowballing, as usually girls do not hit what they aim at.

Oh! Oh! Uncle Frank:

I just read "Clarissa's Vision." I hope that it will never happen, and let the "Merry Circle" drop.

Say, Merry Circlers, let us keep it up. Don't let it drop, for we want something to do evenings. And, oh! just think, never to hear from our Uncle Frank any more.

Sister and I took the map of Michigan and located the cities from which the letters come. Ardis L. Bisbee lives the closest to us of those we found.

Will close, from your niece, Leota Ray, M. C., R. 6, Paw Paw, Mich.

Yes, that "vision" was sort of a shivery affair. If I read many like it I really would think I was getting old. The M. C. is going stronger than ever, so don't worry.

Dear Uncle Frank:

I want to thank you very sincerely for the lovely fountain pen you sent me. I had no idea that I would win first prize, so you can imagine how great my surprise was. I am writing



Birdene Coles (Harold's Sister), Montgomery, Mich. Notice Her Hair.

with my pen now, and it is indeed a pleasure to write with. Another thing, Uncle Frank, which makes me appreciate my lovely pen so much, is that I received it the day after my birthday, so that it seems like a birthday present, too.

We are having very cold weather up here now.

Thanking you again, I am, sincerely yours, Mildred Miller, R. 2, Sault Ste. Marie, Mich.

Thanks for your thanks. So often prize winners do not write telling me they received their prize. I think they ought to, don't you? It is nice that you received the pen so near your birthday time.

BRED TO LAY CHICKS
Certified

100,000 Highest Quality Certified Baby Chicks. Improved Shepherd Strain S. C. Anconas—hard to beat. Winter and Summer, English Strain S. C. White Leghorns. All our Leghorns mated with Cockerels from E. E. Shaw Champion winning pen at M. A. C. 1923 laying contest. Personally culled and rated by experts and certified by Michigan Baby Chick Association. Guaranteed 100 per cent live delivery. Catalog Free. Take no chance with just as good, but get your best foundation pure-bred stock from The Reliable Poultry Farm & Hatchery, Paul De Groot, Mor., R. 1, Dept. P, Zeeland, Mich.

Improved S. C. White Leghorns

Bred for egg production since 1910. CHICKS from this high-grade laying strain will give you bigger profits, and absolute satisfaction.

They have 13 years of careful selecting and breeding direct behind them, and mature in the shortest possible time.

You are benefited by our 13 years' experience in hatching and shipping chicks. These chicks possess great vitality and grow up uniform in size, 100 per cent safe arrival guaranteed.

Have us mail you a catalogue with prices.

WOLVERINE HATCHERY, Zeeland, Mich., R. 2, Box 20.

Certified Chicks

at popular prices. We won 1st and 4th prize this year on English strain White Leghorn Hen at the National Poultry Show, Chicago. Also first at Zeeland Poultry Show. Other breeds have had same careful supervision in developing and breeding. Pure-bred stock carefully culled. 100 per cent live arrival guaranteed. Our chicks are money makers and will improve your flock. Write for catalog and prices. A trial will convince you. All flocks certified.

AMERICAN CHICK FARM, B. 115-A, Zeeland, Mich.

Baby Chicks

Our own breeding flock of large type American White Leghorns. Laid 271 eggs and standard qualities combined. 13 years' experience in breeding, hatching and marketing. Also high quality Barred Rocks and Rhode Is. Reds. All flocks culled and inspected. Modern hatching plant, 2 hatches weekly. Quality chicks at commercial prices. Write for prices and circular.

DEAN Egg Farm & Hatchery, Big Beaver, Mail address Birmingham, Mich., R. 4.

BIG MONEY IN POULTRY

FREE \$5.02 PER HEN PROFIT Government report on pen of our stock. Bred-to-lay Rocks, Wyandottes, Leghorns, Reds, High record breeding males \$6 to \$12. BABY CHICKS \$20 to \$40 per 100. HATCHING EGGS \$3 to \$5 per 15, \$12 to \$20 per 100. (No duty to U.S.A.) 30,000 illustrated poultry and incubator catalog FREE.

L. R. GUILD & SONS, Box A, Rockwood, Ont., Can.

300,000 CHICKS

Eggs, Pullets and Breeding Stock
Aristocrat Strain Barred Rocks, both light and dark matings. Shepherd Strain S. C. Mottled Anconas, 250-280-egg strain. Tom Barron S. C. White Leghorns, heavy layers. Write for catalog giving details as to breeding. Special discount on early ordered chicks. Can fill orders promptly. FAIRVIEW POULTRY FARM, R. 2, Box E, Zeeland, Mich.

BEST CHICKS at Low Prices

Send for free catalog describing best bred chicks in the country. Tom Barron and Tancred White Leghorns, Michigan's Champion Winter Laying Barred Plymouth Rocks and S.C.R.I. Reds. No better chicks anywhere at any price. Satisfaction and 100 per cent live delivery guaranteed.

Brunner-Fredrickson Poultry Farm, Box 20 Holland, Mich.

FREE FEED "Just-Rite" CHICKS

Most Profitable Varieties. Trapnest-Exhibition, Pedigree, and Utility Matings, direct from prize-winners at New York, Chicago, Nat'l Egg Laying Contests. Nabob Quality. None better at any price. Satisfaction and 97 per cent live arrival guaranteed. Postpaid. Low Prices. Big Catalog FREE. Stamps appreciated.

NABOB HATCHERIES, Ave. 20, Gambler, Ohio. Ohio Chicks are Better.

QUALITY CHICKS AT REASONABLE PRICES

English White Leghorns, Parks' Strain Barred Rocks, S. C. Black Minorcas, Reds and Anconas. My pen (16) at the 1923 Mich. Contest finished third among all heavy breeds, four hens making records over 200 eggs each, and one with a record of 254 eggs was seventh highest individual for the entire contest, 990 birds competing. Catalog free.

PINE BAY POULTRY FARM, HOLLAND, MICH.

SUPREME CHICKS

LAYERS! That's what you want. Standard Chicks are from just that kind of flocks. Our strain of Supreme Laying White Leghorns is the result of our many years experience, breeding and selection. They are large sized, long deep wedge shaped bodies, keen alert eyes, large lopped combs. The kind you will be proud of and eventually buy. Shipped postpaid. 100% Live delivery guaranteed. Illustrated catalog sent Free.

STANDARD HATCHERY, Box A, Zeeland, Mich.

Highest Quality Chicks

Feb.-March prices. Heavy broiler chicks 12c. Barred Rocks or Reds 17c. Anconas, Black Minorcas 10c. White or Brown Leghorns 15c. White Rocks, White Wyandottes, Buff Orpingtons 17 1/2c. Extra selected chicks, built directly from contest winners. 4c per chick more. Add 30c if less than 100 wanted. Hatching eggs. Catalog. Good reference. Beckmann Hatchery, T.M.F. 26 Lyon St., Grand Rapids, Mich.

B-A-B-Y C-H-I-X

Our supreme quality Eng. W. Leg. and Ancona chicks direct from our farm, delivered 100 per cent alive at your door, at only 18c each. Write for catalog, or order from ad. MODEL POULTRY FARM, Zeeland, Mich., R. 4.

The Critics' Contest

THIS is a new one—I hope you will like it. I think it will be worth while, because it gives you a chance to find fault and thus bring to your mind the errors and good points in contest papers as I receive them. It will likely help you write better papers in the future.

Here are copies of four letters which I received from the last Ad Contest.

Dear Sir
I "gustoday as I was looking through the Michigan Farmer which we take and decide to solve some of your puzzles as you give it. The paper on page eighteen generated by the carbon gas from human & effluent, being produced by desire as an emergency stimulant for the heart and nervous system, on page twenty-five, & De Lee's Pills are

No. 1.

The names and addresses have purposely been left off but the letters have been numbered to help identify them.

Your part in this contest is to tell what you think of each letter. For example, you might say of letters No. 23 and 24, (which are not here), as follows:

"No. 23—Well written and neatly arranged, but the answers are too long, and the spelling is incorrect."

"No. 24—Carelessly written but arrangement is good. The answer to Question No. 8 is incorrect."

You can find out if the answers are correct by looking at last week's paper.

Besides making the criticisms as above you should place first on your paper the criticism of the letter you like the best. For instance, if you like number three best write about that

1. Vapo Oil Range	Page 190-18
2. Heart and nervous system	25-197
3. De Lee's Pills	39-211
4. Radiator Warmth	184-12
5. Hall's Nicotine Sulphate	186-14
6. Carbola	16-189
7. Wyngarden Hatcheries & Farms	34-286
8. Mineral Matter	210-88
9. Harold Butch Shoes	17-189
10. Rubber in U. S. Boots	5-177

No. 2.

first, then if you like No. 1 best, place that second, and so on.

The neatest and most correct criticisms will win the usual prizes. The first two prizes are fountain pens; the next three, tubular flashlights, and the next five, little boxes of candy.

Don't forget to put your name and address on your contest paper. Also, put M. C. after your name if you now are a Merry Circle.

All who send in good papers and are not M. C.'s will get buttons and cards. This contest closes March 7.

Address your letters to Uncle Frank, Michigan Farmer, Detroit, Michigan.

THE DRAWING CONTEST RESULTS.

I HAVE no doubt now about the M. C.'s liking drawing contests. The drawings came in large numbers each day, in all sizes and shapes, and showing all kinds of artistic ability.

When it came to picking the winners I had my desk and table covered with pictures, the outlay making a nice art exhibit in itself. The picking was some job. There were so many good ones that it was very hard for me to make a selection, and after I had picked out ten there were so many other good drawings left that I decided to break the custom and give five extra prizes.

One thing I cannot account for, and

that is why you M. C.'s do not put your names and addresses on your contest papers. I believe I had to write this information on about half the drawings that came in. Hereafter please put your names and addresses on your papers, even if you send a letter with them. Some of these days you are going to get left if you fail to do this, because it takes too many lead pencils and time for me to do it. One girl lost a prize and an M. C. button because she did not send her address.

Some of the prize-winning drawings will be printed next week. The others, and other good drawings received in this contest, will be used as I can find the space for them.

The prize winners, the lucky fifteen this time, are as follows:

Fountain Pens.
Albert Alfredson, Whitehall, Mich.
Mabel Zimmerman, R. 2, Reed City, Mich.

Flash Lights.
Marjory Hillsman, Six Lakes, Mich.
Mary Wert, R. 2, Laingsburg, Mich.
Rosaline Linderer, R. 1, Newaygo, Mich.

Candy.
Mildred Helfer, Ithaca, Mich.

1. Vapo Oil Range	Page 18
2. Heart and nervous system	25
3. De Lee's Pills	39
4. Radiator Warmth	12
5. Hall's Nicotine Sulphate	14
6. Carbola	16
7. Wyngarden Hatcheries & Farms	34
8. Mineral Matter	38
9. Harold Butch Shoes	17
10. Rubber	5

No. 3.

Ann Mulder, R. 6, Grand Rapids, Mich.
Maurice Peterson, Bear Lake, Mich.
Ariel Denton, Saranac, Mich.
Leahbelle Gilbert, Memphis, Mich.
Caroline Wallen, Ewen, Mich.
Evelyn Gordon, R. 1, Cassopolis, Mich.
Henry W. Abshagen, R. 3, Decatur, Mich.
Paul Harris, Dryden, Mich.
Herman K. Hoffer, Ashley, Mich.

HOW I USE MY SUNDAYS.

By Thelma McMahon, Beaverton, Michigan.

I am always glad when Sunday comes around because it means several important things to me.

I am attending school in town, and Sunday means a day with the home folks and friends, whom I miss during the week. Then often on Sunday afternoon the children are bundled up, and all pile into the sleigh, and to Grandmother's we go. She is an old lady, nearly seventy-five years old, but quite strong and active still. She lives

1. Vapo Oil Range	190-18
2. Heart and nervous system	25-197
3. De Lee's Pills	39-211
4. Radiator warmth	184-12
5. Hall's Nicotine Sulphate	186-14
6. Carbola	16-189
7. Wyngarden Hatcheries & Farms	34-286
8. Mineral Matter	210-88
9. Harold Butch Shoes	17-189
10. U. S. Boots	5-177

No. 4.

with her two bachelor sons in a large stone house about a mile from our home. She is always glad when some of her children drop in to spend the day with her.

The great house echoes with the merry laughter of the children. And Grandmother might be seen in the easy chair with the youngest child on her knee, while she visits with her children, who are grouped about her. I enjoy the time spent with her very much and realize that she may not be with us long.

Insure your CHICKS and PROFITS
Blue Hen COLONY BROODERS

Save them both, by supplying perfectly-controlled warmth—automatic regulation which is automatic. Superior from the beginning in results produced, "the mother hen's only rival" is further ahead than ever TODAY, due to 1924 improvements. Fresh air—without floor drafts. Extra large fire box of stove, makes keeping a fire doubly easy.

Larger and Heavier —yet Cheaper

than other brooders, because of the savings effected by quantity production. Measured by efficiency, capacity and price, the Blue Hen is today the best buy in colony brooders.

\$21.00 500 chick capacity (delivered)
\$26.00 1000 chick capacity (delivered)

Blue Hen Mammoth Incubators
—prompt delivery—if you act promptly.

Lancaster Mfg. Co. 883 Janet Ave. Lancaster, Pa.

POULTRY

Wyngarden Strain WHITE LEGHORN BABY CHICKS
EGG BRED for 18 YEARS

Here's what you get when you buy **Guaranteed Wyngarden BABY CHICKS**

(1) Pedigreed stock, sired by males whose dams had records of 200 to 289 eggs per year, and grand-dams 298 to 304 eggs. (2) 100 per cent live delivery. (3) Chicks guaranteed to be healthy. (4) Absolutely pure-bred. (5) Absolutely no culls. (6) Stock that withstands winter cold as well as summer heat. (7) Free entry in our annual flock performance contest, whereby you may obtain 200 of our best Barron English White Leghorns free.

We know the quality of our stock because we maintain 42 hatchery farms of our own, instead of buying eggs wherever available. Sired by Hollywood and Funk Farms Males. White and Brown Leghorns.

Send for our catalog and read full particulars of the Wyngarden Strain.

Wyngarden HATCHERY & FARMS ZEELAND, MICH. Box M

Big 5 To 6 Lb. English White Leghorns. Larger hens, better winter layers. Chicks, hatching eggs. Free catalog describes them in full of practical money-making poultry information. Send for it. A. Wauchek, Gobles, Michigan.

