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$\xrightarrow[\text { DELUME CLX NUMBER TWENTY-ON }]{\text { DETR MAY }} 26,1923$
CURRENT COMMENT
Let us improve our community by substituting self-starters for cranks
That old straw stack moved back to the field and spread evenly will pay bountifully for your pains.
By adding green stuff, fruit and dairy products to our food, we whll furnish plenty of "spark" to fully com bust the other things we eat.

When will our, civilization be properly balanced? Rural population increased three per cent while city population was jumping twenty-nine per cent.

Policy or
Politics Politics at M. A.C.?
$\mathbf{T}_{\text {readers }}^{\mathrm{HE} \text { thousands of the }}$ Michigan Farmer whe have a keen interest in the welfare of the Míchigan Agricultural College, have read with regret the current press reports indicating a serious clash between prominent members of the State Board of Ag"feuture and President Friday. This regret has doubtless been accentuated by the na ture of the reports, which allege that a secret meeting of meribers of the board was held at the office of one of their number, during President Fri ay's absere retirement was discussed and agreed upon. Later reports in clude denials of the action, but seem to fully substantiate the discussion of the retirement, sfnce an associate of one of the members in farm organization work, who was designated to speak for him in a published interview, defended the alleged action by stating that the farmers of the state were dissatisfied with President. Friday's policies and program.
Briefly stated, this program was directed toward the ellmination of waste which would cheapen the cost of production on Michigan farms, and the development of Michigan markets for the produets of Michigan farms, or the production of products demanded by home markets with - the consequent elimination of waste in trapsportation and distribution. Whether it is true that the farmers of the state are opposed to this program is a question for the farmers themselves to answer. We shall be glad to receive their expressions on this point.
At this time but one fact seems entirely clear. The manner in which the acceptablity of President Friday's service to the college seems to have been approached by the members of the
the publicity given it was most unfortunate. It cannot fail to injure to some extent the work of the college and its influence on the agriculture of the state. The extent and permanence of this injury will depend largely on the sequence of events and tie extent to which current reports and rumor are substantiated or proven untrue.
A minimum of injury will now be done the college and its work for Michigan agriculture if full puobicity is giv en to the issue which has been raised as rapidly as facts regarding it can be fairly established. The Michigan Farm er's sole interest in the matter is the welfare of the institution for the benefit of Michigan agriculture. This is of far greater import to the farmers of the state than any or all of the personal considerations involved. We be lieve this end will be best served by presentation to our readers of the true facts relating to this controversy as they may be fairly established, which presentation will be given in future issues.

## A <br> Buyer's Market

 $\mathbf{J}_{\text {wean inw the tho great }}^{\mathrm{UST}}$ wealth producing and highly essential pure-bred live stock industry is at low wa ter mark. Contrašted with the prices at which pedigreed animals were selling a few years ago present quotations are little above give-away valuesThe four-figure prices of those days were as far above the average true values as present prices are below. As these extreme high figures were a danger signal to the far-seeing men in the business, so the present invest ment opportunities are enticing to men with ordinary insight.
We are just now passing through a period of depression such as occurs at tervals in the live stock business, and which wise investors are in the habit of taking advantage of. Careful investments in pure-bred live stock at he present time can hardly fail to ead to better things ahead. For like easons, the man who already has good animals will do well to give careful attention to the increase of his herd, biding the time when, as a seller he will be in a position to command profitable prices.
Fortunate is he who is prepared now with cash or credit to make investbeen hauled and while the potato bugs
 now in the buyer's hands, and the man who takes advantage of it and uses discretion in making his selections, and good business judgment in his fol low-up operations, can await with con fidence what the next few years may unfold for hìm.

IWAS in a hardly and just ahead of me at the counter was a carpenter who was purchasing tools. did not think a man could ask so many c
chisel.
When he had selected what he want ed, I asked him why he was so par ticular about the tools he bought. The man was of foreign birth and had not fully conquered the English language. He replied:

Poor tools, he do no rood vork Good tool, good man, good vork.

I happened to know that this man was a most excellent carpenter, and that his services were in demand by those wanting high-class work done
What is true of carpentry work seems also to be true of the stock business. Good results are as impossible with scrub stock as with scrub ools, and the man who is seeking to improve his live stock business will go to every pains to make sure that he is getting good individual animals to go into his herds or flocks.

## Less Bugs and More

Cows

A michigin tark wish to who does not mentioned, pastured on his farm last year if estimates are cor
ect, nearly one and a half million po tato bugs, over sixty-three million plant lice and leaf heppers, and one airy cow.
The potato tops in his forty-aere pateh grew luxuriantly and provided the finest sort of feed for the bugs and brother insects, but in spite of the good growth the outcome was most disappointing. No exact figures had been kept to enable him to analyze the situation to its last detail, yet he knew that the income did not make sufficient to pay for the labor required and the seed used.

Berore the last load of potatoes had
the other fellow For inst., when
you say, "This is nice weather, ain't it?" And the other fellow says, "Yes, but I think it's goin' to rain," right away you know he is a fellow what notices the thorns more'n the roses. He is what you call a pessimist. Then if you say, kinda nice-like, "Yes, but I think the rain will be good for the crops," he'll know that you kin see the bright side of everything, even a bald head.

In these days when the matrimonial condishuns of folks changes so quick, you don't always know what to say to the lady friends you meet. So, you kin say that the weather is nice and the lady will say, "Yes, it's just like the weather was when I left my last husband." Then you got a subject you kin talk about-I mean, listen to -for a hour or more. Womin folks, you know, is naturally good talkers, especially on such subjects, and mea, from bein' in company of womin, has been trained to be good listeners.
Right here Sophie starts talkin'. She says I ought to be out sproutin' potatoes instead of spoutin' about the weather. She says I'm wastin' my own time and lots of other folkses with this dumb stuff. Maybe it's so. As Itve been married nigh to twenty-five years, you kin safely bet I'm goin ${ }^{\text {² }}$ to 3fart sproutin' and stop spoutin' somethin ${ }^{2}$ a bout
peacefully in their winter quarters, this man was thinking very hard. He walked the floor and occasionally stopped belore the fire to meditate as to the end of it all. However, he finally thought the matter through and re solved to make a change.
So here is what he is now doing: The old stables are being remodeledcement floors, more and larger win dows, good stanchions and mangers will soon be completed. A ten by thirty silo is lifting its head above the eaves of the old barn. Four good, high-grade Guernseys have been brought to the farm and others will come as soon as they can be found. Two neighbors have joined with this inspired farmer to purchase a pure bred sire.
Potatoes, we are told, will not be abandoned, but will be planted in reg ular rotation with other crops needed to keep the cows. Sweet clover, al falfa and corn will be prominent in this crop list.
Our prediction is that, in the course of five years, this farmer will look back to his potato crop of 1922 as most valuable because it set him to thinking and was the means of lining him up on the right side of the dairy cow and of starting him in diversified farming.

## The Weather

## ${ }^{1}$ HIS is hard to say somethin' about,

 cause you never know how the weather is goin' to be, and you don't care how it was except to remember so you kin tell the youngsters what big snow storms there was whea Grandpop was a pup.Seems like the weather we are havhavin' now has lost its wigor and witality, accordin' to the Grandpops of today. But it just kinda looks to me that the May snow storm we got lately in our neck of the woods shows the weather musta got a graftin' of monkey glands or such like, and got its youth renewed.
There ain't nothin' whats' talked about more'n the weather, 'cause there ain't nothin' what is so nice to start a conversashun with. It's a newtral subject. And it's all right. cause it helps you to find out


# Pointers on Painting by a Painter 

## A Business Where a Little Knowledge Often Saves Many Dollars

0NE can safely say that fifty per cent of the framers' buildings in the United States need painting. The author reached this conclusion when erossing the country by rail between the Great Lakes and the Pacific over two different routes and noticing the condition of the buildings along the right-of-way in the country through which he passed.
If you are among the fifty per cen whose buildings need paint, and you paint them this year, you will have made an investment that will be offset three ways: You can take credit for he amount it cost you on your ax return, it will add more the it cost you to the value of your place, and it will add years to the life of your buildings. However, the main purpose of paint, when composed of a good combination of ingredients properly mived and skilfully a polied is to form a camplete weather-proof cove ing to all the wood and metal in your structure. Without this protection both wood and metal soon deteriorate.
Although the usual procedure fol lowed in getting a job of painting done is to call for competitive bids on the work and let the job to the lowest bid der, one should have some knowledge of just what a good paint consists of and have it definitely stated in the contract as to the kind of material to be used and how apllied.
job of painting done with some of the cheap, adulterated materials that are fcund on the market today, and these improperly applied, is al most as good as no job at all
It is not the author's policy in this article to boost any particular brand of ready-mixed paint, or to say a thing that will injure any brand. However if a brand of ready-mixed paint that is put up by some good reliable house that has a large patronage, is being used, it is only reasonable to expec such a company will keep the quality of their goods up to a certain standard which will protect their future busi ness.
The proper compounding of pain demands great skill and experience

## By Clive B. Price

and it stands to reason that a manuacturer who has had years of experience in the business, the proper machinery for the grinding and mixing an put out a much better mixture han the local painter, who buys his material and mixes it on the job.
In many districts throughout the ountry the comptition in biddin obs the competition in bidaing on al has become so keen between 10 painters that in order to keep up he standard of wages they have been orced to sacriffce the quality of the material used and speed the work up to a point where it is impossible to do a thorough job.

This adulteration can be quite easily accomplished by a painter who mixes his own paint and has some knowledge of the many kinds of cheap materials that are being used
These materials are found on the market under many different names. The raw material principally used in the manufacture of these adulterations is as follows: Carbonate of lime or chalk white from the chalk pits of England and France. Chalk contains magnesia, silica and clay. Paint containing a very large percentage of chalk has a tendency to be gritty and does not work freely under the brush


Much Time May be Saved During the Busy Summer Days by Providing an Outside Manger where the Horses Can Take their Noon Meals.
should also give some consideration to he relative quality of oils.
For all exterior work there is only one available that is capable of drying reasonably fast and forming the filn or binder required to produce a good lasting job, and that is the raw pure linseed oil.
However, there are a great many substitutes being used today by paint. ers in doing cheap work. The cheap est and poorest of these is a by-prod uct of crude petroleum. This oil is uct of crude petroleum. This oil is
doctored up with dryers and called doctored up various names.
A job done with this kind of oil will look fine while it is fresh, but at the end of thirty days will have the ap pearance of a job of calsomining.
Fish oil is sometimes used to adul trate dinseed oil. In this case the binding qualities of your linseed oil is weakened in proportion to the amount of fish oil used.
The only substitute for linseed oil on the market that has any value as a paint oil is the true soya-bean oil However, most of the so-called soyabean oils sold to painters is merely the residue left after extracting the finer grades for cooking oils. The one bad feature of the soya-bean product is that it is a very slow dryer. This makes it necessary to doctor it with artificial dryers.
When red lead, litheroge, or Japan dryers are used, the quality of the paint is impaired. Tungate or cobalt dryers give the best results with soya bean oils.
The most important feature in get ting a good job of painting done is to see to it that all surfaces to be paint ed are first properly prepared
All scale and blister should be re moved with a steel scraper or stee brush. All surfaces where the old paint is decomposed so that it rubs upon the hand should be gone over thoroughly with a steel brush or a good stiff scrubbing-brush. If a good grade of paint is now used and well grade of paint is now used and well
brushed in on the first eoat you will have a job of painting that will last and look well when the cheap jobs are being done again

## Making Money Spraying Spuds

## Satisfaction Comes Only When Tried and Proven Methods are Followed to the Letter

THE potato is probably the most important money crop grown in America. Unfortunately it is subject to a great variety of insect pests and plant diseases. If the known control methods, already tried and proved, were generally put into effect by growers, the loss of many millions of dollars would be prevented.

A big yield of sound tubers, free from rot cannot be obtained without large healthy tops which develop ear ly and remain green until the erop is fully ripe. Injury to the leaves by hopperburn, flea-beetle holes and blight spots prevent their storing up staveh in the tubers. Reduction of one-third to one-half of the leaf surfaces means a corresponding loss of tubers.
Here is some of the evidence which proves that the careful and thorough spraying of potatoes pays good divi dends on the time and money invested in the operation, even when there are no bugs
Vermont. - In experiments conduct ed over a period of twenty years by the Vermont Agricultural Experiment station, an increase of an average of 105 bushels per acre was obtained
New York, - A ten-year series of ex
periments at the New York State Ex- Iowa showed twenty bushels increase periment-Station at Geneva gave an average increase of 97.5 bushels from spraying every two weeks.
Minnesota.- An average increase o corty-seven bushels per acre was ob tained over a fourteen-year period and


Thorough Spraying is Necessary to Get Good Results.

## value of proper spraying has been

 made at the Pennsylvania State Col lege. The work has been conducted on a commercial scale by the grower themselves in cooperation with thei county agents. The results were as follows:Demonstrations Acres sprayed Yield per acre, bu.
ncrease per acre, b Times sprayed Spraying Pays Even when Absent.
It is a well-established fact that cop per sprays have a stimulating effee on potato foliage which results in in creasing the yield of tubers. In New York no blight occurred in 1918, yet an average of twenty-eight fields in seven counties showed an average in crease of about thirty bushels per acre from spraying.
Professor Lutman, at the Vermon Station, found that by spraying a least four times during July and Aug ust, the yield could be increased fif teen to twenty-five per cent in the ab sence of blight. Wisconsin has obtain ed an increase in yield from spraying (Continued on page 725)


## A Farmer's Engine

The Farmer with a good big job wants a good engine just as much as he wants a good separator.
Good, strong, steady power is just as
tecessary as a good separator. A lack rlecessary as a good separator. A lack of steady power means poor threshing, poor separation and poor cleaning.
You do not want a threshing outfit that breaks down or has to stop and wait for stéam, letting hands stand idle at your expense.
You work hard to plant, grow and harHire a
Red River Special
outfit with a Nichols-Shepard Steam or
Oil-Gas Tractor and
Save Your Thresh Bill The reason is that it is correctly designed and strongly made.
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PEONIES 10 roots for 83.00 . Write for NORTHERN NURSERY CO., Wausaw, Wis.

## State Capital Comment

## By Our Lansing Correspondent

(Concluded from last week)

COMMENDABLE steps were taken
toward a standardization of Michigan farm products to increase the confidence of the consuming public in Michigan farm products and stimulate the demand for these articles on the markets- In an effort to
restore once more Michigan cheese is popular favor and regain the standing which it has lost, a law was passed to establish fat and moisture content standards for Michigan cheese and to require honest labeling of the product.
At the request of the growers a measure was enacted which establishes three standard grades for all grapes sold in closed packages in Michigan, the grower to label and pack his product according to the specifications laid down in the law, and the apple standards law passed in 1921 was amended to comply with practical conditions met with by the growers.
Senator Bernie L. Case's bill to prevent unjust discrimination in the purchase of potatoes, grain and beans received the approval of both branches of the legislature, but to date has net received the signature of the gover-
nor and there seems to be considerable doubt in the minds of those who ought to know, whether he will ever sign it or not. It is hinted that by ve toing the bill he will rebuke Senato Case for standing so strongly for the gasoline tax and opposing the weight tax.
Another marketing measure which was passed and has already been signed by the governor allows counties, af ter a favorable referendum vote, to
acquire and maintain through their supervisors county markets for direct producer-to-consumer marketing.

Dairymen Get Laws.
In a legislative session when many important bills were lost in the jam, the organized dairy interests of the state were, successful ir securing the
passage of all the legislation which they sponsored. Perhaps this is explained by the fact that they conconthrough until the finish saw them through until the finish.
The "filled milk" bill, which probably attracted the widest publicity, filled milk in Michigan and sale of ments the national Voight bilt on this subject.
Another bill of especial interest to the dairymen provides for state licensing of all manufacturers of ice cream and gives the state commissioner of agriculture authority to suspend such licenses if the manufacturers do not live up to the provisions of the law
and the rules and regulations which he establishes.
The third dairy bill sets up definite standards for fat and moisture content of Michigan cheese and requires honest labeling of the product. The oper-
ation of all of these ation of all of these laws should result in the use of more genuine dairy products and a stimulation of the public demand for Michigan-grown cheese, ice cream and milk products.

To Curb Foul Seeds.
In an effort to protect Michigan farmers from those who have been dumping impure and ill-adapted seed on Michigan markets, an agricultural seed law was enacted which provides for labeling all agricultural seeds to
show purity, germination and source or origin and to give the state commissioner of agriculture authority to seize and hold any agricultural seed being sold contrary to the provisions of the bill. The lack of such seizure power has been the great hindrance
to controlling the sale of foul seed in Michigan in the past.
Farm-to-farm movement of agricul-
tural seeds and trafic by local elevat-
ors in locally grown seed is from the provisions of the is exempiea has been some talk around the Chere that the governor would veto this bivi, but no official announcement has been made as yet regarding bis final decision.
Another measure was passed which has for its object a reduction in the cost of implements used on the farms. This effort took the form of a resolution, urging congress and the Inter State Commerce Conmission to take immediate steps to abolish the practice of selling all rolled steel on the Pitts. burgh plus basis under which the price is the price at Pittsburgh plus the freight from Pittsburgh to point of delivery, although the steel may be made at Gary or South Chicago.

Stockmen Get Laws.
Probably the most important legislative issue confronting the live stock industry in Michigan was relative to the five-year campaign for the eradication of bovine tuberculosis within the state. A bill was passed to allow or county cooperation in carrying on the campaigns and to reduce the maximum state rewards on condemned cat., tle to $\$ 30$ for a grade and $\$ 60$ for a pure-bred. Two hundred and fifty thousand dollars a year was appropriated to pay such state rewards. This amount is not enough to allow for carrying on the campaigns in all of the counties that have requested this work, but there is some probability that the state administrative board will advance additional funds from the state treasury. The regular appropriation for the State Department of $\mathbf{A g}$ riculture contains -sufficient amounts to allow for the supervision of the bovine tuberculosis eradication work. Under the terms of another bill eeder sheep were exempted from the rovisions of the law requiring dipping or all sheep brought into the state.
A measure was enacted to promote he health of Michigan bees by establishing quaraatine regulations and rules governing the traffic in queen bees. The bill contains a provision requiring the labeting of all honey, to rotect Michigan honey against infer-
or honey, shipped in from other states.
Little Highway Legislation.
While state, rewards on county roads were suspended for a two-year period, that was about all that was accomptished. The governor vetoed the Thomas bill which proposed important amendments to the Covert highway law. The governor's objections stated in his veto message were technical and referred chiefly to the constituthenality of some of the provisions of the bill.

## Drain Laws Simplified.

The complicated system of drain laws which had accumulated in Michigan during the last twenty-six years was entirely repealed by the legislature and one unified drain law passed to apply to all drainage projects throughout the state.
An optional land certification bill was passed in an effort to restore the confidence of the buying public in Michigan farm lands. This measure was sponsored by the development bureau of the State Department of Ag

From the Above we Conclude: Farmers have shown more than usual interest in legislative proceedings during the past session. If the reports and comments in the golumns of this curate understandin promote an acand general legislation and an interest in what was going on under the dome at Lansing, we feel that they haye pot

## 

STABLING COWS IN SUMMER.
$\mathrm{F}^{\text {OR }}$ the past ten years $I$ have been following the practice of stabling my cows at night during the summer. think it pays. For years I have felt the need producing more stable manure to build up my soil. While I use a considerable commercial fertilizer with my crops, I can not get away from the idea that stable manure is the best fertilizer for the farmer to use.
By stabling my cows at night during the summer I have been able to more than doubie my manurial output. Last season the manure made from the cows' stable during the summer covered over seven acres of land with a top-dressing previous to sowing the wheat. Had I allowed my cows to go back to pasture at night I would have lost most of this manure.
Stabling the cows increases the labor somewhat, but I am very sure that the manure pays for the labor several times over. I use all the bedding in


This is How they Grow Soy-beans in Ogemaw County, where Pioneer Work with this Crop Has Been Carried on by Edward Evans
the stable possible as an absorbent. rour-year-old class, Silver Belmer My stable is cement so I am able to Clare, owned by W. C. Cornwell, of conserve the liquid manure. I use a Saginaw takes first place with a pro-liquid-tight litter carrier so that all the duction of $19,328.6$ pounds of milk and manure from the stable is carried out 627.90 pounds of fat, or 784.87 pounds some distance from the barn. When cleaning the stable $I$ clean out the liquid atong with the other manure and dump on the pile. This gives the straw a chance to absorb the liquid and improves its fertilizing value.Leo C. Reynolds.

DAIRY PRODUCTS GROW POPU. LAR.

NOTWITHSTANDING the increase I in the production of dairy produets in this country, the statistical sit-
uation appears to be in better condition from a producers' standpoint than a quarter of a centiry ago. In 1890 the annual per capita consumption of milk amounted to twenty-two gallons. In 1920 the consumption had practically doubled, it then being forty-three
gallons per capita. Then in a single year, from 1920 to 1921, the consumption per person increased to forty-nine gallons, or fourteen per cent. If this increase should continue, the use of dairy products would double in anoth-

## WORLD-WIDE DAIRYING.

world-wide organization will be held at Washington, D. C., on October $2-3$ The following day at Philadelphia demonstrations of methods for the pro motion of health by educating the public to the food value of milk will be given. The fact that the exports of dairy products from the United States almost balance our imports makes this world dairy congress association a most opportune meeting, the feanificance to every progressive dairyman.
FOUR NEW MICHIGAN HOLSTEIN CHAMPIONS.
$T$ HE new Michigan Helstein champion in the junior four-year-old class for production in one year, is Fayne Aaggie Hengerveld Pontiac.
Her record is 289.44 pounds of milk and 907.88 pounds of fat, or $1,134.85$ pounds of butter. She is owned by $W$. Mountain, of Flint.
In ten months division and junior

Segis Cornucopia Pauline, owned by W. C. Cornwell, Saginaw, Michigan, is a third new state champion. At full age in the ten-months division she
produced $22,832.8$ pounds of milk and produced $22,832.8$ pounds of milk and 766.71 pounds of fat, equal to 958.88 pounds of butter.
Canary Maid Promethous Champion is declared highest producer in Michigan as a senior three-year-old in both the seven-day and thirty-day division. She is owned by the State Hospital at Newbery. In seven days she produced 674.5 pounds of milk and 27.896 pounds of fat, or 34.87 pounds of but-
ter. Her thirty-day record is $2,639.1$ pounds of milk and 106.796 pounds of fat, or 313,495 pounds of butter.
MICHIGAN AYRSHIRE BECOMES CHAMPION.

BLUEBELL 3rd 73354 is the new senior two-year-old champion of
Kichigan. This good Ayrshire completed her advanced registry record with 10361 pounds of milk, 399.45 pounds of butter-fat. She is owned by Shuttlew orth Bros., Ypsilanti, Mich.

An additional 400,000 pounds of special sweet clean butter needed to complete the navy requirements for the coming year has just been contracted



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ful new features, Also the Dick's ${ }^{\text {Famous }}$




## IIR STRVIE BEEHRTMENT

## RIGHTS OF ENDORSER

A. lends money to B on note. C. signs it and pays it when due, Can
C. have B. locked up and take hi C. have B. locked up and take his
wages? If so, what steps must C. take? B. owns a car. Can C. take it? Reader.
cannot have B. locked up, and judgment for reimbursement could not be collected out of exempt wages, but he could reach other wages by garnishment. B's car would also be lia ble to execution. C.'s remedy is by suit against B. He cannot take the car without execution.-Rood.

## GROCERY ORDER.

A salesman, taking orders for groc eries, practically forged an order on us. When my husband and I talked
the matter over we decided to cancel the order. So we wrote right in to
the the company and also to the salesman to cancel the ordér. We do not want
the order under any consideration. Inthe order under any consideration. In-
closed is a letter from the company. closed is a

- Mrs. C.
D
The contract is binding and, if the goods are not taken and paid for, the buyers are liable in damages.-Rood.


## TENANT AT WILL.

Forty-five years ago Mr. A. bought building of the sehool board and, not having a suitable place to put it, the
city officials gave him permission to set it on ground that had been plotted as a such, as the high never been used back of same and fenced. Some, wishing to show their authority, want to
compel Mr. G. to give up possession. compel Mr. G. to give up possession.
Has Mr. G. any hold on this ground by right of possession? -T. H,
A. appears to be merely a tenant at will in the street and can be put out upon the three months notice provided for by statute to oust tenants at will.-Rood.

BEAN PODS VS. CORN FODDER.
1 have a large quantity of bean pods which I intend to feed to my cows. I
would like to know their food value would like to know their food value as compared to corn fodder. At what
test should I keep my cream to re test should
ceive the best results doring winter?

Bean pods or bean straw; that is, the bean plant after seed is threshed out, is considered much superior to cornstalks as food for dairy cows. The bean plant is a legume, and contains a larger percentage of protein than the corn plant, and as home grown plants and grains do not contain sufficient protein to make a balanced ration for cows giving milk, clover hay, bean straw or pods are considered more valuable than carbonaceous plants like.corn. The fact is, one sup. plements the ather. Both are needed, but the one containing the greater percentage of protein would be, other things being equal, the more valuable. But the other things are not always equal. Bean pods are liable to be worth very little as food from the fact that the beans were very ripe, when harvested and from the fact that many of them are practically ruined in curing. If the beans are harvested as early as possible and the weather is favorable for curing, bean pods may be a very good substitate for clover hay; but ordinarily they are not worth one-half as much. However, the same critieism can be applied to cornstalks. Some are good feed, others are almost worthless.
As cream is almost invariably sold on test, practically the only gain in having a high test is the saving of skim-milk. For butter-making purposes cream ought to test thirty per cent or better of butter-fat. If you have a
thin cream, say twenty per cent, it
does not allow the use of sufficien "starter" to guarantee the best control of the product.
If sweet cream is sold for table use, it gives best satisfaction when it contains about eighteen or twenty per cent fat.
It is evident if you set your sep arator to skim a heavy cream (over thirty per cent) you will have more skim-milk than if you skim a thin cream (twenty per-cent); but in either case you should have the same number of pounds of fat and would receive the same amount of money for your entire product. But in the case of twenty per cent cream you would be giving away some skim-milk.

## REQUIREMENTS FOR SELLING

What laws would one have to com ply with in order to put up and sel powders, ointments and liniments? A. W. H.

No one can prescribe for a given case other than a registered veterinary or pharmacist but we find no requirement for the issuance of a license to sell proprietary medicines at whole sale.-Rood.

## DESCENT

What share has a half-sister in a a barother's estate. The half-brother order to have an assessment changed on the assessment rolls, is it necessary to have the deeds recorded?-Reader The parents, if living, inherit. But half blood takes the same share whole blood, except that if the pros yo proper y descended to the deceased only those of the blood of the ancestor can take. The supervisor will change the assessment on request.-Rood.

## LINE TREES.

When limbs or fruit trees extend ver fence and fruit drops on my land, belong to, and ean I saw the limbs perpendicular with the fence.-Reader.
The fruit bekongs to the person on whose land the trunk stands. The party over whose land the limbs hang may cut them off after notice to the owner to remove them.

CLOVER SEED WASTE USED AS MANURE.