CHICKS White and Barred Rocks, White Leghorns, English Strain White Wyandottes, Buff Orpingtons, Reds, 100 per cent live arrival Guaranteed. Postpaid. Order from this ad and get the best. Durand Hatchery, Fenton, Michigan.

1,000,000 GOOD LUCK CHICKS
\$10 Per 100 AND UP

This season get our big, fluffy, healthy "GOOD LUCK" Chicks and REAP PROFITS. Prices of 50 100 300 500

White, Brown and Buff Leghorns.....	\$7	\$13	\$38	\$62
Barred and White Rocks, R. C. & S. C. Reds, Anconas....	8	15	44	72
White Wyandottes, Black Minorcas, Buff Orpingtons	8.50	16	47	77
Sil. & Part. Wyan., Lt. Brah., Buff Minorcas, Speckled Sussex 11	20	58	95	

Mixed, all varieties, \$10 per 100, straight. Postpaid, full live delivery guaranteed. Bank references. Order right from this ad. Get them when you want them. You take no chance on "GOOD LUCK CHICKS". Catalogue free. Member International Baby Chick Association.

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750,000 CHICKS \$10.00 PER 100 AND UP

Select, culled flocks of heavy layers on free range and properly cared for to produce vigorous, sturdy chicks.

Varieties	25	50	100	500	1000
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White Wyandottes, Buff Orpingtons	5.00	9	17	82	...
Buff Minorcas, Silver Laced Wyandottes	6.00	11	20	...	...
Mixed	3.50	6	11	52	100

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TRI-STATE HATCHERIES Box 533 **ARCHBOLD, OHIO**

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FROM STOCK—THAT IS BRED WITH THE LAYING HABIT
Hollywood and Barron English Single Comb White Leghorns STRAIN MATINGS
250-300 EGG-BRED LINE

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Our Leghorns are long, deep-bodied, wedge-shaped birds, with wide backs and low spread tails, big lopped combs and alert eyes. Birds that lay those large white eggs that bring the high prices on the New York Market.

It describes our wonderful breeding establishment, it tells what and how to feed your chickens for profit, it will show you how you, too, can double your poultry profits.

KARSTEN'S FARM Box Y **ZEELAND, MICHIGAN**

Additional Poultry Ads. on Page 337

Buy PARKER-VOSS COs'. HATCHING EGGS & BABY CHICKS
from **Heavy White Laying-Trap Nested S. C. White Leghorn Stock**
Hollywood and Wycoff Strains
Write for Prices
Dimondale, Mich.

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PROFIT MAKERS
Breeder of high egg production, combined with sturdy free-range stock of exhibition quality assures you of fine success with Ovie's Healthful Chicks.
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Tested for White Diarrhea and elimination of infected birds assures Profit Makers. 15 leading money-making breeds. Shipped prepaid and live delivery guaranteed. Write for Big Free Catalog. 80,000 chicks weekly.
OVIE'S POULTRY FARM & HATCHERY
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BUY DUNDEE Bred-To-Lay Chicks and Get The Right Start
Best utility and exhibition matings. Barred Rocks, 290 to 302 egg strain. R. I. Reds. Liddicoat's best Anconas direct from Shepards. White Leghorns from Michigan Agricultural College. 100 per cent live delivery. Reference, Dundee State Savings Bank. Write for our 1924 catalog and price list; it will save you money. **THE DUNDEE HATCHERY, Box A, Dundee, Michigan.**

Breckenridge Chicks Are Winners
Day-old chicks from strong, vigorous flocks which have been carefully culled and extra selected standard male birds—Barred Rocks, R. I. Reds and White Leghorns. We guarantee 100 per cent safe arrival. Write us for price list and circular.
BRECKENRIDGE HATCHERY, J. C. Barnse, Prop. Box 351, Breckenridge, Mich.

STURDY CHICKS
From high grade, heavy egg producing strains of S. C. White Leghorns, S. C. Rhode Island Whites and White Wyandottes. All from pure bred, healthy, vigorous stock, carefully culled and tested to insure your getting chicks that will be easy to raise, develop rapidly and become heavy winter layers. Shipped postpaid, 100% live delivery guaranteed. Catalog Free.
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WONDERFUL PRODUCERS — EARLY LAYERS 10 THOROBBED VARIETIES. Lowest prices. Free catalog. Write to-day.
D. T. FARROW CHICKERIES, Dept. O, Peoria, Ill.

Wishbone Hatched Chicks
From high-grade, heavy egg producing English strain S. C. White Leghorns. Strong and vigorous from free range utility flocks. Catalogue free. **HONOR-BILT POULTRY FARM, Zeeland, Mich.**



Thoroughbred Alfalfa Seed as well as Thoroughbred Cattle

Pure bred alfalfa seed is as important as pure bred stock. Scrubby stock costs more than it earns. The same is true of inferior alfalfa seed.

Blackfoot Brand Genuine Grimm comes from registered fields. It is field-inspected and is certified and guaranteed Genuine Grimm by State Pure Seed Commissioner of Idaho.

Each of the three sizes of sacks, 30, 60 and 150 pounds have the Blackfoot label and are sealed. Insist on seeing this label and seal before you buy; the just-as-good brand is like a grade boar or bull, you get the same poor results.

Ask your seedsman for Blackfoot Brand Genuine Grimm, the pure bred Grimm alfalfa seed. If he cannot supply you, write us direct.

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West Bend BARN EQUIPMENT

West Bend Automatic Stanchions equipped with our wonderful locking-releasing lever save you time and labor—and insure safety in locking up or releasing the cows, yet you pay no more for West Bend equipment than for ordinary stanchions that must be opened and closed singly by hand. The West Bend lever controls from 2 to 50 West Bend Automatic Swinging Stanchions. The entire row of cows can be locked up or released instantly by one throw of the lever. Cow stops are operated at same time, and when set guide cow into the stanchion. Every user says it's the greatest idea ever brought out in modern barn equipment. You certainly want it in your barn. Write today for catalog showing complete line of West Bend Barn Equipment. Write TODAY, West Bend Equipment Corp., West Bend, Wis. Syracuse, N. Y. Write nearest office, Dept. E.

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HEAVES Use 2 large cans. Cost \$2.50. Money back if not satisfactory. One can at \$1.25 often sufficient. NEWTON'S Compound for Worm Expelling, Conditioning, Heaves, Indigestion, Distemper, Coughs. 65c and \$1.25 cans. At dealers or post-paid. The NEWTON REMEDY CO., Toledo, Ohio

Quick!

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GOMBAULT'S
Caustic
BALSAM



MICHIGAN IS SECOND IN COW-TESTING WORK.

MICHIGAN now moves up to second place in the number of cow testing associations operating in the state. At present she has seventy-five of these organizations as compared with 151 in Wisconsin, the leading state in this constructive dairy extension work. Minnesota follows Michigan with fifty-five associations, Iowa claims forty-seven, Pennsylvania and Ohio each have thirty-six. In the associations of the country fully 300,000 cows are being watched by cow testers.

ESTABLISHES MILK RECORD FOR ALLEGAN.

EARL S. KING, cow tester for the East Allegan Association, reports in his annual summary that 302 cows were tested for the year, averaging 5,623 pounds of milk and 242.1 pounds of butter-fat. Mr. William Knobloch, one of the members of this association, of Otsego, Michigan, had the high herd in butter-fat production on seventeen cows averaging 8,997 pounds of milk and 479.9 pounds of fat. His herd is made up of pure-bred and grade Jerseys. The high cow in butter-fat production was an eight-year-old grade Jersey in Mr. Knobloch's herd. This cow made 13,718 pounds of milk and 715.3 pounds of fat for the year. It is believed this is the highest cow testing association record made to date in Allegan county.

It is further interesting to study the records of production in the offspring from this cow. A three-year-old grade Jersey and a two-year-old grade Jersey, both daughters out of this eight-year-old cow, made 479.3 pounds of fat and 476.4 pounds of fat, respectively. The fat test on these three individuals for the entire year was 5.21, 5.23 and 5.27 per cent. This is a remarkably uniform test and uniform production for these high-grade Jersey cows, all of them sired by pure-bred bulls.

The high herd in milk production belonged to Oliver Brothers, Plainwell, Michigan. This herd of ten pure-bred and grade Holstein cows averaged 9,963.4 pounds of milk and 350.9 pounds of fat. Among the ten high herds in this association two Jersey herds averaged higher than 400 pounds of fat annually—Mr. William Knobloch's and Mr. David Anderson's. Mr. Martin Reed and Mr. John Smith, also with pure-bred and grade Jersey herds, made an average above 350 pounds of fat. There were four Holstein herds that made better than 340 pounds of fat average for the association year. Among the high cows listed nine cows made over 500 pounds of fat and twenty-four cows made between 400 and 500 pounds of fat.

This is the second year that the East Allegan Association has operated. The interest aroused and the good work accomplished by the three associations that have been operating in this county during the past year have attracted considerable attention to the quality of dairy cows to be found in Allegan county. Both breeds—Holsteins and Jerseys—are well represented in all the associations.

FARMERS SEE MORE OF THE DOLLAR.

BY cutting out superfluous milk wagons the Berrien County Milk Producers' Association have been able to deliver milk to patrons in Benton Harbor at less cost and, at the same time, pay back to the producer a larger portion of the dollar than was possible under the old plan. Under the present arrangement the producer gets seventy-two cents, factory expenses amount to eleven cents, selling ten and one-half cents, administration four and one-half cents, bonds and interest two cents out of every dollar paid by the consumer.



Heals

**Penetrates
Softens
Restores**

For healing any external hurt on your cows, or other livestock, rely on Bag Balm. This wonderful healing, penetrating ointment protects the wound, restores circulation and promotes quick healing of any cut, scratch, bruise or inflammation.

Bag Balm is especially valuable in treating any injury to the udder or teats. The delicate cells of this organ are very easily injured and unless quickly and properly cared for do not heal in their original structure. Bag Balm restores and rebuilds the tissues so that there will be no interference with normal milk flow.

Soft, silky udders have a lot to do with full milk yield—as well as easy milking. Keep Bag Balm on hand for any healing emergency. Very useful in cases of Caked Bag, Bunches, Cow Fox.

Big 10-ounce package, only 60c at general stores, feed dealers and druggists. Free booklet, "Dairy Wrinkles" by writing us.

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Lyndonville, Vermont

BAG BALM

MADE BY THE KOW-KARE PEOPLE

FREE 2-OUNCE SAMPLE
Dairy Association Co., Lyndonville, Vt. (Dept. B2)
Please send me sample package of Bag Balm
My name.....
Address.....
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**TRY a Michigan Farmer
Classified Liner. They
bring results.**

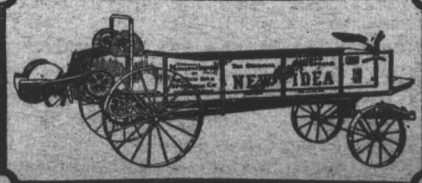
The NEW IDEA SPREADER

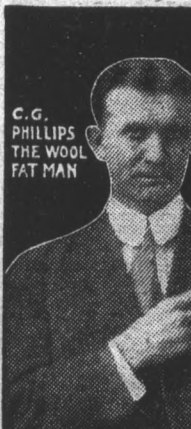
THE New Idea has led the spreader field for twenty-five years. No other implement of any kind has ever established itself more firmly in first place—or been more widely imitated.

And NOW—a new New Idea Spreader—our Silver Anniversary Model—which emphasizes more strongly than ever before, the outstanding leadership of New Idea in the spreader field.

Steel-built throughout—except sides and bottom. Lighter, stronger, longer-wearing. Sturdily built for smooth, steady operation and minimum of work for team and driver. See this vastly better spreader at your dealers—or write direct for complete description.

THE NEW IDEA SPREADER CO
Coldwater, Ohio





TRY This Big Can on 20 Days FREE TRIAL

CORONA WOOL FAT

SEND NO MONEY

I make this liberal offer to prove before you pay that CORONA WOOL FAT is the greatest healing preparation you ever used for Cuts, Galled Shoulders, Collar Boils, Inflamed Udders or other injuries of man or beast.

Simply mail me a postal or letter saying "Send me your big can of CORONA WOOL FAT on 20 Days Free Trial." I'll send it postpaid. Use all or part of it, and if you don't find it to be the best healing ointment you ever used you won't owe me a cent. If it does all I claim for it, send me 65c in payment at end of 20 days. (6)

C. G. PHILLIPS, President
The Corona Mfg. Co., Kenton, Ohio

DAIRY-ALFALFA WORKERS TO INVADE MIDLAND COUNTY.

PLANS have been completed for conducting a dairy-alfalfa campaign in Midland county from March 3 to 15, with the farm crops and the dairy departments of M. A. C. and County Agricultural Agent Roy Weinberg in charge.

Two teams composed of specialists from the college staff will cover practically every part of the county, three or four meetings daily being planned for each team. Every farmer in the county will be able to attend one of the meetings and demonstrations without being required to travel over two or three miles, according to the plans.

Midland county is the sixth to be covered during the present drive, Arenac, Sanilac, Shiawassee, Newaygo and Ottawa counties having already staged similar campaigns during this year. Muskegon county will conduct a campaign March 17-29. This work

has been conducted for three years by the college specialists, and about thirty county campaigns have been staged during this period.—B. V. Halstead.

WANT DAIRY BUREAU AT WASHINGTON.

REPRESENTATIVES of twenty national dairy organizations included in the American Dairy Federation, met in Washington on February 14 and made a strong presentation to the house committee on agriculture in favor of the establishment of a dairy bureau in the department of agriculture. They were joined in this effort by the representatives of the other farmers' organizations. A. M. Loomis, secretary of the National Dairy Union, has been made secretary of the American Dairy Federation, and headquarters of the organization have been established in Washington.

Beet Growers Meet

Hopeful of Reaching Agreement with Manufacturers After Saginaw Meeting

WITH earnest debate and ringing resolutions, compensating in some degree for the small attendance of members due to snow-of cooperation to be held in this county-bound country roads and other conditions, the Michigan Sugar Beet Growers' Association in meeting at Saginaw on Saturday, buried the hatchet in its long fight with the sugar interests and agree to work together in peace and harmony. This unexpected development in the sugar beet situation, in view of the small acreage so far signed up for this year, was due to important concessions made by the sugar companies and to a realization on the part of the growers that a better organization and cooperation are necessary for their success.

Concessions Offered Have Effect.

The peace resolutions were prompted by a concession announced the day before the meeting that the sugar companies would raise their guarantee from six to seven dollars per ton of beets. This peace balm was further enriched by an offer of the interests to aid the beet growers to put their organization on a strong financial basis. The aid thus extended to the growers would be a collection from the growers themselves of a fund, which has been greatly needed in the past, to carry on their activities for satisfactory working agreements, and which would be similar to the miners' checking-off system. By imposing a tax of five cents per ton on all beets delivered at the factories, and paid into the treasury of the association, the beet growers would be in a position to perfect their organization so that it would function in a harmonious way to the advantage and benefit of all. This offer was made conditional upon the acceptance of the present 45-55 contract for five years with the understanding that the beet growers' association would aid in signing up of a large acreage on this basis.

The beet growers' association went on record as favoring this proposal, but resolved to hold off the actual signing of contracts until after a further conference with the sugar companies, in an effort to secure a modification of the percentage clause of the agreement. It is contended that the spread of ten per cent in favor of the companies is too large. The beet growers present expressed satisfaction with the 50-50 contract last year, and if this can not be secured for 1924, a spread not exceeding five per cent would be demanded.

Thomas C. Price Gives Inside Facts.

In calling the meeting to order, Thomas C. Price, president of the association, explained how the supposed agreement of last October with the

Owosso Sugar Company had fallen through, saying that fair settlements with the growers depended upon a right determination of the sugar extraction, and that a basis of twelve per cent, or 240 pounds of sugar to the ton of beets, was not a correct basis to work upon, in view of assertions made that the Owosso plant extracted at least 280 pounds to the ton of beets, or fourteen per cent.

Mr. Price also stated that William H. Wallace, president of the Michigan Sugar Company, had told him that if the beet growers' association would get behind the present contract and secure a big acreage for this year, that his company might grant the 50-50 contract on beets delivered to the plants using the Steffen's process of extraction. Mr. Price, however, favored the 47½@52½ percentage contract for all growers, if the 50-50 contract of last year cannot be renewed.

One Beet Grower's Experience.

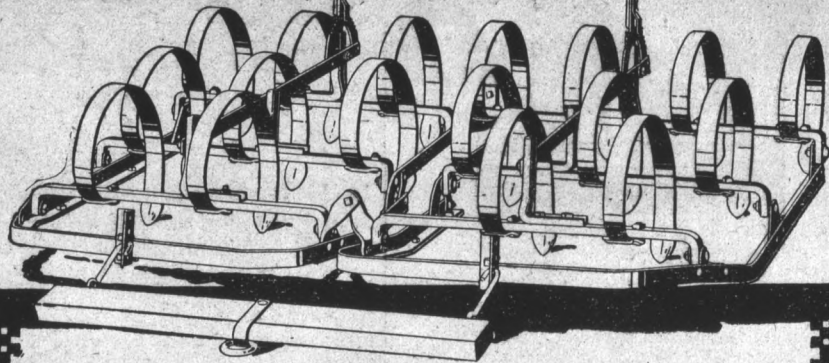
E. A. Rolfs, of Akron, who grows about 1,000 tons of beets yearly, said that he keeps a careful record of his costs and he had found that over a period of years his average cost of producing beets when he employs all labor, taxes on the acreage, repairs and depreciation to machinery, but with no managerial expense included, was \$77 per acre. His average production last year was slightly more than nine tons to the acre. On the basis of \$9.29 per ton paid by the sugar companies, plus forty cents per ton for the employment of his own labor, or \$9.6939 per ton, his return was about \$89 per acre, or a net gain of \$12. He declared that the present 45-55 per cent contract, on the basis of twelve per cent extraction, would return to the grower only \$78.46 per acre of beets, barely above his actual costs of production, including taxes.

It was the consensus of opinion that a large number of farmers will grow beets, and the real problem is to get working agreements that will bring a profit to growers.

A RECORD COW'S FEED.

ALFALFA and mixed hay, corn silage, and a grain ration consisting of the usual concentrates mixed on the farm with an analysis of about twenty per cent of digestible protein, fifty per cent of carbohydrates and five per cent of fat, was the main ration fed to Onxy Lillith, the world's new junior three-year-old record cow for ten months. In that time this young Holstein cow gave 21,387.2 pounds of milk, which yielded 727.61 pounds of fat—equal to 909.3 pounds of butter.

Digs Deep Kills the Weeds Makes a Fine Seed Bed



John Deere-Syracuse Spring-Tooth Harrow

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

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

teeth are spaced so that trash naturally works toward the center and through the opening.

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

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

Get ahead and keep ahead of the weeds by using a Syracuse Spring-Tooth Harrow. Write today for free booklet describing it. Address John Deere, Moline, Ill., and ask for Booklet DJ-622

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THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

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Cow testers who reach over 6000 dairy farms and regularly test the skim-milk from cream separators, practically all reported in an investigation, that De Laval's skim cleaner and last longer. The following is typical:

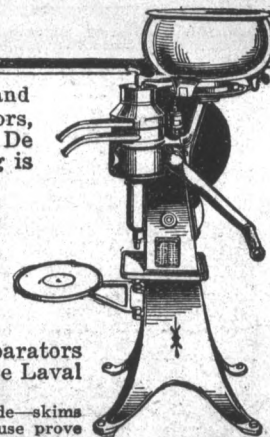
"I have tested many makes of separators and find the De Laval does the best work. With only one or two exceptions the De Laval have not run over 2/100 of one per cent of butter-fat in the skim-milk. The other makes of separators tested from 5/100 to 2/10 of one per cent, and even higher."

With five average cows and butter-fat at 40c a lb., a 2/10 per cent loss of butter-fat amounts to \$24.00 a year—6 per cent interest on \$400.00. There are thousands of worn-out and inferior separators in use today which are wasting the price of a new De Laval in a short time.

The New De Laval is the best cream separator ever made—skims cleaner, runs easier and lasts longer. Over 100,000 in actual use prove this. Among other new features and refinements it has a self-centering bowl which eliminates vibration, causing it to run smoother and last longer. You get more and better cream, bigger cream checks and satisfaction with a De Laval.

A new De Laval will soon pay for itself. Ask your De Laval Agent about one, or send coupon for full information.

De Laval Milker. Also ask about the De Laval Milker, which soon pays for itself with a herd of 10 or more cows, and is giving wonderful satisfaction to thousands of users.



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The rest in easy
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Town.....
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No. Cows.....

Only \$14.24 DOWN



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Uses All Low-Priced Fuels. BURNS KEROSENE, GASOLINE, DISTILLATE or GAS. No Special Attachments necessary! Most economical engine built but always delivers the big surplus of power needed for the hardest jobs. Simple to operate and trouble-proof. Guaranteed for a life-time of hard work. Equipped with the celebrated Wico Magneto—the best system of high-tension, jump-spark ignition known. Starts easily at 40 below zero—not affected by water or oil. Only one moving part—can't get out of order. Economical and far better than the old-style batteries.

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STOCK FARMING

Success with Chester Whites

How John Gibson, a City Man Took a Small Farm and Became a Successful Breeder

By James C. Mills

NINE years ago John Gibson and wife took a small piece of land in Bridgeport township, Saginaw county, forty acres in extent, and about the poorest farm of its size to be found anywhere. He had been a city salesman and knew nothing of farming or stock raising, and was handicapped still further by ill health, and his wife in little better condition.

Recently Mr. Gibson returned from a tour of the eastern and southern states bringing with him his load of Chester White pigs that he had been exhibiting and sixty-five championship awards that he had received in the various fairs where he had shown his stock. His cash returns from the trip were well over the \$2,000 mark. Mrs. Gibson has turned her attention to poultry breeding and has already won many prizes for her fine Barred Rocks. They are both in the best of health, having come in nine years from well-nigh hopeless ill health and poverty to success.

Starts with Chester White Pigs.

During the first spring in their home on the Bridgeport farm, Mr. Gibson bought a scrub Chester White pig from one of his neighbors. This pig, although three months old, was so small that he was put into a berry crate, where he was able to turn around comfortably. Mr. Gibson brought the pig home and set about to take care of it with his little knowledge of such matters. As a result of studying the feeding of this pig, he became interested in pig breeding and decided to go into it in earnest.

With the profits from his scrub pigs he bought his first registered sow, the third spring on the farm. This sow was the foundation for his blooded stock. Gradually improving his herd of animals, he bought "Triumph's Perfection," the fifth year on the farm. This sow was a grand champion Chester White sow, and was the dam, granddam and great granddam of many of the animals of his present herd.

He Starts on Tour of the Fairs.

Early last fall he loaded his pigs into a car and started off with them for the east. At every fair where his animals were exhibited, they created much interest, especially "Susie" and "Lindy," his two wonder sows, and

"Jumbo Giant," a mammoth boar. The two sows "sawed-off" on the grand championships, one winning the coveted honor at one fair and the other often displacing her companion at the next. Between the two, eleven grand championships were taken, as well as twenty-two championships. "Jumbo's Giant" took eleven grand championships and eleven senior championships.

Mr. Gibson's pigs were the first Chester Whites ever shown at the Florida State Fair, and people came from far and near to see the "white pigs from Michigan." As far as Florida is concerned, Michigan will no doubt be known as the home of the Chester White variety. In all, Mr. Gibson toured eleven states. He is now regarded as among the most successful breeders of Chester White pigs in Michigan.

FEEDING ALFALFA TO HORSES.

ALFALFA is a splendid horse feed, but must be fed with judgment and care. Because of its palatability, mature horses are likely to eat too much alfalfa if permitted to have free access to it. The average farm horse at work is allowed to eat much more alfalfa and other roughage than he really needs to maintain his weight.

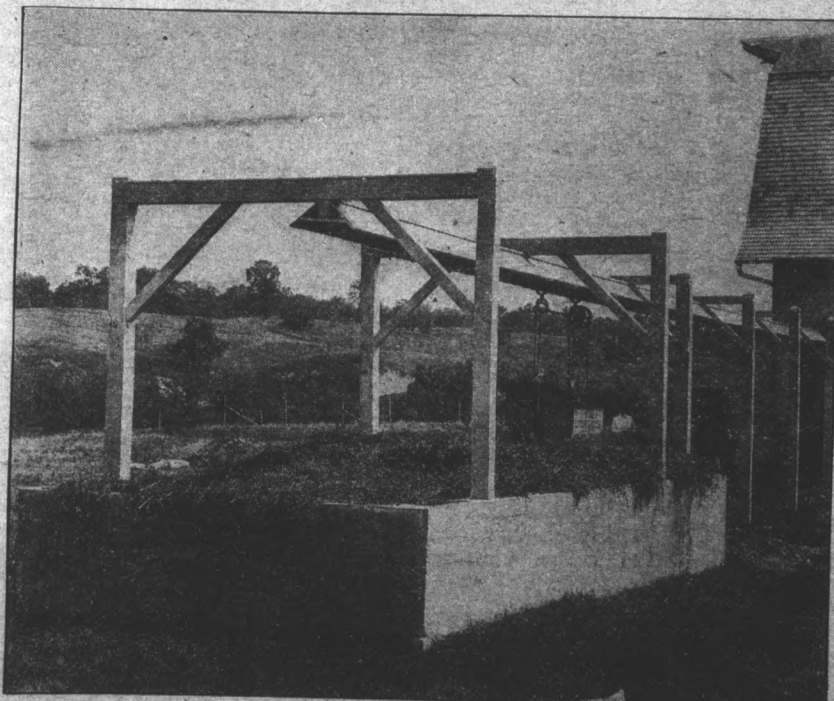
One pound of alfalfa or other hay, and nearly one and one-fourth pounds of grain per day for each 100 pounds of a horse's weight, make a good ration for an average working horse.

Horses like alfalfa stems. Refuse from the cattle racks is very acceptable to horses.

Feed mature horses first and second cutting alfalfa, which is free from mold and dust. Never feed wet alfalfa hay to horses.—W. E. McMullen.

There is an opportunity for our extension men doing live stock work to encourage the more general use of approved methods of curing and smoking meats to provide high-class products for use in our farm homes.

Tuberculosis is a menace to the hog business. In districts where skim-milk, whey and other dairy products are fed to the hogs, contagion is likely.



Besides Saving Much of the Value of the Manure, this Pit Enables the Owner to Keep the Barnyard More Tidy.

Galvanized Corrugated Steel ROOFING!

\$3.75 Per Square
Freight Paid
—as Follows

Freight charges prepaid in full on all orders of roofing from this advertisement at prices shown to Illinois, Indiana, Ohio, Wisconsin, Michigan, Minnesota, Missouri, Iowa, New York and Pennsylvania. If your state is not included, proportionate differences in freight charges will be allowed.

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These GALVANIZED sheets are suitable for roofing or siding, free from holes, squarely trimmed, recorrugated and given a coat of Red Paint free of charge.

No. SD-111—Heavy weight overhauled GALVANIZED 24-inch Corrugated sheets—per square of 100 square feet..... **\$3.75**

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No. SD-115—NEW Slate Coated Roofing in rolls of 100 square feet complete with nails and cement. **\$2.00** Weight 85 pounds. Red or gray. Per roll.....

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OUR FREE 96 page Save-The-Horse BOOK, will tell you 99 times out of 100. It is the "last word" in helping you to locate, understand and treat every kind of lameness. This unique BOOK cost hundreds of dollars but is absolutely FREE to you.

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Is sold with a signed Money-Back Guarantee to cure SPAVIN, Ringbone, Thoropin, or—Shoulder, Knee, Ankle, Hoof and Tendon Disease. After everything else has failed it has cured the most serious chronic cases. Over 380,000 satisfied users. 30 years success.

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At Druggists and Dealers with Signed Contract or sent prepaid.

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Blow them out, roots
and all—easily and
cheaply with

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Most efficient and economical
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Bargain prices on heaviest yielding,
big rooted, healthy, northern grown
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and others. Prices sharply reduced
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Big money in sweet clover. Enrich-
es your ground. A money-maker.
Also tested Alfalfa, Clover, Alsike,
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Book of every kind of seed, garden, field,
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34 Pages of reliable seed
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all kinds of vegetables and
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GRAPE VINES
15 LARGE BEARING SIZE VINES \$1
Concord, Moore's Early, Warden, The
Best Varieties for Fruit 25 Vines \$1.50
2 Apple Trees Free if you send order at once.
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STRAWBERRY PLANTS Complete line
of Fruit Trees, Small Fruit Plants, Asparagus Roots, Roses, Gladioli, Peren-
nials, Ornamental Shrubbery, Etc. CATALOG FREE.
WATSON'S STRAWBERRY ACRES Grape Vines \$25 and up per
1,000. Box 7, Grand Rapids, Mich.