I have a chance, at an elevator, to get a quantity of waste from the cleaning of clover seed. I suppose several
kinds, of weed seeds and light seeds of kinds, of weed seeds and light seeds of farm. Do you think it would be safe to use such stuff after it has laid in a pile out of doors for a couple of years, and is heated and rotted some: Do you think there still would be danger of the weed seeds germinating and It is.
It is doubtful if composting would destroy the germination of weed seeds in this waste. It would have to be very thoroughly done. However, that should not prevent you from using it in the manner you speak of if-you think it will pay for the labor involved in hauling and composting. You will always have weeds, and a few more could be destroyed by cultivation at the same time with little or no extra expense.
If you have special crops that you want to use the manure on, possibly it will pay to expend all this labor. But for ordinary farm crops, it would be practically as well to haul it and top-dress at once. If you have permanent pasture, for instance, you need not hesitate about applying as a topdressing. The weeds will not grow there to any extent and the mulch will there to any extent and the mulch will

## Orchard, Garden

RUNNING OUT OF RASPBERRIES. Morello and should be planted in place of that well-known variety.
R ASPBERRY culture has frequently cause sered setbacks. The fully understood until recently. \$The trouble is due to any one of three diseases which are carried over into diseases which are carried over into eased planting stock. These diseases are known as mosaic or yellows, leaf curl, and rosette. Every part of the diseased plant is affected, even the roots and suckers. The diseases greatly reduce the yield and quality of the fruit.
It is believed that the only satisfac tory way in which to control all thre of these diseases is to plant selected disease-free stock. Steps are being taken to provide for the inspection of raspberry planting stock during the coming summer in an effort to secure
an adequate supply of disease-free stock for replacing diseased plantings.

AN IMPROVED MORELLO CHERRY.

THE Chase sour cherry, believed to 1 have originated near Riga, Mon-
roe county, New York, has proved so roe county, New York, has proved so
satisfactory on the grounds of the Experiment Station at Geneva, that the station fruit specialists are recommending that it be planted in place of English Morello, the standard late sour cherry for North America. The Chase is described as being of the same type of cherry as the Morello but with fewer faults.
"The trees of the Chase are larger healthier, more spreading, and the branches do not droop as do those of Morello," says the station horticulturist. "The leaves are larger and the fruit better distributed. The cherries are larger, possess the same dark color and shape of the Morello, except with a deeper cavity; and ripen a little earlier, but are much milder in flavor and therefore pleasanter to eat out of hand than the sour, astringen Morello. The Chase is an improved


The state of New York has realized cor some time the necessity of re ears ago gangs of planters, equipped as this man is, went over the slopes ting out trees from every spring set apart. Those young plantings are now dense young forests extending as far be a good plan for Michigan to follow on some of her deforested non-agricul
tural lands?

## CANNERS TO ADVERTISE.

$A^{T}$TWO per cent carry-over of last r cherry pack and a fifteen herr increase in the Michigan ning Association to consider advertis ing in order to stimulate a greater consumption of the Michigan canned product. The carry-over of the cherry ported. In other years, the supply could not clear the demand.
Michigan canners will also enter the asparagus canning business. Heretoagus practically all the canned asparagus came from California, but the hinois canners have put up this prodthat the success and it is believed as easily and will have a better qual ity. The Paw Paw Preserving Company will can about twenty-five acres of asparagus this year.

A half million youngsters raised Amen million dollars worth of stuff in America's boys' and girls' clubs last year.

## 100,0101 Ifles Without Stopping for (11

An inventor who could develop an automobile, a railroad car or any ther conveyance on wheels which would perform such a feat would be considered a wonder. But such is the record of regular accomplishmentor during the pas
Did you ever stop to think how many revolutions the wheel
of a windmill makes? If the wheel of an Aermator should roll along the surface of a windmill makes? If the wheel of an Aermotor should roll along the surface
of the ground at the same speed that it makes when pumping water it would
encirclethe world in encircle the world in 90 days, or would go four tines arounping in a water it would
travel on an average 275 miles per day or about 30 miles per hour for9 Gave on an average 275 miles per day or about 30 miles per hour for 9 hours each
day. An automobile which keeps up that pace day after day needs a thorough day. An automobie which reeps up that pace day after day needs a thorough
oiling at least once a week. Int it marvelous, then, that a windmill has been
made which will go 50 times as long as the best automobile with one oiling? The Auto-oiled Aermotor after 8 full years of service in every part of the world has proven its ability to run and give the most reliable service with one oiling a year. The double gears, and all moving parts, are entirely enclosed and flooded with oil al the time. It gives more service with less attention than Auto-ill
For full infor- ADRMIDIDIB CD. Chicago Dation write
mallas
Des Moines
Daldand
\$10 Puts a Hercules to Work DOWN SS My new reduced 1923 prices and easy terms place a Her-


In their partiality for Firestone Gum-Dipped Cords, the majority of farmers in America are in fluenced by the knowledge that this name has meant Most Miles per Dollar for over twenty years. They have the facts to justify their confidence in these tires.
For uncertain weather and for all conditions of roads, the farmer wants a safe, sure hold. This he has in the powerful gripping angles of the Firestone tread; it presents the right angle of resistance against swerve. And the toughness of the rubber makes this tread slower to wear-retaining its non-skid effectiveness for thousands of miles.

In the past sixmonths the demand for Firestone Gum-Dipped Cords has increased $194 \%$ over the same period one year ago-proof that the public hes found genuine economy and satisfaction in these reliable tires.


## About \$2,000,000

## Losses to Michigan Farmers

 To Cover Fire, Theft and Liability on Automobiles
#### Abstract

With the large number of heavy trucks and automobile busses running on the highways your ar may be run into and shoved off the highway into the ditch, making a complete wreck. The driver of the other car may be worthless and you will need automobile insurance to take care of your loss. On the other hand, in case of a collision in which the automobile is damaged and people injured, there is the usual argument as to who is at fault.


MR. FARMER, if you have invested from $\$ 500$ to $\$ 3,000$ in an automobile, can you afford to take the risk with the increasing danger upon all highways and city streets of the state? Why not insure in the pioneer mutual that is now starting its ninth season of success and therefore is organized to give you service and to protect your rights? Every regular policy carries liability to $\$ 5,000$ and fire and theft not exceeding $\$ 1,000$. Collision and additional fire and theft tan be had at reasonable rates.
On May 1st the total cash assets of the company were $\$ 225,412.20$ which, with office building and other assets amounting to $\$ 49,690.49$, makes total assets of $\$ 275,102.69$.

Remember that on a Dodge car the cost is only $\$ 10.50$ for fire and theft to the value of the car, and $\$ 5,000$ liability. Insure today, tomorrow may be too late.

## See the local agent or write to the

## Citizens' Mutual Automobile Insurance Company

HOWELL,
$\therefore$ MICHIGAN
PATENTS =


## potatobugs cabbage worns

HOBSTRA

## NOT A POISON



Im using A-MF Sickle
It's the "Sarety Razor" Mower Knife and it sure is great ! Youd better do the same-
Ask yourdealer orwite

American Machine \& Foundry Co . 511 ifith Ave. New York


Work $f=$ Kindred
Shirts

Peninsular Work Shirts Are Cut for Comfort! Half a yard more material, double stitching, pointed neck-yole these and other features make Peninsular the favorite work shirt. Just try one! - you'llabe convinced! Ask your dealer.

GEO. F. MINTO \& CO. Inc. DETROAT

## The Handy Man's Corner

## How They Save Minutes

WISH to take this opportunity to articles to the tinper. If one will proresponded to our requests for infor-one of these may be put in the hove mation through this department. The and riveted down, stopping it comresponse has been most generous and pletely. Or a plug of lead can easily beyond my expectation. The interest be whittled out with a jack knife and being taken in the replies makes it hammered in. An irregular shaped seem desirable to keep the good work hole may be fitted with a lead plug up duritg the summer montlts. What in this way and stopped. do you say? One good farmer tells Sometimes in using tinners' rivets me that the little diversion occasioned a washer on one or both sides is need by thinking on the subjects suggested, ed. If washers are not at hand they and the writing of the letters, has may be cut out of sheet iron and a helped him to enjoy his farm work much more than usual, even thougn he is working with far less help than ever before.
Anyway, we are going to keep the work going, Suggestions will be ap-preciated.-The Handy Man.

DRIVES AROUND FIELD IN DRILL

> ING.

O
NE way of saving minutes is to drill a field by driving around the field instead of going back and forth across it. I find the work can be done much quicker that way. The drill discs will not have to be raised and by keeping offe of the horses fol lowing the wheel track the work can be done very satisfactorily. When finishing make a round from the center of the field to each corner to fill in the spaces at the turn.-R. M. Carroll, Big Rapids, Mich.

FINDS MINUTES IN REPAIR SHOP.
A. GOOD method of saving minutes is to have a well-equipped repair
shop on the farm. When something breaks it can be repaired during the noon hour or in the evening. This fre quently saves many a trip to town.
The shop should contain a vise, hole punched in to fit the rivet. A
post-drill, anvil and forge, soldering large crack that a

## Haying Hints

DID you realize, brother farmers, that haying time is almost here, and that we have got to do the work this year under the heaviest labor handicap that farmers have ever experienced?
That we might be of the greatest help to each other, I am asking that you write and tell me of some short cut in haying which has helped you to save time or help in doing this annual job.
Merely write out a brief description of your short-cut on a letter or postcard and mail to me, The Handy Man, Michigan Farmer, Detroit. To the writer of each of the five best letters I will send a bran new pair of those combination pliers.
Letters are coming to my desk from those who have received this handy tool, telling of its usefulness and good quality. Your haying hint should be mailed on or before May 30 . post-drill, anvil and forge, soldering large crack that a tinner had failed to outfit, shoe repair kit, a good supply of stop with solder in a copper boiler botbolts of $2 l l$ descriptions, an assort- tom was closed by two large washers ment of rivets, some wrenches and cut out of sheet iron, and under one pliers.-John Bos, Marion, Mich.

MAKE YOUR HEAD HELP.
WE all can save minutes in our of these was placed a third made from lead hammered down to a little more than the thickness of the sheet iron. A rivet brought these down firmly and completely stopped the hole.-E. H., Fennville, Mich. our head. When we go to the city or village we jot down the things we shall likely need during the next week or two, and then purchase the, entire list. Likewise, when going to the
field in the morning we always have a field in the morning we always have a
wrench, a few nails and some wire, so that in case something does go wrong the chances are we cañ fix it without think the farmer should go about his work in a way to overcome that tired and nervous feeling. Work straight ahead and keep constantly thinking of the most efficient method of accomplishing the task you are at.-W. Dykhuis, Holland, Mich.

MENDS VESSELS QUICKLY.
SAVES MINUTES BY LOOKING AHEAD.
 farm: Have all my harnesses and implements ready when it is time o go to work. Draw stable manure direet to fields in winter. Kill bulk of weeds before planting, with a threesection drag instead of doing it after planting with a one-horse cultivator Draw surplus grain to elevator for storage in early spring and sell by telephone when the market seems right. Do all the spring's work possible in the fall by fall-plowing. $-\mathbf{F}$ 'R., Shepard, Mich.

THERE are numerous savings, both 1 in convenience and money, that may be effected by a little ingenuity on the part of the handy man-or woman-about the house. Kitchen utensils, both of tin and enamelware, frequently have holes come in them.
How many of us ean remember the days of our grandmothers, before germs were discovered, and the importance of sanitation so emphasized, when a piece of rag was drawn into the hole in the tin milk pan. There is a better way and more sanitary, and without the trouble of taking these


MANY farmers do not realize the tremendous waste due to wrong lubrication. They no not charge against the motor oil such matters as scored cylinders - overheating - too much carbon - too much exhaust smoke-too high consumption of gas.

Yet the right grade of Polarine-indicated in the chart frequently corrects all these troubles. Polarine means economy in operation, as well as added flexibility and power.
The reason why Polarine is good, begins with fundamentals. Polarine is made from selected crudes-high in lubricating value. Polarine is manufactured in modern refineries. It is made according to the findings of the world's leading petroleum chemists in co-operation with the designers of the very tractors for which the oil is intended.

## Use <br> Polarine <br> Made In Five Grades

It is tested, scientifically, in hundreds of tests - in all kinds of engines - under all field conditions.
Polarine is dependable at all motor speeds-at all temperatures-because it holds together. It maintains its body, does not disintegrate under pressure, will correctly lubricate your tractor
at all times, provided the grade indicated in the Chart is used.

Polarine is elastic. It forms a perfect cushion, an unbroken film between the moving metal parts. Yet it offers minimum resistance to motion and maximum flexibility. Change your motor oil very frequently and use Polarine.

# Francisco Farm Notes <br> By P. P. Pope 

## Rainy Days.

T Tains this morning. Not heavily, to beat the ground into puddles but gently and quietly. The air is saturated with moisture and the grass laden with dewdrops. The condition is ideal for the germination and rapid growth of the remaining grains of oats and barley and tiny clover seeds that may not to date have been subjected to sufficient moisture to start the new life into action. The big blanket of snow which all Michigan shivered under during early corn planting time, left a generous supply of moisture to soak into the soil where it was generally needed, but it was cold. This morning it is warm and will do much good, so we are glad to see it rain.


This Map Shows the Sections of the
United States and Canada Under Quarantine on Account of the Pres Quarantine on Account of the Pres
ence of European Corn Borer. There is always some useful work to be done under shelter on farms like ours, so the time is not lost.

Guarding Again Navel III.
We are expecting the arrival of couple of new little colts in a short time. This is no uncommon thing with us, but among the dozens of them that have arrived in recent years, we have twice made the mistake of having the foaling on dirt floors with resultant losses.