Agricultural Lime High Calcium. Either
lump or hydrated
Also spraying lime in wooden or steel barrels or paper
sacks. Price mailed on request. NORTHERN LIME
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BARGAIN CATALOG
of Fruit Trees, plants, Ornamentals, Garden and
Flower Seeds, 3 to 4-foot Apple 25c; 3-foot Peach 20c
each postpaid. Send for 1924 catalog of Reliable
Trees and Seeds. Allen's Nursery & Seed House,
Geneva, Ohio.

Choice Strawberry Plants \$3.75 per 1,000. All
standard varieties.
Guaranteed first-class or money refunded. Catalog.
MRS. FILENA WOOLF, Dept. G, Allegan, Mich.

Save Money
on
high grade implements
by buying them from
your Moline dealer
under the
**MOLINE
Plan**
Write us for the facts

NEW MOLINE PLOW CO.
Moline, Ill.

ANOTHER TON LITTER CONTEST.

A SECOND "ton litter" contest will
be staged by Michigan swine
breeders during the coming season,
according to announcement by Verne
A. Freeman leader of the state ton
litter club, and extension specialist in
animal husbandry at Michigan Agri-
cultural College.

Valuable results along educational
and demonstrational lines were secur-
ed during the contest which was held
this year, which was won by a litter
weighing a total of 2,840 pounds at
the end of the 180-day period. Entries
this year will include most of the men
who participated in the last year's
contest. Cash prizes and medals will
go to the litters which place in the
contest.

"Any Michigan farmer is eligible to
enroll in this contest," says Mr. Free-
man. "It costs nothing to get in and
nothing to get out. Farmers should
enroll at once, though, as they are
likely to be too late if they wait until
after the pigs are farrowed. The lat-
test date at which a person can enroll
is April 1, and he must be enrolled in
time so that any litter he may wish
to enter can be marked and reported
within seven days of birth.

"In counties where there is no agri-
cultural agent, it will be necessary for
several breeders to get together and
form some sort of organization to co-
operate with the state leader of the
ton litter club. At all events, Michi-
gan swine breeders should send in
their names at once and enroll."—B.
V. H.

Veterinary.

CONDUCTED BY DR. W. C. FAIR.

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

Canine Distemper.—Hound pup, six
months old, which I bought a week
ago, coughs, chokes, slime runs from
mouth. He has bad odor, and one eye
closed. I have been told he would die.
Would like to know what ails him.
J. N. Rose City, Mich.—Your pup has
canine distemper, and is likely to die,
and I might say veterinarians now
know the cause, but have not yet
found a remedy for this fatal disease.
Feed him the kind of food he craves,
and give him good care.

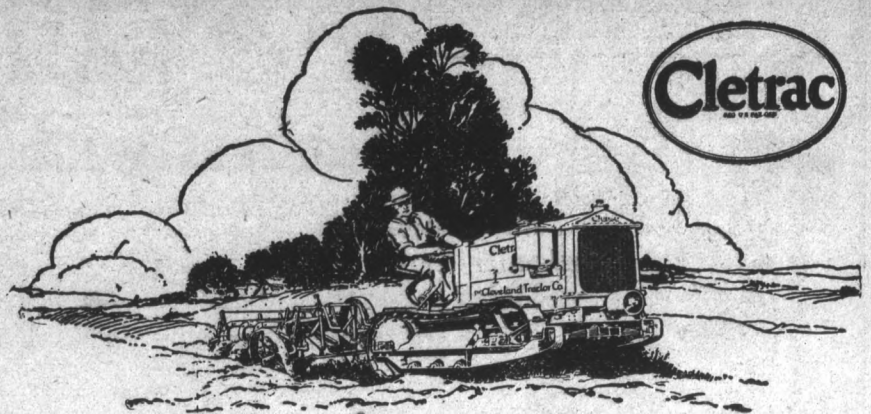
Nymphomania.—I have a four-year-
old mare that we cannot work, because
she is in heat all the time. If hitched
with another horse, she persists in
mounting the mate. H. S. Gagetown,
Mich.—The causes of nymphomania in
the mare are not always determinable.
Spaying is perhaps the only remedy,
but before doing so, why don't you
breed her?

Itchy Legs.—I have a horse that is
bothered with itchy legs. This is all
that ails him. A. C. Yale, Mich.—The
legs should be washed clean, using
soap and warm water. When dry ap-
ply one part sulphur, one-half part of
carbonate of potash, and four parts of
fresh lard. This ointment should be
applied once every day or two until
itching ceases, but don't wash leg
often.

Chapped Teats.—As soon as cold
weather sets in two of my Jersey cows
are troubled with chapped teats. E.
W. B., Paw Paw, Mich.—Add one part
oxide of zinc and three parts vaseline
twice daily. Equal parts of lemon
juice and glycerine is another remedy
and it should be applied twice a day.

Injured Eye.—My cow has injured
her eye and I am unable to cure her.
—T. J. P., Detroit, Mich.—Dissolve a
teaspoonful of boric acid in a quarter
pint of water and apply to eye three
times a day.

Wound.—When my horses were out
in pasture last fall, our seven-year-old
mare cut leg on wire. The wound
was inclined to bleed and the veteri-
nary who took care of her thought it
was caused from eating sweet clover
and thinning her blood. I also have
a ewe that has lost use of hind quar-
ters, but eats good. R. D. B., Marshall,
Mich.—Sweet clover is good food for
stock also for their blood. The blood
vessel should have been tied. Your
ewe will not recover, but you might
give her a full dose of epsom salts or
castor oil and apply mustard and wa-
ter to back.



Read This The Experience of a Cletrac Owner

Panhandle Sales Company,
Amarillo, Texas.

Post, Texas,
January 17, 1924.

Mr. G. L. Kirven.

Dear Sir:

After thoroughly trying out the Cletrac Model W 12-20 Tractor for one
year, will state for the benefit of farmers who may be concerned that cost
of operation for ten hours is \$3.00 at present prices.

I average eight acres per day flat-breaking at a cost of 37½ cents per
acre. Planting with three row Lister, 20 acres per ten hour day at cost of
15 cents per acre.

I will prove these figures correct to any farmer who will visit my farm
and will say also that my 14-year-old boy cranks and operates my tractor
with perfect success, and will further state after using the tractor one year,
that I have n't had one minute's trouble, and no additional cost, not even
cleaned one plug, and will further state that I had a mechanic to drop the
pan and he found bearings in A-1 condition, all tight.

Send any reference to,

Z. P. Lusk,
Post, Texas, Route A.

THE CLEVELAND TRACTOR COMPANY
Cleveland, Ohio

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Detroit Atlanta Los Angeles Windsor Portland

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\$3.00 PER BU.
Unhulled, FREE SAMPLES.
Highest quality, scarified hulled
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Grow Sweet Clover. Best crops
known fertilizing and pasture.
Much cheaper than Red Clover.
Our prices will save you big
money. We specialize on Clover,
Sweet Clover, Alfalfa, Timothy. Write
today for special prices and Seed Guide.
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Dept. 981 Chicago, Ill.

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EVERBEARING TOMATO
"QUEEN OF THE MARKET." Big Money-Maker. Large, solid
fruit, excellent canner. To introduce to you
our Northern Grown Live Seeds and Plants,
we will mail you 125 seeds of Condon's
Giant Everbearing Tomato, and our Big 1924 Garden
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STRAWBERRY PLANTS
\$2.50 Per 1000, and up. Our strong, healthy,
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crops of luscious berries. Best varieties for all kinds
of soils. Many new varieties such as Eaton, Bun
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greatest new Everbearing Strawberry CHAMPION.
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GLADIOLI—ROSES—ORNAMENTALS
Greatly Reduced Stock of good Grape Plants
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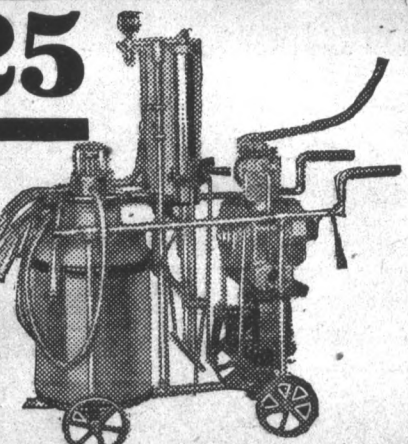
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Milker

(Gas engine included—or electric motor
if you have electricity). Comes complete
and ready to use—portable—nothing to
install. Milks 2 or 3 cows at once. If
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order at any time, detach in a moment
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can do it because of automatic patent
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greatest milking service at the lowest
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mean for you, on your own cows. Why? Be-
cause there's nothing to install; nothing to
build or fit into your barn; just move the
PAGE in and start milking! No bother, no ex-
pense. If satisfied after trial, pay cash or easy
monthly payments. Yes, we'll make that
milker pay for itself every day as you use it.

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Please send me your free booklet containing the facts
of milking machines and full details of your 30 day
free trial, easy payment offer on the Portable Page
Milker model checked:

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Also send me your Agents Offer ☐
Write while this offer lasts

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Registered Ayrshires, both sexes, for sale—out of cows with good milk and butter-fat records. Young bulls out of imported cows. Average per cent of fat in milk from herd is 4 per cent. Prices very reasonable. For information and prices, A. L. FARWELL, 102 So. Market St., Chicago, Ill.

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Registered Guernseys of both sexes for sale at reasonable prices. Young stock from A. R. dams. Herd is Federal Accredited.

JOHN ENDICOTT, Owner
BIRMINGHAM, MICH.

Registered Guernsey Bull Calf

Three months old. May Rose breeding. Sired by Mich. State Fair Winner, 1923. A. R. Dam. Walnut Hill Farm, Milford, Mich.

10 Reg. Guernsey cows, some A. R. Record May Rose breeding, \$2,600 for all; herd bull \$100. John Ebels, Holland, Mich., R. 2.

Reg. Guernseys Two Nice Bulls, nearly ready for service. Special terms if desired. J. M. Williams, North Adams, Mich.

Your Next Herd Sire?

Select a son of
Echo Sylvia King Model, No. 266177
Senior sire in the Traverse City State Hos-
pital herd.

His sire has ten 30-lb. daughters and a
41 lb. dam.

His dam is a 36-lb. daughter of a 37-lb.
cow.

His full sister made 34.77 lbs. at 3½
years.

He has 34 tested daughters, two and
three year olds, including a 32.33-lb. Jun-
ior three-year-old.

Send for our list of bulls for sale.

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Department C,
LANSING, MICHIGAN

A Great Opportunity.

We are offering a young Holstein bull ready for ser-
vice. By a 32-lb. son of Alastor Seris Walker,
a brother to Segis Pieterje Prospect, the World's
Champion. The dam is sired by a 35.73-lb. bull,
King Segis blood. Also some fine heifers for sale.
F. B. LAY, KALAMAZOO, MICH.

Registered Holstein Bulls

Up to eleven months of age. Good individuals and
good breeding, at low prices. Also a few young cows
or heifers soon to freshen. A healthy herd. I. M.
SHORMAN, Fowlerville, Mich.

For Sale: Herd 20 Reg. Holsteins

83½-lb. male. R. B. PARKHAM, Bronson, Mich.

FOR SALE Jersey bulls ready for ser-
vice. All cows Register of
Merit. Accredited herd. Would take bankable
note. SMITH AND PARKER, R. 4, Howell, Mich.

Brookwater Jerseys

Bull calves for sale. Majesty breeding. Herd tubercu-
losis free. Come or write. Brookwater Farm, Ann
Arbor, Mich.

FINANCIAL KING BULLS

We have for sale a few bulls ready for service, also
bull calves sired by the Financial King Sensation, son of
Financial Sensation, the \$60,000 sire. These bulls are
from R. of M. cows. Write to Coldwater Jersey
Farm, Coldwater, Mich.

JERSEYS FOR SALE

Two Young Jersey cows, sired by the prize winning
bulls, "Constance's Brookhill" and "Baron's Owe In-
terest." One freshened November 12 and one is due
on March 4. Will also sell one 2-yr.-old, one year-
ling, one 3-mo.-old heifers. HAROLD F. KLEIN,
R. 3, Birmingham, Michigan.

For Sale Jersey Bull Calves, Majesty Breeding.
From tested dams. Federal Accred-
ited Herd. H. E. Welborn, R. 1, Kalamazoo, Mich.

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

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. Little, Coopersville, Mich.

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78 Wt. Around 775 lbs. 84 Wt. Around 675 lbs.
86 Wt. Around 550 lbs. 102 Wt. Around 625 lbs.
44 Wt. Around 600 lbs. 48 Wt. Around 500 lbs.

All dehorned, dark reds, good stocker order. One
farm, practically out of feed. You can buy your
choice from either bunch. Real quality Herefords
when finished are usually market toppers. Give num-
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Thumb Hereford Breeders' Association
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at reasonable prices. Inquire of E. E. TWING, Sec-
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Revolution Jr. 573938
heads accredited herd
28917. Now offering 2 January roan bull calves of
exceptional merit, reasonably priced.
BIDWELL STOCK FARM, Box D, Tecumseh, Mich.

Milking Shorthorn Bull Born Dec. 9, 1923.
A beautiful roan by
Fremont Roan Clay, a son of Glenside Roan Clay,
the world's heaviest bull and out of a daughter of
Glenside Bell Boy the 2,810-lb. son of Doras Clay
and a daughter of Glenside Dairy King. Price \$125.
Also two Clay-bred red bulls. Irvin Doan & Sons,
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Most picturesque high-producing cows in the world.
Let us send you descriptions and prices. Seventy, all
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KIRBY ORCHARD COMPANY, Covert, Michigan.

Wildwood Farm Milking Shorthorns. An accre-
dited herd bred for beef and milk.
Headed by King Sales, grandson of Glenside Dairy
King. Fresh cows and heifers priced reasonably. Vis-
itors welcome. Beland & Beland, Tecumseh, Mich.
Paved Road No. 50.

When In Need of Red Polled Bulls,
Cows or Heifers, Buy
from Michigan's leading herd, owned by Westbrook
Bros., Ionia, Mich.

Red Polled Cattle A few choice bulls
and heifers for sale.
ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch, Michigan.

Brown Swiss Bull Calves For Sale, one ready
for service. E. T.
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Large Type Berkshires Boar pigs farrowed August
10, 1923. Sired by 'Baron
Mastodon' and out of a 600-lb. yearling daughter of
'Champion' 'Suburban' 2nd. Price right. Visitors
welcome. Lawrence A. Voite, Woodland, Mich., R. 2.