Dirt floors are satisfactory for many purposes but they are not good for baby colts to lie on. The soil around barnyards and stables is full of the deadly germs of tetanus and joint ill. These germs gain ready entrance to the circulation through flesh wounds of horses or the unhealed navels of new-born colts.
To guard against such infection we shall arrange to have the colts foaled on clean board floors heavily bedded with straw, or on clean pastures away from the buildings, and as a farther precaution, secure from our veterinarian a preparation that we can apply to the navel as a disinfectant and an aid to healing. We consider this a measure of prevention, which in the case of new-born colts is the only satisfactory treatment, and in the absence of which thousands of them are doomed to a brief existence

Keeping on Accredited List.
The day is fast passing when breeding cattle can be satisfactorily sold without a certificate of health. The "tubercle test" - and the "accredited list" will soon be common talk whenever sales or purchases are consider ed. It is a serious thing for a man to spend a goodly portion of his aetive life building up a herd of high-class cattle and then find that many of them are tubercular. Not only is it a heavy blow to him financially, but he may have been the means of spreading this insidious disease to numerous herds in which he has sold cattle, with resultant losses to the inncoeflt buyer, to say nothing of the dangers to which the members of his household and the families of his customers have been subjected.

Our little herd so far has never had a reactor, and it has been a source of
much satisfaction and security to have it on the accredited list. The annual test is again due. We expect the veterinarian this week and anxiously await the verdict.

SHOULD GROW MORE SUGAR.
YOUR letter of the twenty-eighth at hand. I am very glad to hear that someone is favorable to the further development of American-grown sugarSugar is a crop of the farmer, it is not made, it is grown, it is a product of the soil, a child of sunshine and rain, born of old Mother Earth ant tendeny cared for by the farmer, just. as corn and wheat and rye and oats are.
It should be considered by the people and by the legislature as a farm crop, not as a manufactured article. We consumed last year $5,700,000$ tons of sugar; we grew 615,000 tons in beets; we grew about 250,000 tons in cane; the remainder of it we bought. When the great bulk of our Ameri-can-grown sugar had been sold and eaten, which was-by February 1, 1923 and we were compelled to go to for eigners for our supply for the remaind er of the year, the price began to soar Our farmers received no benefit. Our sugar "threshing machine" men received no benefit. We will get no relief until American sugar again comes on the market in the fall. We are in the hands of foreigners for our sugar just as we are in the hands of foreigners for our supply of rubber.
We do not have to be in their power. Injunctions against sugar exchanges in this country will not get us out. Traders can immediately start up again in Havana or London. Why should we be dependent upon foreigners for something we can grow our selves? Would we buy vegetables if we had them in our own back yard? Could they hold us up on prices if we grew enough of the vegetables to supply ourselves? Is it not about time we in this country should grow American sugar on American farms for Amerieans?
Michigan and Ohio need annually one billion pounds of sugar. These two states grow $240,000,000$ pounds Should we not, as farmers and agri culturists, use every means to grow what we eat, eat what we grow?

I am asking you as an American, farmer, a citizen of Michigan, to get facts and figures and the truth and go with us in the attempt to make Amer ican markets safe for American farmers.
Senator Capper was right when he said, "the only way for the United States to prevent sugar famines and resulting high prices was to cultivate sugar production in this country."
That is why he voted for a tariff on sugar. Yours, C. H. Allen.

USES WEEDER TO BUNCH BEANS.FOR harvesting beans I would rather have a- one-horse weeder than a dozen men. This implement will move the beans along without shattering the pods.

I pull four double rows and then give the team a rest while I make one round trip with the weeder. I move along the rows with the weeder until a small forkful has been gathered, hen the weeder is raised up when the teeth catch the bunches just enough oo turn them over and leave the roots sticking upward. The beans can be in rows the same as in raking hay. Ora T. Hopkins, Oakland County

## WORLD EVENTS IN PICTURES



Elephant tusks in British East Africa valued at $\$ 10,000$.


Remarkable airplane view of one of America's greatest oil fields which is located near famous Smackover Field, ElDorado, Ark.


King and Queen of England at home just before royal wedding.


These young British farmerettes have come to Canada to stthdy their agricultural methods.


Secretary Denby presented a gold medal to Everett Scott, vetera ball player just before starting thousandth consecutive game.


Columbia University won Childs Cup Race. Un-
iversity of Pennsylvania, 2nd; Princeton, 3rd.


New photo of William Hohenzollern in exile at Doorn.


Royal guest chamber at Glamis Castle, where Duke of York and bride will honeymoon.


When a big flood swept the Anacostia district of Washington, D.
When a big flood swept the Anacostia district of Wa
C. the driver of this car was drowaed.

"Bobbies" held back crowd which watched the wedding procession of the Duke of York and Lady Elizabeth Bowes Lyon.

$\Upsilon$ HE coyotes were taken completely
by surprise. Not until the herd was almost upon them did they attempt to escape, fleeing then chaotically in all directions. But the horses also spread out to avoid the carcass; and with momentum stronger than their fear, they stampeded across the paths of the flee ing pack. Most of the scavengers eseaped but one was struck down. At the foot of the hill Queen turned back, to the dismay of the herd. They watched her curiously as she trotted, some distance ahead of them, up the incline.
She came to the miserable creature whose back had been broken. able to move his hind legs, he dragged them along behind as he crept away with his forelegs. But Queen did not let him get away. The herd had by this time timorously come after her. Stepping back a moment before the flashing teeth and the gleaming eyes she rushed at him again and struck him upon the head with a sharp, front hoof. She struck him again and again as if moved by the terror of the thing she was doing. The herd had come up toward her but when they saw her attacking the coyote they got fright ened and ran away. Queen then aban doned the lifeless form and ran to join them.
Far away on the moonlit sky line sat the rest of the coyote pack, their nozzles turning periodically to the moon and baying madly against the betrayal of their god. Never in all their savage experience had they come upon such a herd of horses and never again would they expose themselves to its madness.
Without vote or discussion, without struggle or rivalry, Queen assumed her regency. Her will became the will of the herd. Queen she became in earnest, in the highest sense of the word, ruling neither for gain nor power, ruling solely for love of freedom and her companions. And her ruling was the salvation of the herd and the consternation of the homesteaders whose wretched shacks skirted her do mains.

HE prairie grass began once more
to wither and grow grey. The inds assumed again their autmunal complaint. Again dead thistles began sadness and moaned with an aimless olling over the, plains, expressing somehow in their helpless rolling the relentlessness of change. Frosts rewhitened the morning earth and geese houked again on their flight to the south.
The herd was grazing on a hillslope. The wind was tugging away at her mane and tail, but otherwise she was
motionless as the hill she was ning Queen made another attempt wo ding on. Her eyes were fixed upon and more than a mile away.
Once or twice the brown colt, now full grown stallion, fat and almost clumsy, raised his head to look as she was looking; but most of the others were busy seeking better grasses and wild plants they liked, until Queen with a partially suppressed whinny of excitement trotted away to meet the
find out just what was wrong. By this time she was convinced that there was no man with them anywhere, and the aborious manner in which these miserable creatures 'followed them mitigated ler fear of their being dan gerous.
She went round on a curve and stop. ped some fifty feet from the two weary animals. The sorrel, now about a foot behind the white horse, snorting as if

## LIFE'S HARVEST

## By Hugh Kephart

How do you build my rugged youth Of your own, with gentle ways? At the peak of your strength today Mayhap it was a tyrant ruled With kindly deeds on the ways of truth In your cheerless home and bare That count when yourre old and gray?
Or is that strength a mighty whip
That sears where the weaker fa
And mocks the word of Holy Writ
Where the meek inherit all?
A chasm yawns in the path of Youth
Tis scan'd with a careless glance Do you boldly take the depths forsooth, As you stalk along with chance?

## How fares it now you hoary head

As you sink in your chair alone? Are you content with the life you've led The harvest you garner home? But why alone now, hoary head
Do you pass the latter days
Why is the stranger here instead
to arrive at some plan of helping them yet not having the faintest idea of what to do.
${ }^{4} \mathrm{HE}$ old sorrel was by far the weaker one of the two. He was evidently just about exhausted. His poor old sides expanded and contracted rapidly and his dirty flanks were líterally wet with foamy perspiration. Though White-black took advantage of their hatt and grazed as far as the entanglement of straps that held him fast to his mate would allow, the old sorrel made no attempt to eat. His harness had slipped down his side and one of his front legs was caught in a loop in one of the straps that hung from his neck.

The weary old sorrel had hardly rega ned his breath, when Queen spied a man on horseback coming after the pair. The herd dashed away to the north while White-black, dragging the exhausted sorrel behind him, brought (1p) the rear. The old sorrel did the best he could. The lines tying his bridie to White-black's bridle pulled paintully at his lips, the corners of which were red with blood. Strength was ebbing rapidly from him and he moved through space as if he were dazed.

Suddenly one of his front legs went into a badger hole. The old fellow went down with a groan. The groan was immediately followed by several sharp, successive snaps and Whiteblack was free from his poor, wretched, old mate. And the poor old sorrel too, was free, free from future agony. The hanging straps impeded Whiteblack's flight, but the darkness came to his rescue. The herd had ceased running. The hoof-beats of the man's saddle pony were dying away in the distance. By morning when the man reappeared on the horizon, Whiteblack, still burdened by his heavy harness, was free enough to be able to keep up with the herd, for what was left of the lines, stepped upon so left of the lines, stepped upon so
many times during the night, now many times during
hung above his knees.
hung above his knees.
For more than a week, the man persisted in his futile attempt to catch the white horse; then, because his saddle pony was completely exhausted racing daily with the weight on his back, he gave up the chase with a vicious hope that White-black wonld vicious hope that White-black wonld
strangle himself in the harness he car strangle himself in the harness he car ried with him, and a curse upon the wild western bioncos that were "no good anyway."
But White-black had no inclination to pass out of existence that way, nor did his notion of value coincide with did his notion of value coincide wis would-be owner. He did everything he could think of doing to
newcomers. At once the peaceful he had great difficulty in oreathing,
But when they had come within a quarter of a mile of the two horses they stopped. A white horse that made Queen think of Whiteblack, tied to a sorrel workhorse, running as fast as they could under the circumstances, were coming toward them, by fits and starts. The white horse, as he canie on, kept stepping backward and rais ing his head every once in a while only to leap forward again a few paces. - Always as he leaped forward something dragged him back by the head. They would run on together for a short distance and then the same thing would happen again.

When they got very near, in spite of her interest, Queen's fear of the scent better of her and she led away till the apparition was out of sight. There the herd waited for its reappearance. When they did appear the herd fled again. This they kept up for the greater part of the day. Toward eve-
took the opportunity during the mo ment's rest to brace his body with his front legs against the pulling of the white one. The white one, driven by some fear, began pulling and tugging as soon as he had caught his breath but he couldn't budge the old fellow an inch. Queen advanced fearfully. The scent of man, despite the fact that there was no man about, worried her even as the growing certainty that these were her old companions drew her toward them. Finally she ventured near enough to touch the white nose that came forward a few inches to meet hers. White-black it was! Poor, abused White-black, erd with barn dirt, his sides fallen in through struggle and lack of sufficient food.
touch of the old sorrel's nose brought him to his proper place in her mind and Queen ran from one to the other,-feeling vaguely that the spell of the dirty barn was still holding

## AL ACRES - Al Says The Acres Bull is Safe and Sane.

By. Frauk: $R$ Leet

rid himself of his trying encumbrance. He would lie down every once in a while and roll in the hope of rubbing the harness off. In time, he managed to loosen the crupper so that it let the greater part of the harness, the part that covered his back and sides, slip down on one side of him and drag on the ground.

This only intensified his eiscomfort for every horse that went near him was sure to step on some strap. Every time some one stepped upon a strap, however, there was one strap less dragging after him, and in a few days the whole network of straps was torn from the hames. One day while he was grazing, the hames suddenly loosened and fell off and the collar fell down upon his head, A little help with one hoof got it completely off his head, and so he was free from all but the bridle. The bit was tormenting enough but since it did not entirely prevent his grazing and his drinking, and the straps hanging down did not interfere with his running, he was virtually free again.

$1{ }^{5}$, was during the middle of the winthat he was relieved of the last in the chain of his captivity. There came a severe blizzard that kept them lying haddled into each other with nothing to do for a long time. Queen had always been annoyed by these straps that clung to White-black and lying close to him, she stretched her neck and began to chew at them.

While she chewed at the straps, White black ground tis teeth in his persist ent effort to dislodge the bit, and suddenly it fell from his mouth.
When next spring the homesteader in another vain attempt to recapture his-valuable white horse, got near enough to the herd to see that Whiteblack did not have on him a piece of all the harness with which he had run away, he could hardly believe his eyes That hight he told his neighbors:
"That mare's got the devil in her She just took them there harness right off him. I know it. How else could he get 'em off? When the crit ters ran away they both had all their harness on, How in thunder did he get his bridle off? Tell me that, She's a devil, that mare. I'll tell y'u she went for me like a witch the day I got her colt. I went away and lel: her round the barn thinkin' I'd get her with the help of Colter; but I reckoned on her bein' a mare not a devil! She opened her mouth just like a wolf. swear i
Because she was able to defend her self against a man's tyranny, they ac cused her of haviag the devil in her; because she was wise enough to retain her liberty, they cursed and hated her. Yet they had ample reason for hating her. Within two years after the loss of White-black, not a homesteader dared release his horses in the fall as they, had been in the habit of doing. To release them was in all probability to lose them.
(Continued next week).

# Reral Hedth <br> By Dr. C. H. Lerrigo 

A BEAUTIFUL COMPLEXION.

SEVEN million dollars is the bill for cosmetics in one single state, in one single year. That gives an idea of how much we crave beauty, the beauty that is skin deep. Our hearty country girls are just as ear nest as their city sisters in their ef forts to give nature a boost in this direction; and their brothers, too show more than a passing interest. So it is evident that complexion is a matter of very special importance, and that the disfiguring skin disease known as Acne, blotching the face with pimples and blackheads, means great ment al distress, even though it does not very seriously impair one's physical powers.
Most young people who suffer with this complaint and are anxious to have it remedied spend too much time on the face and too little on the rest of the skin. They will massage the face for twenty minutes, but do not wish to give five to the covered parts. They must remember that the skin of the face will not respond kindly to treatment that ignores all the rest of the skin.
The very best complexion treatment is a cold or cool bath, once daily, preferably in the morning. This should be taken in a warm room and the water should be cool enough to get a brisk reaction, but there is nothing gained by extreme cold temperatures, Even more important than the bath is the brisk rub that should follow. It must be borne in mind that we are now prescribing for young people of vigorous habit, who desire a good complexion. Such treatment is not safe for the old and feeble; but for those able to bear it the effect is to quicken the circulation and to improve not only the skin but every. organ in the body Improvement will not come in a single ward persistent effort.
The diet of young persons with Aone hould be rather abstemious, especial
ly as to sweets and fats. All rich fried, greasy, highly seasoned food should be shunned. They should eat freely of fruit, green vegetables and coarse breads, and should drink about half a gallon of water each day.
The face should be well washed at night with warm water and soap, and should have enough attention to be sure that all the excess oil of the unusually oily skin is removed.

## SALT RHEUM.

I have had salt rheum on my hands for six years. Have used all the salves is no improvement. I am advised by a neighbor to drink sulphur. Is there any harm in it?-Mis, E. L.
It would not be likely to do you harm if you did not drink too much nor keep it up too long, but neither is at all likely that it would do you any good. Sulphur has been known to cure the trouble. - So have a hundred other remedies. You would have sad time trying all of them. Salt rheum is a form of eczema. It is hard to cure but the best results are obtained by having the peculiarities of your particular case carefully studied by a physician who knows by study and experience the remedies that are most applicable.

## LEAKAGE OF HEART

I have been refused life insurance because of a leaky heart. I thought I was in good health. Is there any way hould I do for insurance, and what Go Io my heart?-H. U.
him to a first-class doctor and ask ct to examine you, find out your excondition, and advise you just what work you may do and what you should eave aloné. Follow this advice and you will live as long as if the leak did ot exist. You will not be able to get a fuH-term life poliey but if you are in good condition, aside from the leak, any good insurance company will sell you a limited policy that will see yo through the important part of life


WHEN you find that coffee makes you nervous, keeps you awake at night, or causes frequent headaches, it's time to change to Postum.

This delicious, healthful cereal beverage gives you all the comfort and satisfaction of your usual morning cup. It has charm without harm to nerves or digestioncheer without fear of a dangerous "kickback.'

Your grocer sells Postum in two forms: Instant Postum (in tins) prepared instantly in the cup by the addition of boiling water. Postum Cereal (in packages) for those who prefer the flavor brought out by boiling fully 20 minutes. The cost of either is about one-half cent a cup.

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## 2. Women's Interests

## Begin Your Canning Program Early

## Study What's In Your Gellar this Spring for Balanced Variety Next Winter

Last son closed, many of us made brags to our neighbor or the ladies at the club, that we had finished our canning and the jars were filled to the very last one. And what a sigh or relief and feeling of satisfaction it was to know that this portion of the fam ily larded for the year was provided for so sumptuously.
But now that the season has nearly passed, many of us are in quite a different frame of mind. We are surprised at what is in our cellar this spring. Even though our larded lacked noth ing in quantity last fall, we have found that it lacked much in yariety. There are jars and jars of huckleberries, but our supply of canned vegetables has been limited since January
Along in February "pie timber" be came so scarce that it was huckleber ry pie every day in the week, until

Select well-grown, Irm , and not ov-
-ripe sel our daily menus. We have added wiss chard and spinach to our usual method of serving. Blahch in boiling idea of canning the surplus. with the water by means of a wire basket o cheesecloth for one or two minutes and plunge into cold water until chillThese two vegetables are canned by
exactly the same method. The leaves ubbers and fill ped jars with good should be picked and canned the same Process in hot water bath water. day. Remove all yellow leaves and minutes. (A longer period of process. cleanse remainder thoroughly. Blanch ing is necessary when sugar is not in cold water. Pack into sterilized used). Remove jars from sterilizer and seal tightly Store in dood rubbers and add one place and wrap in paper to preven teaspoonful of salt to each quart, fill bleaching.
Those greens were fine last winter, but there was not half enough to add the sufficient amount of vitamines to ten pounds steam pressure for fifty minutes. Remove from the canner and seal at once. When cool, store in dry, cool place

## Utilize Your Tin Cans

I T is the little personat touches that A large ten-pound coffee can held the usually small in themserves, that show, sugar and several five-pound ones held usually small in themselves, that show you are interested in the art of housekeeping. And many times the most attractive houses are not those that are the most expensively furnished, but those that show the greatest amount of taste and care or attention. One of the most charming kitchens I ever saw was a farm kitchen and the ever saw was a farm kitchen and the
expenditure of money for the furnishexpenditure of money
ings was small indeed.

The floor was painted and the wall were painted apple green. But the one thing about the room that added more to its attractiveness than all else was the array of enameled cans that filled the pantry shelves and were in evidence in half a dozen places about the dence in half a dozen places about the
room. They were a!l sizes and shapes. There were baking poyder cans, cof fee cans, cocoa cans and spice cans of yarious sizes. With automobile ena mel these had been painted apple green and the name of the contents had been painted on in black. There were cans for everything that a ca could be utilized for about a kitchen the rice and other cereals. This done away with the unsightly paper bags and pasteboard cartons that make a shelf look so untidy.
Another practical use for the in cans is to steam breads and puddings in. They are particularly suitable for this if the pudding or bread is intend ed for school lunches. Bread may also be baked in these eans and the chil dren are always delighted with the little round slices.
The round cans are ideal receptacles for cold mush that is intended for fry ing. The mush, if molded in them yill come out in smooth rounds that can easily be sliced. The lids are nice for baking little cakes for the school luncheons, or little tarts may be baked in the round ones.-Nell Portrey.
FARMERS' INSTITUTES IN GOGE. BIC COUNTY.

FROM April $1 \dot{2}$ to 21 , interesting and

## Lower Sugar

Consumption
$\mathbf{S}^{\text {peculation in sugar is }}$ boosting the price above nor-
mal. In opposition, housewives are advised to limit their buying to aid in lowertng the price You have certain methods, substitutes and recipes by which you are lowering your family's consumption of sugar. Just write a letter or postcard telling me about them. For the letter giv ing the most practical sugges tions and recipes, we will award an aluminum double boifer. The second prize will be an alumi num serving tray; while the third, fourth and fifth prizes will be aluminum sauce pans

Address your letters to Mar tha Cole, Michigan Farmer, De troit, Mich., before June
finally the family began to feel as if they were first cousins to "Huckleber ry Finn." This surplus may be apples or pears, or some other fruit in your individual case. Whichever it is, the appetite of the family has become dull ed for that particular vapiety, because it appeared on menu too frequently. A certain wise man has said, "Variety is the spice of life." There is no place where this rule is more adaptable than in planning the canning budget. By beginning our canning early in the spring, we are taking advantage of the opportunity to increase our va riety. Don't you remember all the "yum yums" that arose from around the table last winter when rhubarb pie was served? In fact, it was well liked no matter how it was served.
Housewives have in their hands but one method to control the present high price of sugar. They can beat the speculator at his own game if they will but cease to buy stheir usual amount of sugar. With his plans for the approaching canning season, it will hit the speculator hard if we can our fruit without sugar. The following is a good recipe for canning rhubarb without sugar.

 your letters to Martha Cole, Míchigan Farmer, eDtroit, Michigan).

## TO STARCH NET CURTAINS

Can you tell me how to starch my net curtains so they will look like Fither starch them with elear starch r rice starch. The recipe for making rice stareh was in our May 12 issue.

## TO GAN GARDEN PEAS.

Can you tell me some good way to can green garden peas so they will
keep?-Mrs. W. R. Seleet-firm peas and wash thoroughy. Blanch in boiling water for five or and fit good rubbers to them. Fill the
townships, reaching nine hundred farm persons.
Sessions for the women were held every afternoon and in some places also in the evening; however, every evening movies were shown. Miss Marian Rogers, the Household Management Specialist from the Michigan Agricultural College, assisted the home demonstration agent, Miss Ruth Wheatley, at South Bessemer, Central Erwin and Wakefield.

Miss Rogers displayed a large exhibit of household conveniences, explaining and giving an interesting talk about each article. She actually made a fireless cooker so the ladies could see how simply they are constructea then she made them feel the need of one, especially in the two-room farm house in the hot summer weather.
Miss Wheatley discussed foods, em phasizing the use of more fruits, veg etables, and milk, using the malnuti tion chart, and the food charts that


The Spont Type of Hat May be Worn With Anything But the Most Formal White Hemp, Trimmed with Chenille to Match the Street Frock.
showed the amount of food for a fam ily of five, closing with a food demon stration making Harvard beets and a raw carrot and celery salad.
As a result of the demonstrations and work offered by the home demonstration agent, a number of groups of ladies have organized to meet every two weeks to carry on project work in which they are especially interest-ed.-Ruth E. Wheatley, Home Demonstration Agent, Gogebic County.

## TO RENEW OILED MOPS.

The nicely oiled floor mops are a reat help in keeping polished floors free from dust, but once they become soiled to the point of having to be washed in hot soapsuds, the dust-gath ering property is lost. Renew the mop and save buying a new one by moist ening with the following fis Store in a bottle large enough to shake it thoroughly before using: Kerosene two ounces; parafin oil, eight ounces; lime water, two ounces; oil of laverder, one dram.

## A Preacher-Statesman <br> Our Weekly Sermon-By N. A. McCuue

Ivent is not the first minister who He tanght them and went into polities. Some men who servicees in the world, all the sacrifices
have wrought mightily for the peo- and ceremonies, would not take the ple through politics have been of the cloth." A few years ago I saw all England. The Reverend $C$ Silveste Horne, a member of parliament, had died, and a memorial service was he Tabernacle. The crowds surged about the place as if it had been the funeril of the prime minister. Horne had hat a passion for humanity, and the strain ment big church, had killed him. was prophet first, but slowly he wa drawn into politics.

The world knows little of its great est men," says someone. of the great est poet and dramatist in the language we know but little. Only a few scraps of biography have been picked up. Of Dante, the giant Italian writer, we have but little knowledge and of Homer still less. The same is true of the greatest of the prophets. He was the son of Amoz, but we know be con Amoz was, and he must not be His boyhood was spent probably in Jerusalem, for he was one of the few was a time of na. tional prosperity The people were proud, the gorernment was very honked high. But ater something happened. The king had grown old, and the story is, that he was in his last days stricken with leprosy for interfering in the religious service in the temple. The whole peo ple felt the disgrace, especially the religiously-minded. It was a time of national heart-searching and humiliation, Some time after this came Isaiah's call.

IT is a powerful description. We have the facts concerning many a celebrated divine's "call" to service, but
none like this. The young man, whose none like this. The young man, whose mind was filled with high ideals and who felt that the glory of his people had been stained-with its love of lux ury, and by,its pride, felt himself compelled to become an ambassador ot the Most High, the God of his fathers, Says he, "In the year that King Uz ziah died I saw the Lord sitting on a throne, high and lifted up, and his train filled the temple. Above it stood the seraphims: each one had six wings; with twain he covered his face with twain he covered his feet, and with twain he did fly. And one cried to another and said, "Holy, holy, holy is the Lord of hosts: the whole earth is full of his glory". Then said I, "woe is me, for I am undone; because I am a man of unclean lips, and I dwell in the midst of a people of unclean lips for mine eyes have seen the king, the Lord of hosts." He was true to his vision. For many years he was the conscience of the nation and has come down to us as one of the mightiest. characters of the Old Testament. He was alwaya, a private citizen. He never, as far as we know, held office. But just as John Knox was the greatest man in Scotland in his day, just as Jonathan Edwards was the most influential man of his day, and Chyrsostom the giant of his time, Isaiah was of his. Genuine worth does not require that it shall hold office, in order to be seen. It shines wherever it is.

Isaiah was a reformer. He taught the people, beginning with the king. In his day no one could complain, "My people perish for lack of knowledge.'
place of honesty and goodness. "Wash you, make you clean; put away the evil of your doings from before mine eyes; cease to do evil; learn to do well; seek judgment, relieve the oppressed, judge the fatherless, plead or the widow." Then he exclaims, "How is the laithful city become an eousness lodged in it, but now murde ers," referring, of course, to Jerusa em. That was plain talk. Amos had talked that way, aind the people had said, "Get out Amos, we don't like znockers; go and tell that to the folks back home, don't come around here.' But Isaiah did not have that trouble He was never unpopular, as far as we know. Perhaps it was because of the preparation of the learlier prophet Sometimes, a man things his work doesn't count, but real work alway

I ONG ago, in 1786, to be exact, 1. minister named Cutler appeared belore the Continuental Congress and pled that the Northwest Territory, (now Michigan, Wisconsin, Ohio, in diana and Illinois), should never toler ate slavery and that free schools should be planted everywhere, and that religion should be encouraged. Three-quarters of a century passed the Civil War came, and the North West Territory saved the Union. With out the five big states that had grown out of the big states the Now out of the original area of the Northwest Territory, the Union cause wouid
have been impossible. Within sixteen days after the first call for troops Ohio had forty regiments in training. Illinois supplied one soldier in ten, who wore the blue, and from thes five states came the two Shermans Secretary Stanton, General Hayes General Logan, James A. Garfield William McKinley, Unconditional Sur reuder Grant, and Abraham Lincoln.
Ale reformers needed in our time? Belore me lies a little book of only ittle over a hundred pages, called "Re igious Foundations." It contains chap Chapter five, "How Shall we Think of Society and Human Relations?" is by that great-hearted Englishman "See Bolm Rountree, the proprietor of the largest or one of the dargest chocolate factories in the world. He deelares that there will have to be re orm in modern industry, if, it is to continue. Says he, "Look at the in dustrial warfare the tens of millions of days of work lost every year in the United States and England through strikes and lockouts. And think of the hidden waste that is even more dangerous." He declares that all ou troubles are spiritual-at bottom. "Take any of the social evils from which hu
manity suffers, trace it to its under lying cause, and you will find some spiritual failing-pride, vanity, love of power, avarice, sloth, or selfishness that word which sums up all other words. What the world needs today is a great spiritual revival, whose im mediate object is not the saving of souls in some future life, but the es tablishment here and now or a stand ard of life more creditable to human hearts and heads than that which ob tains today Whether we judge it from the social, the industrial, or the international standpoint, selfishness has failed as a motive."