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Bred and open Sows of the finest practical type.
Farrowed April 15 to May 15, 1923. Long, well-
rounded body. Send for description and photos.
Fred Vreeland writes: "I am pleased with the
Sows and assure you that they are satisfactory in
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Every shipment guaranteed to be satisfactory.
STATE FARMS ASSOCIATION
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Registered Durocs

FOR SALE—Young boars and gilts bred from the
best herds in Michigan and Ohio, at reasonable prices
and fully guaranteed. W. E. Bartley, Alma, Mich.

DUROC JERSEYS Spring pigs either sex of March
April and May farrow, sired by three outstanding
herd boars. If you want size type and quality combined
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Duroc Jerseys Extra choice bred gilts
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CAREY U. EDMONDS, Hastings, Mich.

Duroc Jerseys Bred Sows, July and September gilts
at prices that leave no excuse for
breeding scrubs or grades. Reg. and guaranteed.
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DUROC fall and spring boars of the best breeding
D and quality, at prices to sell. Fall pigs at bar-
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Chesters Scarcity of room and labor com-
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blood-lines. Reduced prices. Your opportunity.
Write, CLARE V. DORMAN, Snover, Mich.

Big Type Chester White bred sows and gilts.
Sired by and bred to State Fair
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O. I. C's. 25 choice young boars for fall
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O. I. C's 75 spring pigs, pairs not akin, from
3 good sires, also fall pigs, recorded
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O.I.C. & Chester Whites Strictly Big Type with
gilts with extra length. 2 Choice
Demand greater than supply
for qualified automobile paint-
ers; we teach you 8-12 weeks;
get facts; have eyes open to
wonderful new opportunity.
Investigate. Write DETROIT
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25 Reg. O. I. C. Sows, Bred for April and May
Farrow. All Stock Shipped on Approval. Priced
Right. Fred W. Kennedy, R. 2, Plymouth, Mich.

O.I.C's Sept. pigs, Sired by "Giant Boy," Senior
Champion at West. Mich. State Fair, 1923.
Milo H. Peterson, R. 2, Ionia, Mich. "Elmhurst Farm."

O. I. C's 3 choice bred gilts for sale
at \$30 each. Registered free.
C. J. THOMPSON, Rockford, Mich.

Hile's Good Polands

Big, easy feeding, quality Polands. That's the kind
we like and sell. Bred gilts and sows for sale. A
hundred years of constructive breeding back of them.
WESLEY HILE, IONIA, MICH.

SPOTTED POLAND China yearling gilts, sired by
our 1923 blue ribbon winner Chicago Int'l. Bred to
son of Spotted Ranger. Boars and gilts all ages. High
quality, low prices. Keller & Jackson, Ohio City, O.

L. T. P. C. Bred gilts. Fall pigs, either sex.
Brown Swiss Bull. Calved 4-29-23.
A. A. Feldkamp, Manchester, Mich.

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

For Sale Four bred Hampshire Sows and
Herd Boar. Wonderful individ-
uals from excellent breeding lines. Morley E. Os-
borne, Sun Haven Farm, Howell, Mich.

Hamshires Best of breeding. Choice
gilts bred to farrow March
and April. Herman Barchet, R. 3, Watervliet, Mich.

Hampshire Bred gilts, spring and fall boars,
at bargain prices. 12th year. Write
your wants. John W. Snyder, R. 4, St. Johns, Mich.

Hampshires Of Best Blood lines; 100 Bred Gilts
and Sows, some fine Boars. Luck-
hard's Model Farm, Bach, Mich.

ONE LAMB OR TWO.

I T has been our experience at Forest
Grove Farm that the production of
twin lambs proves more remunerative
than when single lambs are grown.
While ewes vary somewhat in their
ability to suckle twin lambs success-
fully, yet I find that most ewes that
drop twin lambs when properly fed
and cared for accomplish their work
very profitably.

I have observed in my flock that
some ewes never drop but one lamb.
I have also noticed that descendants
from such ewes invariably drop single
lambs. While most ewes suckle single
lambs successfully, there are very few
ewes in the average flock that, if well
cared for, could not grow two lambs
equally as well with but a small in-
crease in cost.

The average flock of sheep is kept
for both wool and mutton production.
The latter, in my opinion, is first in
importance and should receive first
consideration. A flock of forty ewes
producing only forty lambs cannot
prove nearly as profitable as the same
number of ewes producing eighty
lambs. I know it costs a little more
to grow twin lambs, but the cost is
only slightly higher as the ewes in
both instances must be maintained.

I find it a profitable practice to en-
courage twin lambs production by re-
plenishing the flock from ewes that
drop twin lambs and suckle them well.
Also, by using rams from ewes that
produce twins. If care is exercised at
lambing time to mark ewes producing
twin lambs these lambs can be retained
to replenish the flock and in this
way encourage twin lamb production.

Ewes producing twin lambs must
be well fed and looked after in order
to grow their lambs profitably.—Leo
C. Reynolds.

BREAKING COLTS.

WE find our spare time this winter
employed in breaking a span of
colts. I like to drive good horses and
for that reason I like to break the
horses I am going to drive.

I know of no other domestic animal
I like better to handle than a well-
broken, intelligent horse. Every man
who likes good horses and enjoys
training them has his way of breaking
them. I like to teach colts to lead
when they are quite young. That can
be done much easier than when they
get older. The colts I am breaking
this winter were taught to lead when
a few months old, but on account of
being busy I have neglected to teach
them other things they should know.

These colts are four years old, of
the same age and weight, but quite
different in disposition. Because of
their different dispositions, I find it
necessary to handle them differently.

In breaking colts I endeavor to
teach them one thing at a time. I
take time to teach that one thing well.
I believe in being patient, but firm. I
do not expect too much. Kindness
and good judgment are essential re-
quisites.—L. R.

IS RYE HARMFUL TO PIGS?

I am told, by what seems to be good
authority, that ground rye is fatal to
pigs if fed to the mothers. As I have
considerable rye and a good prospect
of around fifty pigs, I would like to
know more about it.—J. W. K.

The evil effects which some people
have experienced from feeding rye to
pigs is not due to the grain itself, but
to a parasitic fungus known as ergot,
which is commonly found growing in
the heads of rye. Rye that is badly
infested with this poisonous product
would be dangerous to feed in large
quantities, otherwise rye is an excel-
lent food for hogs. It will give best
results, however, if mixed with other
grains, such as corn, barley or oats,
and ground fine, and then balanced
with some food high in protein, like
tankage, oil meal or milk.—Pope.

Eureka

Potato Planter



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SEED AND COVERS — ALL IN ONE OPERATION

OPENS FURROW

DROPS FERTILIZER

DROPS SEED

COVERS

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depth, drops fertilizer if desired,
covers, and marks next row. Fur-
row opens and seed drops in plain
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made. Sizes for 1 and 2 rows,
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Choice Bred Ewes

400 for sale in carlots, yearlings to solid months,
black-faced, in good condition, bred to lamb April
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at farmer's prices. A. M. BORTEL, Britton, Mich.

10 Head Registered Shropshire ewes of excep-
tional quality. Bred for last of
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HORSES

Registered Belgium Mares

Pair, 5 years old in May, well matched, weight 3,200
lbs. Both raised pair of dainty stud colts last year;
due to foal again in May. Will work anywhere.
Also Belgium Stallion, weight 2,100 lbs., prize winner
at Pairs. Will sell cheap if sold at once. Herman
Kohler, R. 2, Clinton, Mich.

Reg. Percheron Stallions and Mares for sale.
Okemos, (Ingham Co.), Mich. CHAS. A. BRAY.

GOATS

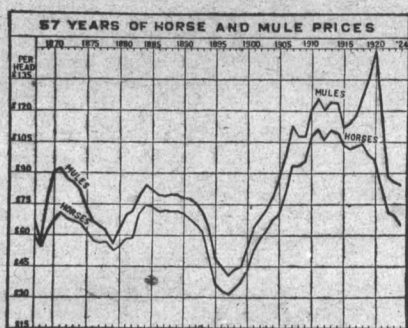
For Sale Goats—Two registered Angora does,
with long silky mohair. Nice pets.
Lone Cedar Farm, 111 N. Johnson Ave. Pontiac, Mich.

IT'S TIME TO RAISE GOOD HORSES.

SOMETIME or other, when the majority of producers and users of horses are least prepared for it, the horse market will come back. Cycles in horse prices are long and the rise of mechanical power in the last fifteen years has introduced a new and important factor into the situation so that any attempt at a precise forecast of the manner in which events will unfold will be hazardous in the extreme.

But, the conclusion that the production of good horses by following approved methods will be a profitable farm enterprise seems amply justified. Such a policy inaugurated now has until 1930 to 1935 to prove its worth.

A glance at the accompanying chart shows that 1910 to 1914 was an era of high prices for horses and mules, following a long advance from the de-



pression period in the late "nineties." It would be logical to expect that production of horses and mules would be stimulated and that prices would descend as they did after the previous peaks reached in 1871 and 1884.

Attractive prices are being paid for all the good, big, sound, shapely drafters, coming to market. At Chicago the range on such horses is from \$240 to \$300. Horses of the wagon type, weighing 1,400 to 1,600 pounds, possessing ability to start a good load and pull it at a smart trot, are selling around \$200. Good saddlers bring excellent prices, although the production of such horses is a specialized business unsuited to the general farm.

Prices for these three types are not high, especially when the level of general commodity values is considered. The point is that some kinds of horses are selling reasonably well, that they have advanced in price from the extreme depression of two years ago, and that the horse business for those who are meeting the requirements of the market is not in as bad shape as is indicated by the prices at which nondescripts are selling.

Numerous instances of city firms returning to the use of horses are reported. For short haul work or in congested districts where the distance traveled per day is twenty miles or less, horse-driven units have proven themselves more economical time after time. In hauling requiring numerous stops, such as milk or ice delivery, where the capacity of the man rather than the speed on the road between stops is the limiting factor in the size of the day's work, the horse has a great advantage. In addition, some firms are coming back to the outstanding advertising possibilities of horse-drawn outfits.

THE POSITION OF SOME LEADING AGRICULTURAL LINES.

IN its monthly review of farming conditions the department of agriculture reports more confidence in the position of certain leading farm products than has been seen in the past three years.

Corn growers are so cheered by the prevailing price that they are talking of planting an acreage equal to or exceeding that of last year.

The sheep industry is optimistic. There is some talk of expansion in the butter end of the dairy industry. There is a prospect of a decrease in

market milk production in the east and of fruit growing in the far west.

Reports from the east indicate fewer heifer calves being saved this winter than usual. The movement of hogs to market from the corn belt continues on a heavy scale.

The price trend during December gradually improved for most crops, and took a downward slant for animal products.

On the whole, the sheep industry was in a prosperous condition in 1923, and gives indications of a continuance of prosperity for some time.

WINTER CROPS WELL COVERED

THE state of Michigan is entirely covered with a blanket of snow, ranging from two inches in the extreme southern portion, to thirty-eight inches in some of the northern counties. The ground was bare in a few local areas in the southern districts during a brief period late in January, otherwise all crops have been fully protected since the advent of pronounced cold weather. As a result of this condition, fall-sown grains should be in good condition. Only an occasional report of crop injury has been received.

The severe cold for a few days in January has undoubtedly caused the loss of many fruit buds, and possibly some injury to fruit trees in localities. The warm weather in November and December permitted unusual advancement of the buds, rendering them susceptible to injury from the low temperatures that prevailed later. No information is available yet as to the extent of the damage, or whether sufficient live buds remain to make a crop.

Feed is plentiful in most sections and live stock is in good condition, the weather having been mild except for comparatively short periods.

Highways have been blocked by heavy snow and are in very poor condition, except in the extreme southern counties. For this reason, there is very little activity on farms and a relatively light movement of farm products to market at this time.

IMPROVES QUALITY OF CORN.

STARCHY corn can to some extent be eliminated by the proper use of fertilizer, according to Mr. P. A. Smith of Mulliken, Michigan. Mr. Smith uses 200 pounds per acre of 2-16-2, or acid phosphate. Manure and acid phosphate has given very good results. The 2-16-2 produces more growth than acid phosphate alone, but Mr. Smith states that in a dry summer this is a disadvantage. Quality as well as yield is improved by the fertilizer.

VETERINARY.

Breeding Question.—Will you please settle this argument? A. said that a mare mule will not breed. B. says that she will breed. A. S., Detroit, Mich.—There are cases on record where the female produce of Jack and mare have bred, but it is the great exception, and the writer has never known of a female mule to breed. I should say A. wins.

Vomiting.—I have a cow that spits up large part of what she eats. Have given her epsom salts without success. A. M. K., Shepherd, Mich.—Change her feed, also give her two tablespoonfuls of bicarbonate of soda with each feed.

Spasm of Larynx.—Almost immediately after my pigs commence to eat they quiver, back up and fall, but the attack does not last long. J. M. Y., Ashley, Mich.—Warm their feed, make it more moist, also spread it out thin, then the pigs will not choke.

Ringworm.—We have a cow that is covered with scabs and is getting thin. She gives fair mess of milk. We think perhaps it is ringworms. J. H. T., Kibbie, Mich.—Apply one part iodine and fifteen parts unsalted lard two or three times a week.

Worms.—Will you please tell me what to give my dog for worms? A. S., Detroit, Mich.—Fast dog for twelve hours, give twenty drops equal parts of fluid extract of spigella and senna every morning until you have given three doses.

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FARMS AND FARM LANDS FOR SALE

PAY NO ADVANCE FEE; don't give option or tie up real estate for any kind of contract without first knowing those you are dealing with are absolutely honorable, responsible and reliable.

337 Acres, Horses, Crops 22 Cows, Tools; \$1500 Cash

Owner called away by urgent business interests makes big sacrifice; convenient P. O., stores, schools, creamery, churches; good markets; 200 acres loamy fields, big creek-watered pasture, wood, timber; comfortable 10-room house, running water, 90-ft. basement barn valued \$4,000, sheds, tool house, etc. Low price \$4,500, horses, 22 cows, full implements, tools, crops. Only \$1,500 needed. Details and how 20 acres of one crop brought farmer \$14,800, page 55 Big Illus. Bargain Catalog money-making farms, best sections United States. Copy free. STROUT FARM AGENCY, 205BC, Kresge Bldg., Detroit, Mich.

Two Good Farms For Sale

At a bargain. One farm 80 acres with a trout stream running through it, about 35 acres cleared, twenty acres seeded to clover and timothy, some timber on it, log house and stable, 20 fruit trees and reasonably well fenced, three miles from town with good market for all kinds farm produce. One 160-acre farm, 85 acres cleared, good land, some timber on it, fenced all the way around it, is well watered, and on M-10 road 2 1/2 miles from good market. For further information write F. E. HAWKS, Millersburg, Michigan.

WANTED DAIRY FARMER

To buy my 240-acre dairy farm near Gladwin, Mich. Good soil, well fenced, spring stream, flowing well, two dwellings, etc. To him who can equip this farm with 10 to 20 cows and farm utensils, can buy and pay for same as he makes. Very low price. Interest 6 per cent. I have other smaller farms for sale. U. G. REYNOLDS, Owner, Gladwin, Mich.

HOMESTEAD FOR SALE Price attractive. 120 acres on state road, 1 mile from Tecumseh, Michigan. Big brick house suitable for Overnight Inn. Fine location for Roadside Stand. Land will grow anything. Write Mrs. C. A. Payne, Watkins, N. Y.

For Sale Eighty-acre farm, Saginaw Co., equipped. Near pavement. Best soil and markets. Price \$6,500; \$2,000 down. S. L. BIGFORD, Genesee Bank, Flint, Mich.

A Farm Home You Will Like One hundred and twenty acres near Clara. Fine new house and barn, orchard, trout stream, close school, horses, cattle, hogs, machinery. Will sacrifice, eight thousand will handle. E. AXFORD, Mandan, N. D.

Would you Buy a Home? With our liberal terms. White people only, good land, healthy progressive country. Write for list. Mills Land Co., Booneville, Ark.

IF YOU WANT TO LIVE in California, write Kings County Chamber of Commerce, Hanford, California, for free booklet.

WANT TO HEAR from party having farm for sale. Give particulars and lowest price. John J. Black, Copper St., Chippewa Falls, Wis.

POULTRY

Baby Chicks

Postpaid to your door. Guarantee 100 per cent live arrival. Heavy laying, pure-bred flocks. White, Brown & Buff Leghorns, 50, \$7; 100, \$13. Barred Rocks, Reds, Anconas, Minorcas, 50, \$8; 100, \$15. White and Columbian Wyandottes, White Rocks, Black Spanish, Black Minorcas (choice), 50, \$9; 100, \$17. Catalog Free. WHY NOT BUY GOOD CHICKS? THE C. M. LOWER HATCHERY, Box 30, Bryan, Ohio.

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S. C. English White Leghorns and Barred Rocks. Every chick from carefully mated, culled, pure-bred flocks owned and developed by us for 15 years. Leghorn males from trapnetted, 280-egg hens. Free catalog. Write for prices. RELIABLE HATCHERY AND FARMS, 74 E. 16th St., Holland, Mich.

Leghorn B-A-B-Y---C-H-I-X Heavies

Black, Brown, Buff, White, Brahmas and Orpingtons, Anconas and Minorcas, Reds, Rocks, Wyandottes, Allegan Hatchery on Highway No. 89. Send for 1924 price list. Crescent Egg Company, Allegan, Mich.

ROSEWOOD CHICKS

Best Baby Chicks, Select heavy laying strains. White Leghorns, Anconas, Barred Rocks. Real quality, low prices. Postpaid. Full live delivery guaranteed. Write today. ROSEWOOD FARM, HOLLAND, MICH.

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Strong, vigorous, pure-bred Heavy-laying, English strain S. C. White Leghorns—the kind that are big winter layers. Postpaid 100% live delivery guaranteed. Low prices. Lake Bluff Hatchery, RD 1, Holland, Mich.

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THE LATEST MARKET REPORTS



GRAIN QUOTATIONS

Wednesday, February 27.

Wheat.

Detroit.—No. 1 red at \$1.15; No. 2 red \$1.14; No. 3 red \$1.11; No. 2 white \$1.15; No. 2 mixed \$1.14.

Chicago.—May \$1.10½@1.10½; July \$1.10½@1.10½; September \$1.10½.

Toledo.—Cash \$1.15@1.15½.

Corn.

Detroit.—Cash No. 2 yellow at 82c; No. 4 yellow 80c; No. 5, 73@75c; No. 6, 70@72c.

Chicago.—May 82c; July 81½@82c; September 82c.

Oats.

Detroit.—Cash No. 2 white 53½c; No. 3, 52c.

Chicago.—May at 49½c; July 46½c; September 43½c.

Rye.

Detroit.—Cash No. 2, 73c.

Chicago.—May 71½c; July 73¼c.

Toledo.—71c.

Barley.

Barley, malting 76c; feeding 72c.

Buckwheat.

Buckwheat.—New milling at \$2.10 per cwt.

Beans.

Detroit.—Immediate and prompt shipments \$4.60@4.70 per cwt.

Chicago.—Choice pea \$5.40; red kidneys \$7.60.

New York.—Choice pea at \$5.75@6; red kidneys \$7.40@7.50.

Seeds.

Detroit.—Prime red clover cash at \$11.50; alsike \$8.50; timothy \$3.90.

Hay.

Strong.—No. 1 timothy \$23.50@24; standard and light mixed \$22.50@23; No. 2 timothy \$21@22; No. 1 clover at \$20.50@21; No. 1 clover mixed \$20.50@21; wheat and oat straw \$11.50@12; rye straw \$12.50@13.

Feeds.

Bran \$33; standard middlings \$32; fine do \$33; cracked corn \$39; coarse cornmeal \$37; chop \$35 per ton in 100-lb. sacks.

Apples.

Chicago.—Barrels, "A" grade Greenings \$5; Jonathans \$5.50@6; Grimes \$3.50; Spies \$5@5.50; Kings \$4@4.50; Baldwins \$4.50; Spitzenberg \$4.

WHEAT

Wheat prices declined early last week but a stable undertone developed on the lower level. Under the circumstances it is probable that the upward trend will be resumed on the next important move. Primary receipts have been heavier in the last ten days but the visible supply continues to shrink and is now down to 65,000,000 bushels against 48,000,000 bushels a year ago, which was the peak for the last wheat year. The report on farm reserves to be made on March 1 is expected to show light holdings east of the Rockies. Damage reports are becoming a little more pronounced, especially in the states from Pennsylvania and Kentucky southward and from Illinois, Indiana and Oklahoma. Kansas and Nebraska report an excellent outlook on a smaller acreage than last year.

CORN

Corn prices have shown surprising strength. The midwinter movement was expected to cause a substantial setback but the cash market has not declined far except on low grades. The visible supply has been increasing but the weekly additions have been rather small and the total accumulation thus far is by no means heavy. Producers have declined to sell whenever prices dropped and their attitude promises to be a factor in the behavior of the market right along. Local feeding demand is broad in most sections. Elevators afford a ready market for all arrivals at terminals as cash prices are at a fair carrying charge discount below future deliveries.

OATS

Oats prices had a small setback but have advanced again almost to the high point of the season. Receipts are moderate, demand is absorbing the offerings each week and a small amount from the visible supply in addition. Farm reserves are believed to be rather light.

BEANS

Bean prices sagged last week to \$4.85@4.90 per 100 pounds f. o. b. Michigan for the choice hand-picked whites. Demand has been very light although numerous bids are in the

market at \$4.75. Retailers seem to be fairly well stocked up at the moment as jobbers are not buying. On the other hand, roads in Michigan are none too good, deliveries at elevators are light and shippers are not disposed to force their offerings on the market at a sacrifice. Prices on great northern beans have declined until they are closely in line with small whites and some of the demand has turned in that direction. Kidney beans are quite scarce, with dark reds hardly obtainable and light reds firm at around \$7.25.

SEEDS

During the first half of February 3,795,700 pounds of red clover seed were imported and total imports since July 1 amount to 13,840,600 pounds. France is the chief source although small amounts of Italian seed, which is not at all adapted to our climate, are coming in. Spring demand is uneven and some reports point to restricted seeding because of the high prices. The new clover crop is not wintering any too well.

FEEDS

Feed prices declined again last week. Demand for mill feeds shows some improvement at the lower prices, but buying of linseed oil meal remains extremely light. Cottonseed meal is dull and weak, with stocks at the mills a little heavier than a year ago. Gluten feed declined sharply during the week in spite of the firmness in corn. Tankage demand has dwindled in the last few weeks but prices are unchanged.

HAY

Hay markets have been irregular. Receipts are not heavy. Demand is slow in the east but active buying of the best grades of timothy is reported in the middle west. The approach of spring in the southwest is causing the producers to release their surpluses of alfalfa while demand is subsiding for the same reason. Farm stocks generally are light. Most of the states east of the Mississippi River, as well as Texas and Oklahoma, report that the severe winter weather has damaged meadows and pastures. Prospects on the western ranges are favorable and rains have brought about marked improvement in California.

POULTRY AND EGGS

Severe weather tightened up the egg market last week, but prices are sagging again and a further downward trend is to be expected in the next month. Receipts are mounting and accumulation in storage will probably

start in the next two weeks. Consumption is quite heavy at prevailing prices. The poultry market has changed but little in the last week. The receipts, although heavy, are gradually diminishing and demand is excellent. Storage stocks in the United States on February 1 were nearly twenty per cent lighter than last year and slightly less than the five-year average. The stocks of turkeys were slightly heavier than a year ago but holdings of roasters and hens were much lighter than at that time.

Chicago.—Eggs, extras at 36@37c; miscellaneous at 28@29c; dirties 26@27c; checks 25@26c; fresh firsts 29½@30c; ordinary firsts 27@28c. Live poultry, hens 24c; springers 25c; roosters at 17c; ducks 27c; geese 14c; turkeys 20c.

Detroit.—Eggs, fresh candled and graded 33@34c. Live poultry, heavy springers 27@28c; light springers 22c; heavy hens 27@28c; light hens 27@28c; roosters 16c; geese at 18@20c; ducks 27@30c; turkeys 30@32c.

WOOL

While the wool market has been quiet a moderate amount has been changing hands each day in seaboard markets. Prices are firm with lower grades showing greatest strength. Foreign markets remain strong although the demand seems to have ebbed slightly in the last ten days. The goods market shows but little change. Buyers are operating conservatively instead of ordering more than their probable requirements in the fear that allotments will be necessary. Instead, there is a prospect of substantial repeat orders during the season when the lines which will be most popular are better known.

BUTTER

Butter prices were shaded slightly last week, especially on the higher scores. Production is gradually increasing, receipts at the leading markets expanded slightly during the last two weeks and substantial quantities of foreign butter are being offered in seaboard markets. Consumptive demand on the other hand, continues excellent and stocks in storage are so small that a heavier supply of current make than a year ago will be necessary in order to fill consumptive needs. The records show that combining markets usually increase ten to fifteen per cent from the end of February to the end of March. Under the circumstances a declining market is to be expected but the losses will be quite gradual.

Prices of fresh creamery butter

were: Chicago, 92-score 48½c; New York 50c. In Detroit fresh creamery in tubs sells for 48½@49c per pound.

APPLES

Apples have been moving into consumption at an extremely rapid rate in the last six weeks. Storage holdings on February 1 consisted of 11,542,000 boxes, 3,620,000 barrels and 1,072,000 bushel baskets, equivalent to a total of 7,824,000 barrels. A year ago the holdings were equal to 5,376,000 barrels and the five-year average for February 1 was 4,485,000 barrels. The reduction in stocks during January was fifty per cent above the average for that month. The movement of boxes was particularly heavy. Large exports during the month were an important factor. Distribution has been equally rapid since February 1. Southern small fruit prospects are not especially glowing so that a high rate of consumption of apples is looked for in the months ahead. Apple prices have made a slow, creeping advance in the last month. New York A-2½-inch Baldwins are quoted at \$3.50@4.50 per barrel in eastern cities. Midwestern Northern Spies are bringing \$6@6.50 in Chicago; Greenings \$5@5.50 and Baldwins \$4@4.50.

POTATOES

Potato prices were firm last week in spite of heavy carlot shipments from producing sections in the last ten days. Northern sacked round whites are quoted at \$1.30@1.45 per 100 pounds in Chicago. New York round whites sold at \$1.75@2 sacked in eastern cities.

GRAND RAPIDS

Fresh egg prices declined three to four cents a dozen in Grand Rapids early this week, acquiring a range of 31@32c a dozen, as compared with 35c at the close of last week. The break was attributed to weaker outside markets and not to any excessive receipts locally, as about 300 cases are being imported weekly from Chicago. Butter was slightly lower, causing a recession in butter-fat prices to 52@53c a pound. Poultry averaged higher, heavy fowls advancing to 22c a pound. Deliveries have been light for weeks on account of snow-blocked roads, the principal source of supply coming by express shipments. Other departments of the market were mostly unchanged, beans falling back to \$4.25 per cwt. to growers, and leaf lettuce declining one cent to 10c and 11c a pound.

DETROIT CITY MARKET

Offerings of produce were moderate and sold quite briskly. Cold had a tendency to keep away some buyers, but most stocks cleaned up well. Carrots were in demand and advanced in price a little. Good cabbage and parsnips were bought quickly. There was a strong demand for parsley and second-grade stock brought \$3@3.50 a bushel. The supply of potatoes was moderate and sold readily, with prices advanced to 95c@1.10 a bushel. Apples were easy sellers, with prices advanced some. The demand for poultry was brisk and prices a little higher. Eggs were firm and hogs and veal moved slowly.

Apples, fancy \$2@3 bu; No. 1, \$1.25@1.75 bu; beets \$1.25@1.50 bu; cabbage \$1.50@1.75 bu; red \$2.50@2.75 a bushel; carrots \$1.75@2 per bushel; celery 20@50c per dozen; onions \$1.50 bu; potatoes 95c@1.10 a bu; winter squash \$2.50@2.75 bu; turnips at \$2@2.25 bu; parsnips \$1.25@1.50 bu; horseradish \$3.50@4.50 bu; bagas \$1 bu; vegetable oysters 75c per dozen bunches; root celery \$1.25@1.75 a bu; eggs, retail, 65@75c per dozen; hens wholesale 27@28c lb; retail 28@32c; veal 18c lb; hogs 11@12c lb.

COMING LIVE STOCK SALES.

Hampshire Hogs.

March 4.—Gus Thomas, New Lothrop, Mich.

Shorthorns.

March 4.—Gus Thomas, New Lothrop, Mich.

Durocs.

March 4.—Schaffer Bros., Oxford, Mich.

Chester Whites.

March 6.—Alexander & Bodmer, Vassar, Mich.

March 5.—Andy Adams, Litchfield, Mich., Brood Sow Sale.

Live Stock Market Service

Wednesday, February 27.

CHICAGO

Hogs.