SUNDAY SCHOOL LESSON FOR MAY 27.

SUBJECT:-Isaiah, the Statesman $1: 1 ; 6: 1-1$
GOLDEN TEXT:-Here am I, send


## Sunlight After Dark on the Farm

Good light is a comfort and happiness producer, the value of which
Plenty of cheerful light, of sunlight quality, is a tonic for mind and body.
After sunset, human nature craves artificial light that is most $n$
the natural light of the sun.
That's why Union cuipment has been ing and cooking equipm,00 farms, and placed on more thanter number of these installations. were purchased in 1922 than during any previous year since than during anion Carbide was first produced by Union Carbide Company more than a quarter century ago.
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plant a garden that will enable your family to tive
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ENGLISH TYPE White leg., BRown leg.
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R. 2. Zeeland, Mieh.

## COURBOYS AND GIRS

## Found In Our Letter Box

Letters from Pals for Our Correspondence Corner

## Dear Uncle Frank I have been wor <br> I have been working your contests every time, and had them right quite often, so I thought I would

 often, so I thought I would send one in.Why didn't you have the picture the waste basket taken while you were at your desk? Don't you think that would have been lots nicer? I do $\frac{\text { anyway. }}{\text { Well, }}$
Woll, I think Ill close my chatter-
 R. 3, Box 12
farm we have thirty-three chickens. Bertrand always feeds them. Once, a thing for my mother and there was a rooster right there and it began to fight me.
Well, Yours truly 1 I will have to close.Yours truly, Bernice Fittins, Allegan, We
We go on fast time here. Everything goes fast in Detroit-money and everything else. I bet getting snarls out hurts, but they say pulling the hair is good for it.
Dear Uncle Frank:
I have never entered your contests before because I knew I would not win a prize, so there was no use trying. miles out of town. I am twelve three miles out of town. I am twelve years
old and am in the seventh grade. I hope to be your niece but this letter
will most likely end wasket, so I will close here so waste wont be much to waste.-Your niece Marjorie Smith,
grong idea about try ing the contests. Nothing would be accomplished if we all thought there was no use trying.

Dear Uncle Frank:
We have thirty-four turkeys, forty four chickens and three little ducks they follow me almost every place
I have a little dog, his name is Bill. He has whiskers, so we call him Billy Whiskers. I think he is the cutest letter, he sat by me to hear it, when I read it to myself.-Your niece, MarIt is a sure sign that you are kind when animals like you so well. It must be nice to have a dog so willing to help you in your correspondence.

THE WORK I LIKE BEST.
THE kind of work that I like best is cooking. I like it because I enjoy seeing the results of my work. I like it because it has always appealed to me. Another reason why I like to cook is because it is an indispensable art - one which mankind cannot do


Miles Beamer is Proud of His Prize Calves, "Pat" and "Mike."
without. A person who cooks has certain responsibility in the use of ma terials, since she may be wasteful o economical. My mother is trying to teach me to be more economical. Beatrice Shepard, Swartz Creek, Mich.

HE work I like best is gardening and supply the table with fresh vege and supply the table with fresh vege tables. Ihke to save seeds from one year to the next. I have a cupboard store the seeds in curing the winter months.
Pushing the hand-cultivator, hoeing and pulling weeds gives plenty of ex ercise.-James K. Russell, Bronson
Mich., R. 2.

## Reduced Prices BABY CHIGKS

 HEARD.
 - looking for the first time at his new baby sister. After-gazing for
few minutes he said, "Why, Mamma fow minutes he said, "Why, Mamma it looks like Pa. Do you suppose it's
any relation to him?"-Mary E. Blashany relation to him?"
ill, Snover, Mich., R. 2.

Mother and children were sitting outdoors on a summer night. Mother said, "How nice and cool it is out doors. Her four-year-old daughter Marion, said, "Don't you wish our house was outdoors, Mother?"-Abbie Brouwer, Kalamazoo, Miche

This is one of the most amusing incidents I have ever heard. It may not appeal to you as it does to me, but if you could have seen the man of whom I write, it certainly would. He is tall, boney, homely, and not very smart
One night he was out of doors, and
it was real dark. He had his arm it, was real dark. He had his arm
stretched out before him so as not to run into anything, when to his misfortune his arms went at each side of a post and his poor nose found the post first.
I wish you could have seen the look that was on his face as he came in the house, rubbing his nose furiously, and honestly said: "Well, by goll, that's the first time I ever knew my nose was longer than my arms."-Marjory Hellman, Six Lakes, Mich.

THE SUCCESSFUL AD. READERS.
M ANY young folks got the ad. M1 reading contest correct and will receive Merry Circle buttons and cards on that accou prize winners because they wrote thir contest papers neatly and had their answers short but correct
The following two got pencil boxes Ruth Leader, Blissfield, Mich., R. Milo K. Chew, Bay Shore, Mich.
Winners of the pocket pencils
Winners of the pocket pencils are:
Nora Halpin, Lapeer, Mich. Nora Halpin, Lapeer, Marine Ctiy., Mich., R. 3.
Kenneth Dean, Ada, Mich., R. 1
Those who got maps are:
Lois M. Waldron, Weston, Mich.
Anna N. Blank, Perrinton, Mich.,
Irene Hutton, Fostoria, Mich.
Milton E. Lezel, Vassar, Mich., R. 4

## PLEASE SIGN YOUR NAME.

E

E
1 VERY little while I get letters them. Half of the fun addresses on ters is in knowing who you are get ting them from. I also get contest papers that are unsigned-some of them would have been prize winners if the names and addresses had been on them.
The other day Vera Hodge, of Allegan, Michigan, R. 8, got a nice letter from one of the gitls who had seen her name in the paper, but it had no name or address. That girl will think Vera is a dandy because she does not answer. But really, the girl is a dandy for not signing her name.
So, please be sure to sign your name and put your address on all letters you send out. And if you send in a contest paper when you write to me put your name and address on that, too.
In you want to help me a lot in hand ling the contest papers, you will write your letters on separate sheets and on one side of the sheet only, And then don't forget, put your name and ad dress on both.-Uncle Frank.

## AD READING CONTEST.

${ }^{-} \mathrm{HE}$ ad contest must have been
easy, so many gat it correct. Per easy, so many got it correct. Per- Says Sam: Not everybody can be
haps the reading of ads is pleasant, president but anybody can tell him
and that made finding the correct an: how.

The correct answers are a follows:

1. Ten or more $-35-675$
2. Ear tags- $35-675$.
3. Overland-658-18
4. Hercules Engine-23-663.
5. Hofstra Mfg. Co.- 31 -671.
6. Hercules alisteel triple power
ump puller- $25-665$. 7. C. H. Prescott \& Sons-678-38. 8. A. M. F. Sickles-676-36. 10. 10-15 per cent-11-651.

## WANT TO GET LETTERS

The following young folks would like o correspond with other boys and girls who are interested in this department and the Merry Circle.
Claude N. Leline, Roscommon, Mich Irene Burzyck, Elkton, Mich., R. 2.
Margaret Nash, Bellevue, Mich., R. 5. Margaret Nash, Bellevue, Mich., R. 5 Ivan J. Frantz, Sunfield. Mich.
Edith Hatovsky, Benton Harbor
Mich., R. 2.
A. Sothturell, of Coruma

## Read-and-Win

Ow that we will have con-
tests every week, we are going to have the Read-and-Win kind more often.

The usual ten prizes will be given; also Merry Circle buttons and cards will be given to all who get the answers correct who do not have buttons now. Hunt the answers' to the following questions in the reading columns of this issue. Please don't repeat the question, and write the answer as short as possible. And don't forget to give the number of the page upon which you round the answ
This contest closes May 31 .
Address Uncle Frank, Mic gan Farmer, Detroit, Michigan. 1. Who feeds three pounds of
skim-milk to one pound of grain to pigs? 2. What was the per capita consumption of beef in 1921?
3. What is a good mixture for oil mops? 4 . Who calls her dog Billy Whiskers?
5. What increase in potato
yield did spraying tests give in
Michigan? Michigan?
of value for linseed oil in paint ing? What is often a sign of liver trouble in hens?
8. What was the annual per capita consumption of milk in 1921? What was the value of the
"stuff" one-half million youngstuff one-halr milion young
sters grew?
10 How can grease spots be removed from wall paper

Mich., R. 5.
Evalyn Campbell, 423 Fifth Street Esther Holm. Ishpeming, Mich. Lillian Johnson. Freeland, Mieh. Symons A. Hendra, Applegate, Mich Archie Roberts. Fennville, Mich:
Lillian Rodanlusler, Dorr, Mich. Ellen Skinner, Batavia, Mich., R. 1 Esther Rutledge, Pickford, Mich.
Everett McDownie, Spruce, Mich.
Geneva Engwall, East Lake, Mich Opal Bogart, Lapeer, Mich., R. 3 . Gladys Campbell, Traverse Cit Mich., R. 5
Frances Hoover, Sunfleld, Mich.
Reggie Gabriel. Augusta, Mich.
Mae Beckett, Redford, Mich., R. 2. Alice Edgar, Lansing, Mich., R. 7. Ateline Rossman, Goodrich, Mich. Alma Kogist, Fremont, Mich., R. Mildred Maedel, Lenox. Mich. Daniel Lott, Howell, Mich
Ellen Peterson, Foster City, Mich. Rideout Route.
Russell Frant
Russell Frantz, Sunfield, Mich.
Marjorie Finch, Bellaire, Mieh., R.
how.

## White Diarrhea

Remarkable Experience of Mrs. C.M. Bradshaw in Preventing White Diarrhea
The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from
White Diarrhea. We will let Mrs. White Diarrhea. We will let Mrs.
Bradshaw tell of her experience in her own words:
"Gentlemen: I see reports of so many losing their little chicks with
White Diarrhea, so thought I would White Diarrhea, so thought I would
tell, my experience. I used to lose a tell, my experience. I used to lose a
great many from this cause, tried great many from this cause, tried
many remedies and was about dismany remedies and was about discouraged. As a the' Walket Remedy Co., Dept. 507, the' Walket Remedy Co., Dept. White
Waterloo, Iowa, for their Walko Diarrhea Remedy. I used two 50 c packages, raised 300 White Wyandottes packages,
and never lost one or had one sick after giving the medicine, and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail.-Mrs.,

## Cause of White Diarrhea

White Diarrhea is caused by the Bacillus Bacterium Pullorum. This germ is transmitted to the baby chick
through the yolk of the newly hatched through the yolk of the newly hatched egg. White Diarrhea. Don't wait until it kills half your chicks. Take the it kills half your chicks. Take the member there is scarcely a hatch member, there is scarcely
without some infected chicks. Don't let these few infect your entire flock. let these few infect your enire frinking
Prevent it. Give Walko in all drink water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

## Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I
raised over 500 chicks and I never lost a single chick from White Diarrhea a single chick from White Diarrhea Walko not only prevents White Diarand vigor; they develop quicker and

Never Lost One After First Dose
Mrs. Ethel Rhoades, Shenandoah, Iowa, writes: "My first incubator
chicks, when but a few days old, bechicks, when but a few days old, began to die by the dozens with White
Diarrhea. I tried different remedies Diarrhea. I tried different remedies
and was about discouraged with the and was about discouraged with the
chicken business. Finally I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko White Diar rhea Remedy. It's just the only thing 700 thrifty, healthy chicks and never lost a single chick after the first dose.'

## You Run No Risk

We will send Walko White Diarrhea Remedy entirely at our risk -postage prepaid-so you can see for edy it is for White Diarrhea in baby chicks. So you can prove-as thou sands have proven-that it will stop your losses and double, treble, even quadruple your profits. Send 50 c fo package of Wako-give it in all drink watch results You'll find weeks an't lose one chick where you lost hun dreds before. It's a positive fact We guarantee it The Leavitt \& Johnson National Bank the oldest and strong est bank in Waterloo, Iowa, stand back of this guarantee. You run no risk. If you don't find it the greatest little chick saver you ever used, yout money will be instantly refunded.

## WALKER REMEDY CO., Dept. 507 .

Waterloo, Iowa.
Send me the [ $]$ regular size (or ${ }^{[ }$ St economical large size regular size (or package of Walko
White Diarrhea Remedy to try at your risk. Send it on your positive guarantee to in-
stantly refund $m y$ money if not satisfied in
 Name
Town
State

 folder: "How to Raise 95 Chicks Out of Every 100." Ask Your Feed Dealer
for Globe Chick Mash The Albert Dickinson Company
Globe Feeds-Pine Tree
Brand Farm Seeds
Chicago-Minneapolts


POULTRY
HIGHEST QUALITY CHICKS Michigan's Old Reliable Hatchery




 OLick betore you buy
W. VAN APPLEDORN,


## Selected Purebred

Day Old Chicks, Pullets and Matured Stock. Now at new low prices
Hatched from high producing two year hens that
 Anconas. Get our prices before you buy as we tuar. antee to save you money, As thousands we guar-
fied customers report big profits. Live d satis:


FAIRVIEW POULTRY FARM R. 2 Box 1101 ZEELAND, MICH. BABY CHICKS

## Hatching every day in the wook and every hour inthe do the we World's largest producers.

 TWelye popular hreeds of be
thorobred stock obted aterob prod stook obtainable. minde
from hise ole QUALITY chicl from heays laying stook at hick sall
additional cost We doliver by parcel
post anywhers.
 THE SMITH STANPARD

189 Fompan

A Handy Arrangement to Give the Chicks a Chance to Eat Without Inter-
ference From Older Chickens.
best remedy is to have nests which dress when sending in inquiries as are slightly darkened. The hens enter prompt replies cannot be given withon a track at the rear and the eggs
are removed by lowering the door in front. Then the eggs can be gathered
orten.
Keep the hens busy in scratching litter and turn them out on range if
possible. When they are busy outdoors they have less time to form bad habits in the poultry house. Provide the hens with plenty of oyster shells so the eggs will have firm shells and not break easily in the nests.

## BLIND CHICKS.

1 have some little chicks about three weeks old which have an eye disease The eye becomes closed and they can't
see. W, H. H.
The eye troubles among chicks are usually due to colds which cause an inflammation of membranes around the eye. The secretion soon tightly closes the lid. I think the common cause of this trouble is dusty litter. The floor of a brooder house becomes
very dry from the heat of the stove and the dust is constantly kicked into the air from the scratching of the birds. The frequent cleaning of the brooder house floor is one remedy.
A tittle boracic acid may be used to cleanse the eyes and help them to stay open. Witch-hazel is also useful for
that purpose. If there are colds in the flock it often pays to color the drink ing water with potassium permanga nate to keep the trouble from spread ing. Sometimes a chick will go stone blind from causes which seem difficult to determine and in such cases the
only remedy is to put the bird out of its misery as soon as possible.

## GOBBLER WITH SORE FOOT.

Could you tell me what is the mat
er with our gobbler? His er with our gobbler? His foot is swol
len so that he can't step is gathered and broke yesterday but he seems worse today. What can I do
for him? Mrs. H. D. S.
The gobbler may have an abscess in the foot. This is called bumblefoot and is usually started by an injury caused from jumping from a high
perch to a hard floor. Stone bruises perch to a hard floor. Stone bruises
or pricks, from thorns or sharp nails

## POSSIBLY POISONING.

What is the matter with my chick
n? She pokes her head under her en? She pokes her head under her
body and then turns a sommersault on her back. She is not lively like a petite does not seem to be impaired

Hens are subject to diseases of the nerves and brain. Congestion of the brain sometimes occurs in heavy birds causing dizziness. Dizziness may be eaused by the absorption of poisons rom the digestive tract.
Hens may also have epilepsy and disease called myletis, which is in
flammation of the spinal marrow or membranes. A bird with any type of nervous disorder should be isolated and given a dose of epsom salts, but aside from that very little can be done. Usually there will be very few
losses from such troubles when the hens have normal care.

## HEAD TURNS DARK.

My chickens are affected with a dis ease and I cannot quite tell what is tles, and even their face turns, watue
and they hold their and they hold their heads down. The feathers are ruffled in the neck. Some H. them di
H. M. K.

When a hen's head turns dark it is often a sign of liver trouble. This is most apt to occur after the birds have been confined a long time with plenty of corn in the ration, but a lack of bird from that is no treatment for is discovered too late. It can usually be prevented by making the hens seratch in deep litter for their grain and feeding plenty of green food which acts as a tonic for the liver and provides bulk to go with the more con. centrated ration of mash
It usually pays to perform a post bortem on a hen that dies from an ternal organs. This and examine the imation that is useful in furnish inurther losses.
mumin BABYCHIX


 JUNE PRICES SHIPPRD P. P. PREPAID



## THE MILAN HATCHERY

 Box 4 MILAN, MICHIGAN
## CHICKS



## anteed to Satisy

Chicks after May, 15th $\$ 9.00$ per 100 Postpaid Eztra selected stock 811.00 per 100 . O.O. White and Brown Leghorns. Our chicks are hatched right and
will live. Safe arrival guarantecd. OTTAWA HATCHERY or end for our catalogua Holland
GREEN LAWN CHICKS SENT INSURED




CHICKS
You can now send your order for Ohicks in 11 breeds
of the Pare Breed Practical Poutrythat ts making
Barred Rocks egg records in the hands of ouring
elt
 Phode. Reds
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STATE FARMS ASSOCIATION
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CHICKS

$\qquad$ Every Week All Year

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

## WHITE LEGHORNS AND MOTTLED ANOONA


 Allogan CREENT EGG COMPANY
miom s. C. W. Leghorn CHIX American-English Sirain



## BABY CHICKS


 PETERSBURG HATCHERY

## Standard Chicks Satisfy!

 Hre daivery Posthald, Catalog free
Standard Hatchery, Box B. Zeoland, Michigan
RHODE ISLAND WHITES

## Making Money Spraying Spuds

## of over ten per cent on early varieties,

 and from ten to forty-three per cent on late varieties in the absence of late blightSome of the above increases may be and leaf hoppers, but this is an added argument for the thorough use of copper sprays, even in those sections where early and late blight are not serious or of frequent occurrence. Spraying Reduces Tip-burn and Hop-per-burn.
The potato leaf hopper is that small greenish insect that so often flies out vines. It is responsible for serious damage to the leaves which curl at the edges and die as a result of the attack of the pest. This injury is known as hopper-burn. What is known as "tip-burn" is a very similar type of injury and is supposedly caused by excessive transpiration of moisture of the leaves during the dry weather This injury has undoubtedly been con fused to some extent, at least in the past, with hopper-burn. Since 1911 it is estimated that in Michigan hopperburn has reduced the crop of late potatoes twenty-five per cent, and of early potatoes fifty per cent.
Thoroughly coating the leaves, especially the under side, with a copper spray is an effective means of reduc ing the amount of both hopper-burn and tip-burn, and preventing loss in yield. In Ohio during 1921 hopper-burn was the principal foliage trouble against which spraying was directed. Forty-seven potato growers in nine counties made sixty tests on one-hal acre or more. The average increase
from spraying in all these tests was thirty-one bushels per acre. Four applications of spray gave a net gain of $\$ 55.70$ per acre.

More Growers Should Spray.
In spite of this evidence only a small percentage of the total potato acreage is sprayed at all and much of this is not sprayed in an efficient manner. Although good potato spraying is being developed to a high degree in Pennsylvania, it is estimated that not more than about five per cent of the total acreage of the state was sprayed last year and it is not probable that many other states can show a higher percentage.
Why is it that a larger proportion of potato growers do not spray thoroughly if they spray at all? In the writer's opinion, the use of poison sprays alone and low pressure one nozzle-to-the-row sprayers are largely responsible. Potatoes were first sprayed with Paris green or other arsenicals for the control of the Colorado potato beetle, and spray machines were developed which are fairly well adapted to applying strong doses of poison for the bugs. Such machines give disappointing results, however, in applying a copper spray for the control of blight, leaf-hoppers and fleabeetles. To prevent the attacks of these pests it is essential that a fine mist be applied to both sides of the leaves at high pressure, thus insuring. a complete covering of the foliage. Repeated failures to control anything. but potato bugs with such machines have led many growers to condemn potato spraying as unprofitable without ever having tried really good potato spraying. There is more to spraying than simply poisoning potato bugs. Combine the poison each time with a copper spray and for the same amount of labor and but little more expense, an increase in yield of more than fifty bushels per acre can very often be obtained.
Bordeaux mixture is one of the most popular capper spray materials and
givesi very satisfactory results when gives: very satisfactory - results when
properly made and correctly applied.

The $4-4-50$ mixture is generally condered the standard. If the mixture applied often enough and with suffcient thoroughness, there is plenty of evidence to indicate that the $4-4-50$ formula will produce very satisfactory results.

Commercial Preparations.
There are on the market several prepared materials which are effective substitutes for Bordeaux mixture. Some of them contain a poison for potato beetles. These are put out in both paste and powder form. All the evidence to date points to the fact that a powdered Bordeaux is not as efficient as the faste form. -This is largely due o the fact that the spreading and sticking qualities are reduced by the destruction of the "Bordeaux films" in the drying process. When mixing with water these films never regain their original form and the material there fore fails to spread and stick as well as the paste.
Commercial pastes should be purchased on a basis of the amount of copper they contain. Other factors being the same, the higher the percentage of metallic copper guaranteed, the more efficient they will prove. A fine physical condition, freedom from gri and high sticking power are also qual ities to be demanded in the selection prepared mixtures

A poison should always be included n at least the first one or two appli cations of any copper spray for potato beetles, and if aphis appears later on nicotine sulphate should be added.
How to Obtain Maximum Results.
There is just one way to obtai maximum results from potato spray ing, and that is to apply the right ma terials frequently and at the right tim under high pressure and with the noz zles arranged so as to spray both sides of the leaves. There is no way, to ge around this, and disappointing result are almost sure to follow if these re quirements are not observed.

## Spray Early

Do not wait till bugs become numer ous. Spray as soon as the first beetle appear, and again when the eggs begin to hatch, using a poison in a good well-made Bordeaux spray

Spray Often.
Once or twice is not enough. Three or four times should be considered the minimum. If late blight becames ser ious it may pay to spray five to eight times.

Use Enough Material.
From fifty to one hundred gallons of the spray mixture per acre are requir The exact amount will the foliage The exact amount will depend some what on the size of the plants but less than fifty gallons will not do a thorough job.

Spray with the Right Material. Usé a combined fungicide and poi on. It doesn't pay to spray for bugs alone. Be sure that you use only a material that is well prepared, is free
from grit and won't clog the nozzles, but will stick to the leaves and can be depended upon to give results.

> Get a Good Sprayer.

Buy a Machine which will do the business. Unless it is the hand type of machine, equip it with three nozzles to the row, using as fine nozzles as possible. Cover both sides of every leaf and stem and you can't go wrong in expecting good results.
Spraying will pay better in some years than in others. It must be loaked upon, however, as crop insurance. Over a selies, of years it will return handsome dividends to the careful grower.
"The present system of marketins agrieultural products discourages pro
duction on the one hand, and eansuin liou on the ather."-Walton Peteet

THE RECORD OF SATISFACTION

"The Goodyear Klingtite Belt 1 bought from you in 1918 has delivered the best service of any belt I have used during my 22 yedrs of threshing experience. It has a record of 102 threshing days and 261,000 bushels threshed."-G. T. SELTVEIT, Delamere, N. D. ANY of the readers of this magazine have seen the very Goodyear Klingtite Belt to which Mr. Seltveit refers, at implement dealers' conventions in Minneapolis, Fargo and Grand Forks. They have heard from Mr. Seltveit's own lips the story of its faithful performance-powerful, slipless and trouble-free-and have heard him predict that it will last

Goodyear Klingtite Belts are made in endless type for heavy duty and in cut lengths for lighter drives. They are sold by Goodyear Mechanical GoodsService
Station Dealers and by many hardware dealers

## VALVES <br>  

## The Worlds RURAL Famous STRAIN



AT ASTONISHING NEW LOW PRICES NEVER BEFORE
 Excerpts From a few of the Scores of Complimentary Letters in Our Files.

## $\underset{\substack{\text { EGGE } \\ \text { RRED }}}{ }$ Baby Chicks <br> DOWN GOES THE PRICE OF RELIABLE CHICKS

Special bargains for June shipment, chicks almost at cost price, from our greatest Engliss stran wark's Strain Barred Rocks, customers of last year state pulPark s Strain Barred 1 Rocksts started to lay at $4 \frac{2}{2}$ months old, order your chicks right now for winter layers when eggs are high, from prices quoted below and save money. Satisfaction guaranteed, or your money back, handsome Catalog free. English W.L. per hundred $\$ 10.00$ English W.L. per thousand $\$ 95.00$. Park's Strain B.R. per hundred 13.00 . Park's Strain B.R. per thousand 120.00.

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92 E. 17th. St.
HOLLAND, MICH.
Buy "Better Quality" CHICKS ANCONAS to be hach regardless of price. We will be pleased to show any prospective customer the flocks from whick we hatrik our chicks and haye them inspect our motern equipped hatehery. Chicks sont postpadd.
$100 \%$ good tive chicks and your absolute satisfaction guaranted. Instructive catalogue and prices free on
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10 extra nice Repeater and Fairfax heifers from 14 to 20 months old for sale, also 10 cows.

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Registered Jersey catle soung bulls, for


## NOMAD FARMS Dispersal Sale

 Tuesday, June 12, 1923

## Richland Shorthorns

Speoial orfer; Twolve Bulle from twelvo to twenty
four months old. Red, White, Roan, Good Aize.bee
of of breeding-from good milking dams. Priced fo
quick sale. Write for particulars,

Ask us about a Real Bull a Maple Crest or an Ormsby. JOHN H. WINN, Inc., Rochester, Mich. The Traverse Herd

 auotatione, tatating stoout age deoired.
TRAVERSE CITY STATE HOSPITAL Traverse City, Mich.


## O. H, Prescoft \& Sons,

Francisco Farm Shorthorns


 $\frac{\text { A. ©. Parmenter }}{\text { Two Scotch Shorthorn Bulls Mor For Sale }}$
 Woodlawn Farm montinawn Form


## PUBLIC AUCTION!

THURSDAY, MAY, 311923 at 1:00 P. M.

Tuberculin Tested, Registered Shorthorn cattle, and Registered Berkshire sows
 N. C. THOMAS, Auctioneer

## Live Stock

IAM OFFERING BRED SOMS

SKIM-MILK FOR GROWING PIGS.
SKIM-MILK when fed in connection with grain makes a very nutritious
and valuable feed for growing pigs and valuable feed for growing pigs.
I have never found a feed that will ake the place of milk for feeding sows nursing their litters, and for growing the pigs before and after weaning.
There are essential ingredients in skim-milk, such as casein, milk, sugar and ash, that makes it a valuable feed or growing pigs where rapid bone and feesh formation is desired.
To obtain best results from feeding skim-milk to growing pigs it should be fed in combination with other grains. If the self-feeder is employed
in growing the pig crop the skim-milk may be fed three or four times daily in a trough near the self-feeder, If
the slop method is used mix the feed in the skim-milk.
I mix the grain into the skim-milk for feeding my growing pigs. I think time pigs do better, at least, up to th time they are weaned.
Where a large amount of skim-milk is at hand care should be exercised danger. I find. in this there is some low is to allow about three pound for skim-milk to one pound of grain. I mix my slop until it is wet, but not sloppy--Leo C. Reynolds.