Receipts 38,000. Market is uneven, mostly 15@20c lower than yesterday's best kind, or 5@10c lower than close. Lightweights show most decline. Few choice 250 to 325-lb. butchers \$7.15; bulk good and choice grades scaling 200 lbs. and more at \$7@7.10; good 150 to 190-lb. average \$6.75@6.95; bulk packing sows \$6.15@6.30.

Cattle.

Receipts 11,000. Market on better grades of steers, especially weighty grades, steady to strong; others and most other killing classes uneven and steady. Matured steers and yearlings \$11; bulk \$7.75@10; stockers and feeders fairly active, strong to 15c higher; bulk \$5.50@7.25; meaty kind at about \$8.50.

Sheep and Lambs.

Receipts 13,000. Market fat lambs fairly active, steady to strong. Feeding and shearing lambs 25@40c higher; desirable fat woolled lambs early \$15.75@16.15; tops to shippers \$16.25; choice medium weight fat ewes, few shearing lambs with short killing end at \$15.50.

DETROIT

Cattle.

Market slow but steady. Good to choice yearlings \$8.50@9.50. Best heavy steers 8.00@8.50. Heavyweight butchers 7.25@7.75. Mixed steers and heifers 6.00@6.75. Heavy light butchers 5.00@5.75. Light butchers 4.25@4.75. Best cows 5.00@5.50.

Butcher cows 4.00@4.50. Cutters 3.00@3.50. Canners 2.50@3.00. Choice bulls 5.00@6.00. Bologna bulls 4.50@5.50. Stock bulls 3.25@4.25. Feeders 5.50@6.25. Stockers 5.00@6.00. Milkers \$45@80.

Veal Calves.

Market steady. Best \$15.00@15.50. Others 7.00@14.00.

Sheep and Lambs.

Market 25c lower. Best lambs 15.75. Light to common 7.25@11.50. Fair 12.25@14.00. Fair to good 8.00@9.25. Culls and common 3.00@4.00.

Hogs.

Market steady to 10c lower. Mixed and heavies \$7.40@7.50. Pigs 6.25. Roughs 6.00. Stags 4.00@4.50. Yorkers 7.00@7.40.

BUFFALO

Cattle.

Receipts five cars. Market steady. Calves at \$16.

Hogs.

Receipts 50 cars. Market higher. Heavy and Yorkers \$7.85@7.90; pigs and lights \$6.50@7.25.

Sheep and Lambs.

Receipts 15 cars. Top lambs \$16@16.25; yearlings \$12@14; wethers \$10@11; ewes \$8.50@9.50.

COST OF GROWING POTATOES.

SOME interesting potato production cost studies are being made by the bureau of agricultural economics. On 461 farms, including 8,161 acres, in several of the leading potato producing centers, the average cost of producing a bushel of potatoes in 1923 was seventy-eight cents. Maine had the highest per acre cost, reaching \$220, while New York state reports show the highest cost per bushel of potatoes. In Monroe county, New York, the cost per bushel was \$1.06 and per acre \$117, while in Steuben county the bushel cost was sixty-eight cents and acre cost \$96. In Montcalm county, Michigan, the acre cost was \$84 and the bushel cost seventy-eight cents, and in Grand Traverse county the acre cost was \$90 and the bushel cost seventy-two cents.

Man and horse labor was the most important item of cost except in Maine, where fertilizers are extensively used.

REDUCES TOLERANCE IN CELERY GRADES.

THE tolerance provided in the United States celery grades has been found impracticable, and it has been decided by the Federal Bureau of Agricultural Economics to do away with the provision that "not more than one-half of the total tolerance should be permitted for any one defect and substitute a ten per cent tolerance, but not more than two per cent to be permitted for decay.

LEADERS AGREE ON MUSCLE SHOALS.

HOUSE leaders have agreed that the bill providing for the leasing of Muscle Shoals power and sale of the nitrate plants to Henry Ford shall be taken up for action when the tax reduction bill is out of the way. It is confidently predicted that the bill will pass the house by a considerable majority.

WOOL OUTPUT INCREASES.

LAST year's wool production in the United States was 223,610,000 pounds, according to estimates of the United States Department of Agriculture. This is an increase of 1,050,000 pounds over 1922, partly due to a larger number of sheep and an increase of three-tenths of a pound in the average fleece, which reached 7.3 pounds last year.

Texas leads with 19,700,000 pounds,

Wyoming next with 18,800,000 pounds, Montana 17,775,000 pounds, and Ohio, 14,313,000 pounds.

The mohair clip reached 8,651,000 pounds for 1923 as compared with 6,532,000 pounds in 1922. Most of the mohair clip is in Texas.

BREAD CHEAPER AND WHEAT HIGHER IN FRANCE.

IN an investigation made by the department of agriculture at the request of the American Farm Bureau Federation, it was found that the retail sale price of bread in Paris was three cents a pound loaf, although wheat is higher in France than in the United States. At the time the investigation was made wheat was selling at \$1.10 in this country and \$1.40 in France. In Paris there is a bakery in every city block, and the city regulates the price of bread according to the cost of wheat.

EAT FRESH VEGETABLES AND FRUIT EVERY DAY.

I am twenty-nine years old, and am bothered with jaundice about every other week lately. Water is brown colored with settlements. I take something for it. It clears up, but in about a week it comes again. Am nursing a six-months-old baby. Am quite healthy other ways. Would it help to have bladder washed out?—L. M. S.

Having the bladder washed out is not a simple matter as it may produce an infected bladder unless very carefully done. I do not advise it. Have your urine and blood pressure carefully tested. Eat some fresh vegetables and fruit every day. Drink plenty of fresh water.

DIVORCE LAWS.

Can you tell me where I could secure the divorce laws of the different states of the Union. Wish to prepare a paper on the subject, and thought there might be a government bulletin on the matter. Also, what department would one address to obtain bulletins on art topics?—M. F.

A compendium of the divorce laws will be found in Martindale's Legal Directory, in other legal directories, and probably in other books to which you might be referred by calling on a local attorney.—Rood.

Ship Your Cattle, Hogs and Sheep to Warns, Iles and Dankert

Union Stock Yards, Toledo, Ohio. For Top Prices—Big Fills—Quick Returns. Correspondence solicited.

Ship Your Hay and Grain to the OLD RE- LIABLE HOUSE GEO. E. ROGERS & CO., Pittsburgh, Pa.

SWEET CLOVER, ALFALFA, SOYBEANS, ETC. Priced right. Inoculating Bacteria for bushel any legume, 60c postpaid. E. E. BASIL, LATTY, OHIO.

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	Words	One time	Four times
10.....	\$0.80	\$2.40	26.....	\$2.00	\$6.24
11.....	.88	2.64	27.....	2.16	6.48
12.....	.96	2.88	28.....	2.24	6.72
13.....	1.04	3.12	29.....	2.32	6.96
14.....	1.12	3.36	30.....	2.40	7.20
15.....	1.20	3.60	31.....	2.48	7.44
16.....	1.28	3.84	32.....	2.56	7.68
17.....	1.36	4.08	33.....	2.64	7.92
18.....	1.44	4.32	34.....	2.72	8.16
19.....	1.52	4.56	35.....	2.80	8.40
20.....	1.60	4.80	36.....	2.88	8.64
21.....	1.68	5.04	37.....	2.96	8.88
22.....	1.76	5.28	38.....	3.04	9.12
23.....	1.84	5.52	39.....	3.12	9.36
24.....	1.92	5.76	40.....	3.20	9.60
25.....	2.00	6.00	41.....	3.28	9.84

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

A HOME IN THE SOUTH on good Florida land. Near Pensacola on the Gulf Coast northwestern Florida, due south of Chicago, on beautiful Bay. Cows, Hogs, Hens, Vegetables, Pecans and Fruits all do well. Save cost of Feed, Lumber, Labor and Winter Clothing. Enjoy Boating, Bathing, Fishing and Hunting. Climate delightful summer and winter. 10 and 40 acres for \$50 an acre. Easy terms. Write for our Free Map and Descriptive Folder No. 12. Brown & Sons, 5 N. LaSalle St., Chicago, Ill.

FOR SALE—40 acres, 24 acres first-class Concord grapes, good buildings. Lawton, 1 1/2 miles, Paw Paw 2 1/2, hunting, trout stream on place. Lakes near. \$1,900.00, half crop payment, deal with owner. E. H. R. 3, Box 12, Lawton, Michigan.

GLADIOLI BULBS. Fifteen, labeled differently, 50c. Mixed, 15c dozen. Postpaid. R. Fast, Moscow, Mich.

SEED CORN—Clement's Improved White Cap Yellow Dent. Field selected, dried on racks, ear tested, with a guaranteed germination. This was one of the heaviest yielders in the State the past year in a test made by The Farm Crop Department of the Michigan Agricultural College. Write Paul Clement, Britton, Michigan, for catalog and prices.

TREES, Plants, Shrubs, guaranteed direct from grower. Lowest prices. New—Dr. Worcester hardy peach and Ohio Beauty Apple. Planting Book Free. Wood-lawn Nurseries, 951 Garson Ave., Rochester, N. Y.

36 GLADIOLI BULBS—new colors, including rare purple, \$1. Postpaid. Send for 20-page illustrated catalog of 125 beautiful varieties. Howard W. Gillet, New Lebanon, N. Y.

FRUIT PLANTS. Prices Right. Stock Guaranteed. Strawberries, \$3.00 per 1,000 and up. Raspberries, Grapes, Gooseberries, Currants, Dewberries. Catalogue Free. Hellen's Nursery, Three Oaks, Mich.

100 MIXED Gladioli Blooming Bulbs, 200 bulbets, \$3.50, prepaid. Cream of 12 years' experience, many cost \$1.00 each, 4-inch flowers. Geo. S. Barnes, Battle Creek, Mich.

BERRY BOXES—Our Berry Boxes will carry your fruit to market safely. \$4.50 per thousand. Write us: Central Basket Co., Berrien Springs, Mich.

GLADIOLI BULBS—Blooming size, Le Marechal Foch, "Beautiful Pink New Variety," also mixed colors, \$3.50 per 100. Write G. Lubbers, Holland, Mich., R. 9.

STRAWBERRIES—Plants and all kinds of small fruit plants, thousands of plants. Get our list for cut prices. Sawyer Nurseries, Sawyer, Mich., Box 81.

GLADIOLI—25 big plump bulbs, fine varieties, and catalog postpaid. \$1.00. B. F. Kindig, Box 637, E. Lansing, Mich.

CERTIFIED Wolverine Oats. Order now. C. D. Finkbeiner, Clinton, Mich.

PET STOCK

AIREDALE PUPS—Sired by half-brother Ex. Pres. Harding's Laddie Boy. From registered stock. Pedigrees furnished. Males \$15. Females \$10. R. G. Kirby, Route 1, East Lansing, Mich.

GERMAN SHEPHERD—Airedales, Collies, Old English Shepherd dogs, puppies, 10c illustrated instructive list. W. R. Watson, Box 35, Macon, Mo.

PURE-BRED Scotch Collie Puppies. O. B. Robbins, R. 2, Mishawaka, Ind.

COLLIE PUPPIES—Sable and white. Natural heelers. Chas. A. Beatty, Milford, Mich.

TOBACCO

TOBACCO—Extra Fancy Smoking, 10 pounds, \$2.50. Good Smoking, 5 pounds, \$1.10; 10 pounds, \$1.50; 20 pounds, \$2.75. Chewing, 5 pounds, \$1.50; 10 pounds, \$2.75. Quality Guaranteed. O'Connor Smokehouse, S133, Mayfield, Ky.

NATURAL LEAF TOBACCO: Chewing, Five pounds, \$1.75; Ten, \$3.00; Smoking, Five pounds, \$1.25; Ten, \$2.00; Twenty, \$3.50; pipe and recipe free, pay when received. Co-operative Farmers, Paducah, Kentucky.

TOBACCO—Fancy Smoking, 10 lbs., \$2.50. Good Smoking, 5, \$1.00; 10, \$1.75; 20, \$3.00. Fancy Chewing, 5, \$1.75; 10, \$3.00. Quality Guaranteed. O'Connor Growers, O-129, Mayfield, Kentucky.

HOMESPUN TOBACCO—Chewing, 5 lbs., \$1.75; Ten, \$3.00; Smoking, 5 lbs., \$1.25; Ten, \$2.00. Pay when received, pipe and recipe free. Farmers' Union, Paducah, Ky.

BABY CHICKS

CHICKS—White Leghorns \$12 per 100, \$6.25 for 50, and \$3.25 for 25; Barred Rocks, Reds \$16 per 100, \$8.50 for 50, and \$4.25 for 25; White Wyandottes, White Rocks \$17 per 100, \$8.75 for 50, and \$4.50 for 25; Buff Orpingtons \$18 per 100, \$9.25 for 50, and \$4.75 for 25. \$5 on each 100 chicks with order will book your order. Balance two weeks before delivery. 100 per cent live delivery guaranteed. Reference, Bank of Mt. Morris, Meadow Brook Hatchery, Mt. Morris, Mich.

STURDY CHICKS—Pure bred-to-lay and exhibition flocks, culled by experts. Reasonable prices. Catalog free. Single Comb White Leghorns, Anconas, Rocks, Reds, White Wyandottes. Sunnybrook Poultry Farm, Hillsdale, Mich.

WRITE for free catalogue and prices on good, sound, thrifty Baby Chicks. Four leading varieties of T. B. S. C. White Leghorns, Barred Rocks, Shepard Anconas and Rhode Island Reds from thoroughly culled flocks, to the Summit Hatchery, Byron Center, Mich. 100 per cent live delivery.

BRED TO LAY Barred Rock chicks, hens, all blood tested for White Diarrhea by Michigan Agricultural College Bacteriological Dept. Pedigreed males from high-record hens used. Circular free. L. W. Aseltine, R. 1, Grand Rapids, Mich.

BABY CHICKS—Seventeen popular varieties. High egg production and standard qualities combined. Michigan State Fair winners. No better chicks available at same price. Write for prices. Litchfield Hatchery, Litchfield, Mich.

CHICKS—Genuine Tom Barron English Strain S. C. White Leghorns, bred from imported stock, and M. A. C. Barred Rocks. Write for our low price quality stock circular. Hillside Hatchery Farm, R. 3, Holland, Mich.

BABY CHICKS—Write for our new free catalog and price list. Eight years' experience. H. H. Pierce, Jerome, Michigan.

QUALITY CHICKS, eggs: fifteen standard bred varieties; best winter laying strains. Free delivery. Reasonable prices. Catalogue free. Missouri Poultry Farms, Columbia, Mo.

BABY CHICKS from heavy-laying strains. All leading pure breeds. Low prices. Prepaid. Live delivery guaranteed. Catalog Free. Smith Bros.' Hatcheries, Mexico, Mo.

BRED-TO-LAY CHICKS from my own flock of Barred Rocks. Write for description and prices. Delivery guaranteed. Krueper Poultry Farm & Hatchery, Milan, Mich., R. 3.

SINGLE COMB White Leghorn chicks, hatched from two and three-year-old hens, mated with pedigreed males from the Michigan Agricultural College. Krueper's Hatchery and Leghorn Farm, Ionia, Mich.

BABY CHICKS—Remarkable for size and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas, Tyrone Poultry Farm, Fenton, Mich.

HAI LOOK! 100,000 chicks 12c and up, 15 varieties. From highest producing contest winners. Hatching eggs. Circular. Lawrence Hatchery, Box J, R. 7, Grand Rapids, Mich.

RICHARDSON'S ROCKY RIDGE pure Parks strain Barred Rock Baby Chicks, \$16 per 100. Hanover, Mich.

BABY CHICKS and eggs. Superior Ringlet Barred Rocks, R. C. R. I. Reds, White Leghorns. Circular. Wyndham's Ideal Hatchery, Tiffin, Ohio.

BARRED ROCKS—Park's best pedigreed stock, mated with M. A. C. and Dennison pedigreed cockerels. Hatching eggs \$2 per \$15; \$5 per 50; \$10 per 100. Chicks \$20 per 100. Prepaid by parcel post. R. G. Kirby, Route 1, East Lansing, Mich.

CHILSON BARRED ROCKS—Hatching eggs and Baby Chicks. Winning pen all heavy breeds Michigan International Egg Contest 1923. Michigan's greatest egg and color strain. Write for price list today. Mr. & Mrs. W. H. Chilson, R. 1, Grandville, Mich.

BABY CHICKS—S. C. W. Leghorns, mated to Hollywood Pedigree Cockerels, 250-egg strain. Send for catalogue. Snowflake Poultry Farm, R. 5, Middleville, Mich.

BABY CHICKS and Hatching Eggs. Send for Circular. "Gibbs" Winterlay Ancona Farm, Bronson, Mich.

BABY CHICKS—Tannered and Barron Strain S. C. White Leghorns. Strong, sturdy, profit producing stock, \$15.00 per 100; \$135.00 per 1,000. Bekkers Hatchery, Holland, Mich.

BABY CHICKS—English strain White Leghorns, Brown Leghorns and Anconas. Booklet free. East Saugatuck Hatchery, East Saugatuck, Mich.

WHITE LEGHORN chicks and eggs from best stock Michigan International Egg-laying Contest. Orme Thompson, Allen, Michigan.

BABY CHICKS—Bred to lay Rhode Island Reds, Barred Rocks & English White Leghorns, Also Brouler Chicks. Goret's Poultry Farm, Corunna, Mich.

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

POULTRY

SINGLE COMB REDS—Selected eggs from strong matings. Win M. A. C. Silver and Bronze Medals. Birds under Ribbons in both exhibition and utility classes. Postal card request brings free circular. Satisfaction guaranteed at let live prices. Harry J. Theis, 283 Hunter St., Battle Creek, Mich.

STOCK and Eggs by 100 or 1,000 lots, all leading Varieties Chickens, Ducks, Geese, Bantams, Guinea, Turkeys, Fox Terrier Pups. Write your wants, Jesse Burnside, Judson, Ind.

ROSE COMB REDS—prize winning stock, 1st cockerel; 2nd, young pen, Michigan red meet. A few choice cockerels left. Order hatching eggs now. L. B. Hendrickson, 81 Frisbie Ave., Battle Creek, Mich.

STOCK & EGGS—Buff & W. Leghorns, Orpingtons, Reds & Anconas, \$1 for 15; \$5 per 100, parcel post. Turkeys, Ducks & Geese. Indianapolis winners. W. C. Jackson, R. 3, South Bend, Ind.

"RINGLET" Barred Rock Cockerels, also hatching eggs. Satisfaction Guaranteed. Earl Murphy, Britton, Mich.

S. C. R. I. REDS—Pure-bred eggs for setting, 15, \$1.25; 100, \$8.00. Louis Morris, R. 1, Mt. Morris, Michigan.

PURE-BRED S. C. Minorca cockerels and pullets for sale at reduced prices to close out. Vesta Mills, Saline, Mich.

SILVER LACED and White Wyandotte Choice Cockerels. C. W. Browning, Portland, Mich.

WHITE ROCK COCKERELS—Choice stock, \$3.00 and \$4.00 each. Wesley Hile, Ionia, Mich.

SINGLE COMB Ancona Cockerels, Sheppard's best, \$7 to \$3. H. Cecil Smith, Rapid City, Mich., R. 2.

68 VARIETIES fine pure-bred chickens, ducks, geese, turkeys, fowls, eggs, baby chicks. Large catalog 5c. A. A. Ziemer, Austin, Minn.

WHITE WYANDOTTES Exclusively. Eggs \$4.50 per 100, Prepaid. Raymond Eash, Shippenawa, Indiana.

PRIZE WINNING Rose Comb Red Cockerels, \$3.00. Chas. Beier, Dundee, Michigan.

GEESSE—Ducks, leading varieties. Free Circular. John Hass, Bettendorf, Iowa.

WHITE CHINA GEESSE, excellent layers, \$10.00 trio, Eggs 40 cents. Mrs. Alice Bonow, Matkawan, Mich.

WHITE HOLLAND TURKEYS—Silver Wyandottes. Big winners, Lansing, Chicago, 1924. Hardy, productive stock. World's richest breeding. Four toms left, \$10.00 each. Cockerels, \$5.00. Alvah Stegenga, Portland, Michigan.

NARRAGANSETT TURKEYS—Get something different from your neighbors. Express paid on tritos. Ernest, Clement, Ionia, Mich.

PURE-BRED Mammoth Bronze Turkeys. Big boned young thoroughbreds. Mrs. Millie Dillworth, North Star, Mich.

MICHIGAN'S BEST Giant Bronze Turkeys. Extra good values in young toms. N. Evalyn Ramsdell, Ionia, Mich.

PURE-BRED White Holland Toms for sale. Young toms, \$10 each; year-old toms, \$15 each.—Mrs. Ed. Colling, Fostoria, Mich.

MAMMOTH BRONZE hens \$5 and \$3; toms \$8. Pure-bred, choice. Peter Douma, R. 2, Holland, Michigan.

WHITE HOLLAND TURKEYS—Hens, \$8; Toms, \$12; Trio, \$25. Mrs. Don Ross, R. 6, Marlette, Mich.

FOR GIANT BRONZE TURKEYS—Toulouse Geese, Buff Orpingtons, write to M. B. Noble, Saline, Mich.

WHITE HOLLAND TURKEYS—bargain price. Mrs. Ella Cleveland, Millersburg, Mich.

HELP WANTED

MASON sold 18 Comet Sprayers and Autowashers one Saturday. Profits \$2.50 each. Particulars free. Established 30 years. Rustler Co., Johnstown, Ohio. Box C-26.

I WANT hustling man in each county to establish dealers for Hopkins Fertilizers. Create paying business for yourself. George Barker, Union Street, Hillsdale, Mich.

WE PAY \$200 monthly salary, furnish car and expenses to introduce our guaranteed poultry and stock powders. Bigler Company, X683, Springfield, Illinois.

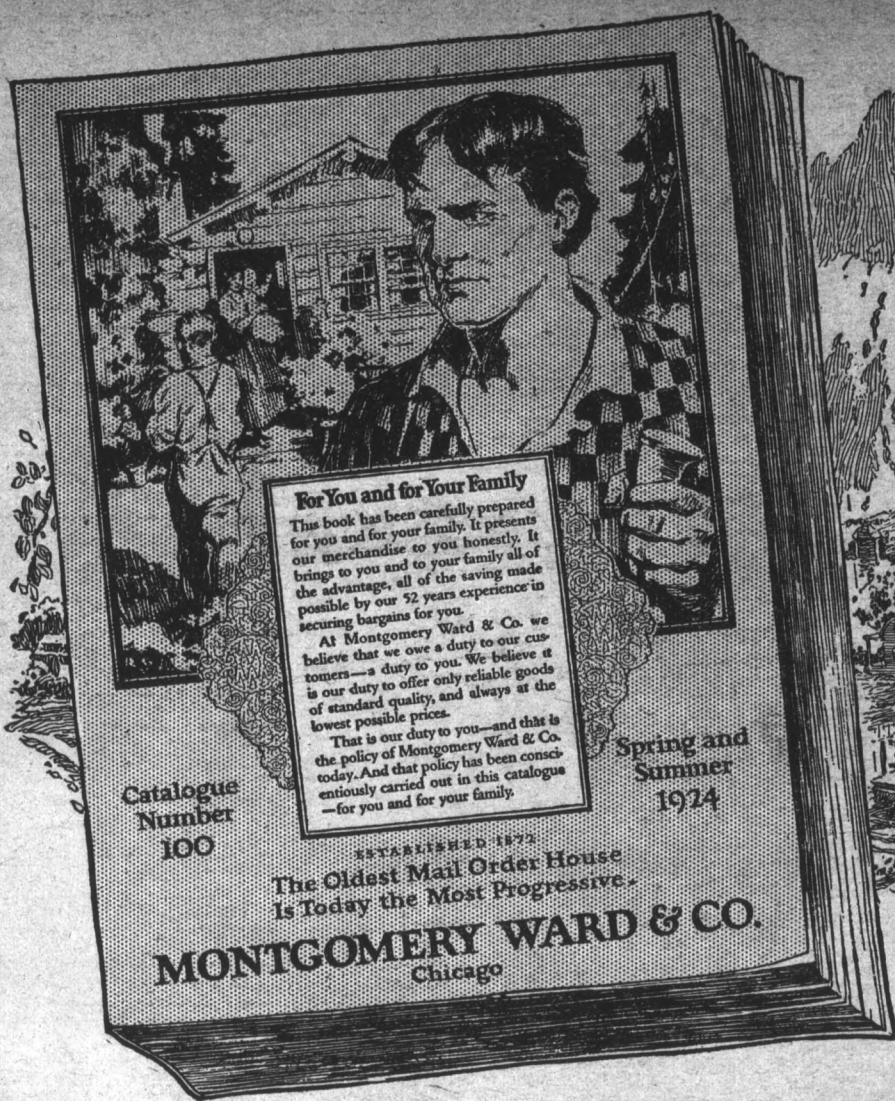
WANTED—Experienced dairyman in handling herd and milk production. Married, with small family. John Swigart, No. 41, Scottwood Apt., Toledo, Ohio.

FIREMEN, BRAKEMEN—\$150-\$250, railroads everywhere. Railway Association, Desk W-1, Brooklyn, New York.

MEN wanting forest ranger and railway mail clerk positions. Write for particulars. Mokane, B28, Denver, Colo.

RAILWAY POSTAL CLERKS—Start \$133 monthly; railway pass, expenses paid. Questions free: Columbia Institute, R. 6, Columbus, Ohio.

WANTED—Married farm hand, write Service Exchange, Merrill, Michigan.



This Book Offers a Saving on Everything for the Home, the Farm and the Family

Are you *using* this book? Do you look through it every week to find the right price, *the lowest price* for everything you want to buy?

This Catalogue is now at work saving millions of dollars for the people of America. Are you getting your share of this saving?

This page is printed to remind you of your opportunity

You have a copy of this big complete Catalogue, or you can easily get one by writing to us. If in immediate need borrow your neighbor's Catalogue until yours comes. The opportunity for Saving is now yours.

Fifty million dollars' worth of new merchandise is ready for your selection. Fifty million dollars' worth of goods Manufactured and bought especially for this Catalogue, bought *when* prices were lowest, bought *where* prices were lowest—and paid for in ready cash to make our prices lower—to make *your savings larger*.

Over one hundred expert buyers have been working for you, at home and abroad, carefully choosing the best, skillfully buying at the lowest prices—and the fruit of all this work, the benefit of all this experience, the

advantage of all this vast buying power and ready cash—is *now yours*.

Low Prices and Ward Quality Make Your Savings Double

A low price means nothing without *quality*. It takes quality—serviceability—and *low price* to make a bargain.

Ward quality stands for satisfaction in actual use. It stands for serviceability. It means the kind of goods that stand inspection and use.

We do not sell "cheap goods." We sell good goods. Our prices are low—but they are not price baits. We never sacrifice quality—serviceability—to make a low price.

Look Through this Catalogue Again

You buy something every week. This book, therefore, offers you a *saving every week*. Before you buy, look through your Catalogue—compare prices. Remember our Guarantee of Quality. Remember our Guarantee of Satisfaction—"Your money back if anything does not please you."

Use your Catalogue. Study every department of this book. There is a saving for you in everything you wear and use. There is a saving for you on everything for the Home, the Farm and the Family.



FOR WOMEN AND MISSES: New York is the home of Fashion. Therefore, Ward's Fashion Experts live in New York to select all of the best styles for you. And when you buy your clothes at Ward's you get the newest, most beautiful styles without paying the usual "Fashion Profits."



HOME FURNISHING: It is a delightful task to select from Ward's Catalogue. Experts on beautifying the home, artists in the selection of furnishings choose everything for this big Catalogue. And the saving you make enables you to buy many more things than you expect.



FOR MEN AND BOYS: This Catalogue will interest you for hours if you will study the hundreds of articles for men, young men and boys. Everything you wear, or like, or use, from suits to sporting goods, from a knife to all kinds of tools are offered, always at a saving.



FOR THE HOUSE: Roofing, fencing, poultry supplies, plumbing, electric lighting, furnaces, stoves, and the most wonderful bargains in furniture, yes, even to doors and mill work and the house itself. All can be bought at Ward's with certain satisfaction and at a big saving.



FOR THE AUTOMOBILE: Riverside Over-size Cord Tires, guaranteed for 10,000 miles and lasting longer than that, will save you one-third. Why pay more? The same saving is offered on tubes, batteries, radiators—everything for the automobile of standard make and quality, and with a big saving for you.



FOR THE FARM: For Fifty-one years we have studied the farmer's needs. For fifty-one years we have been friends with the American farmer. We have experts in every branch of farm work to study what lasts longest, what gives the best satisfaction in actual use. Quality first for the Farmer is our policy, but always we offer a saving.

24-Hour Service

We have perfected our service for you. After much study and testing new systems and employing experts we have perfected a system that makes certain your orders will be shipped promptly.

Our records prove that during the past year most of our orders were shipped in 24 hours—nearly all of our orders within 48 hours.

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