FEEDING CONCENTRATES PAYS.
E XTENSIVE steer feeding tests in Ohio indicate that the use of con centrates in feeding is again profit able. During the high price time, the use of concentrates was eliminated to quite an extent, But since prices have taken a tumble, they have again be come economical to feed.
In one case, two and a half pounds thirty-five pounds of day, along with pounds of corn were fed. The steers thus fed gained two and a quarte pounds.

## SAVE TIME-LET THE CATTLE

 DO T .I
I whe barnyard or feed lo
are happier, grow fatter and are mor profitable if they are provided with a pole on which they can scratec their backs and necks.
Such a pole may be prepared by wrapping with gunny sacks and then soaking these sacks with crude oil.
The pole is then hung horizontally at a height to permit the cattle to make heir toilat preparations.
The results are that the neck of the animals, where the lice collect in the coatest numbers, is constantly kept
covered with crude oil, to the very reat discomfort of the insects. The ox-warbles out of the back.

## JOB HOLDERS EAT BEEF

LA
ABORING conditions
of our population is able
all the time. But variations in be ployment and wages cause rather wid fluctuations in

## purchase

able for conditions are highly favo uct. In 1921 the per capita consump tion of beef was 57.8 pounds.
later, when the laboring classes wer jumped to 61.4 pounds. But during the interval from 1908 to 1912, the Ame ican people were eating a per capita
average of ten pounds above the pres ent rate of consumption.

## W. C. TAYLOR, Mrico list, Mich.


Is It Worth While? A real boar pig sired by Woodford Seneation
Dami of Dofonder or Pathfinder breeding. If so,
We have them of Sept. rarrow, not only atowing
extreme quality, but greater alze than you will Kope-Kon Farms, Coldwater, Mich DUROC Fall Boare Ready for service sired by
 D OROO BOARSY Do oroin wanta good growith hedy
 Duroc-Jerseys A fow Painifinder Gilts.
Foust's Top Col., E D. Heydenbero th Wayland.Mich.

## 

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spoiled silage. "NOT one ounce of spoiled silage." Mich., says of his ROSS "In-de-str-uct-o" silo. Every day we get letters fiom satis fied owners telling us the "In-de-str-uct-o" is the easiest of all silos to erect-the silo that produces $99 \%$ Food Value Silage from every standpoint

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 each case and give, name and address of the writer. Initials
only are published, When a reply by mail is requested the
oervice becomes private practice and $\$ 1$ must be encosed.

Eczema, My twelve-year-old horse is-troubled with an itchy skin. I. Ieed
him hay and oats. P. D., Burt, Mich. him hay and oats. P. D., Bisinfectant and thirty parts water twice daily.
Sore Mouth.-I have a cow which seems to be in perfect health, gives a nice mess of milk, but of it out of mouth. R. C. R., Metamora, Mich.If you will make a careful examination of her mouth you may find a piece of wood or wire lodged between two of her teeth, or she may have a split
tooth. A removal of the cause is the tooth. A
Navel-ill. We have a flock of sheep and have been feeding them all the ensilage they will eat, also mixe hath of lambs they are taken with diarrhea and usually die before they are three
days old. What is the cause of their days old. What is the cause of their
death? H. S., Harrison, Mich.-This death? H. S., Harrison, Mich.-This is, not such a common disease in lambs
as in the foal, but outbreaks do occur as in the foal, but outbreaks do occur
in sheep. The bacillus bipolaris sepin sheep. The bacillus bipolaris sep-, ticus, and the bacilus coll presence of seem responsible for the presence of
this disease. They gain entrance to the umbilicus (navel) at birth or when the cord is ruptured. In some cases, it is thought the organisms have entered the circulatory system before birth. If possible remove your pregnant ewes to a clean place which has recently been disinfected. The pus
may be squeezed out of the umbilicus may be squeezed out of the umber perof the affected la injected, to be followed by tincture of iodine, turpentine or chinosol, or lysol, or any of the coal-tar preparations. Give a single dose of castor oil, but in the treatment of valuable lambs, bacterins may be used. Don't neglect to clean and treat navel oo every lamb at birth, and before ther, thoroughly clean her filthy udder.
Partial Loss of Power.-We have a pig, six months old, which shows con-
siderable weakness in hind quarters. I notice some white spots on body. His appetite is not very good. S. B. L.,
Hadley, Mich.-Perhaps I had better enumerate a few of the common causes of this ailment, then you may be better able to remove the cause and check this lose keeping the pigs in damp, one cause, keeping is another, also feeding an unbalanced ration, such as corn and water. Feed with the corn clover, alfalfa, tankage, oats, oil meal and roots. Growing pigs require a certain amount of exercise, and their bowels should be-kept open, this in
sures sufficient elimination, and don't sures sumad to add minerals, to their ration. Atrophy-Contracted Feet.-I would like to know the cause of contracted
feet in horses, and how it can be avoided.-J. V., Ladysmith, Wis.-The foot of the horse is undoubtedly the most important part of the animal, so far as veterinary surgery is concerned for the very good reason that it is sub-
ject to so many injuries and diseases ject to so many injuries and diseases which in part or in whole, render
animal unfit for labor demanded of him. The domestication, coupled with the multiplied uses to which the animal is put, besides the constant reproduction of hereditary defects and tendencies, gives us many foot ailments such as you mention. A large percentage of horses have feet which are not perfect in conformation, and as a con-
sequence they are especially predis sequence they are especially predis posed of moisture and regular exer lise, also bad shoeing, neglected diseases, or wounds have a tendeney to cause atrophy of the soft tissues of the foot, resulting in what is commonly called contraction. Stand your horse in wet clay for two hours daily, apply lanolin daily, and remember that different cases require different treat
ment. Don't raise colts from cripples, ment. Don't raise colts from eripples. Vertigo.-My twelve-year-old mare
occasionally starts and runs; she is occasionally starts and runs; she is
unmanageable, after the attack passes off, she is easily frightened, and lately off, she is easily frightened, J . S., Banper appetite is not good.
nister, Mich. - Give her one quart of raw linseed oil, one dose only; also give her a half-dram of calomel and
one ounce of baking soda in feed three times a week for three weeks. Keep her bowels open, exercise her daily Does
short.


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at atherton station; Pere Marquette Ry. Half-way between Harbor Beach and Port Hope on Huron Shore Road. 6 Bulls, 29 Cows
Baker's Sale, June 8th, 1923. AT ST. CLAIR. Sotham Station Port Pectric Ry. 3 blocks from local stop. PRACTICAL CATTLE, 7 Bulls, 28 Cows and Heifers; 14 Calves.
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working condition, carrying plenty of flesh to show their real merit. Theriare honest and clean,
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GRAIN QUOTATIONS
Tuesday, May 22.
Wheat.
Detroit.-No. 2 red at $\$ 1.366^{1 / 2}$; No. 2 mixed $\$ 1.361 / 2$, No 2 white $\$ 1.361 / 10$,
Chicago.-No. 1 hard $\$ 1.203 / 4$; No. northern $\$ 1.21$.
Toledo--Cash $\$ 1.35 @ 1.36$.
Detroit.-Cash Norn. 2 yellow at 88 c ;
No. $3,871 / 2 \mathrm{c}$. No. $3,87^{1 / 2 \mathrm{c} .}$. 2 mixed $813 / 4(0.821 / 2 \mathrm{c}$;
Chicago. 2 yellow $83^{11} 2 \mathrm{c}$ Detroit-Cash Nats.
Detroit.-Cash No. 2 white at 50 c ;
No. $3,481 / 2$ c.
Chicago- No. 2 white $441 / 4 @ 461 / 4 \mathrm{c}$;
No. 3 white $431 / 2 @ 443 / 4 \mathrm{c}$.
No. 3 white $431 / 2 @ 443 / 4 \mathrm{c}$
Beans.
Detroit. - Immediate and prompt
shipment $\$ 7.35$. shipment $\$ 7.35$.

Rye.
82 c .
Detroit.-Cash 82 e
Chicago,- 79 c .
Toledo. $-81 / 2 \mathrm{c}$.
Detroit-Prime Seeds.
Detroit-Prime red clover cash a
$\$ 11.25$; a isike $\$ 10.25 ;$ timothy $\$ 3.30$.
Toledo.-Prime red clover Toledo- Prime red clover cash at
$\$ 11.15$; alsike $\$ 10.50$; timothy cash at
$\$ 3.30$. $\$ 3.30$.
Barley;
$\begin{aligned} & \text { Detroit.-Malting } 75 \mathrm{c} \text {; feeding } 72 \mathrm{c} . \\ & \text { Chicago.- }\end{aligned}$ 68c.
Detroit,-No, Hay. 1 timothy $\$ 1750 @ 18$. standard $\$ 16.50 @ 17$; light mixed at
$\$ 16.50 @ 17$ : No. 2 timothy at $\$ 15.50 @$ \$16.50@17; No. 2 timothy at $\$ 15.50 @$ 16.50; No. 1 clover $\$ 13 @ 14$; rye straw
$\$ 11.50 @ 12 ;$ wheat and oat straw at $\$ 11 @ 11.50$ per ton in carlots.
Bran $\$ 36 @ 36.50 ;$ standard middlings Bran $\$ 36 @ 36.50 ;$ standard middlings
$\$ 38 @ 38.50 ;$ fine do $\$ 38.50 @ 39 ;$ cracked
corn at $\$ 39.50 @ 40 ;$ coarse cornmeal at corn at $\$ 39.50 @ 40$; coarse cornmeal at
$\$ 38$; chop $\$ 34$ per ton in $100-\mathrm{Hb}$. sacks. WHEAT
The wheat crop has not improved as and more favorable growing weather. Complaints ${ }^{\text {a }}$ are coming again from Oklahoma and Texas as well as from Illinois, Indiana and Ohio. The crop is already late and needs warm grow ing weather. Spring wheat seeding
has just been completed which is lat er than the usual date, indicating that the crop will be below normal unlesis weather conditions are more favorable
than usual. The cash demand for wheat has shown but little change. The visible supply in the United Ataie and Canada decreased around 0,000 , 000 bushels in the previous week, with prospects that it will continue to
shrink rather rapidly until new wheat becomes available.

> CORN \& OATS

Receipts of corn at the primary mar-
kets declined sharply again last week kets declined sharply again last week
and they are now only about twenty and they are now only about twenty
per cent of the volume moving a few weeks ago. The country has sold more and the after-planting run wilh siart before long. Demand for corn in commercial channels remains broad, although export sales are limited. Prices advanced during the week, recovering
most of the loss since late April but most of the loss since late April kut
sagged again at the close. Some complaints that recent rains have delayed planting unduly and that prospects are for a larger acreage but last year and a few days of good growing weather would change the tenor of the reports, Oats crop prospects re${ }_{\text {main }}$ from Texly favorable, with new oats from Texas expected on the market
within thirty days.

## SEEDS

Although clover seed prices declined
a new low level last week , to a new low level last week, the mar-
ket now shows greater stability and promises to hold within a compara new eron is retter known size of the seed shows greater strength than red

## FEEDS

Practically all kinds of by product
eds were dull and declined in pro feeds were dull and declined in pro-
ducing and jobbing markets last week. Bran for shipment any time during the
season is quoted at $\$ 19$ at Kansas City and slightly higher in the northwest Cottonseed meal is being offered free ly and the linseed meal market is un.
der pressure.

## HAY

Hay markets remain firm because of continued light receipts. Country load large holdings on farms. Widespreal rains during the past week have improved pastures and prospects for the new hay crop.

## POULTRY AND EGGS

Egg prices declined further early storage holdings showed a larger on than the preliminary report and re ceipts at the leading cities remained abnormally heavy. The course of the market during the rest of the spring and summer depends largely on the
weather but it, is probable that prices weather but it is probable that prices
will be well sustained as long as eggs suitable for long time storage, are Chindant.
Chicago.-Eggs, miscellaneous $231 / 2$ $211 / 2 \mathrm{c}$; extra firsts $301 / 2(6311 / 2 \mathrm{c} ;$ fresh firsts $22 @ 241 / 2 \mathrm{c}$; ordinary firsts $22 @$

## Live Stock Market Service

## DETROIT

Cattle.
Reeeipts 402. Market is slow but steady.
Fancy light yearlings Mixed eight butchers Handy light and heifers Light butcher butchers
Best cows
Butcher cows
Canners
Choice buils
Bologna bulls
Stock bulls
Stock bu
Feeders
Stockers and springers.
Veal Calves.
Receipts. 638. Market higher.
Best
Others
.................. $\$ 11.50$ 500@11.00 Sheep and Lambs.
$\begin{aligned} & \text { Receipts 135. Market slow. } \\ & \text { Best lambs } \\ & \text { Fair lambs }\end{aligned} . . . . . . . . . . \$ 14.50$ Light to lambs
$\$ 14.50 @ 14.75$
$11.50 @ 13.50$
light to common.
$11.50 @ 13.50$
$6.50 @ 90$
6.50 Culls and common
1.50@3.00

Receipts 2,109 Hogs. Market steady.
Mixed hogs Mixed hogs
6.75 © 7.700

## CHICAGO

## Receipts 25 Hogs.

teady to 25,000 . Market is uneven bulk $160 @ 225-1 \mathrm{lb}$. average $\$ 7.40 @ 7.50$ sows $\$ 6 @ 6.30 ; 110 @ 130-1 \mathrm{~b}$ pigs $\$ 6.25$ @6.75. $\quad$ Cattle.
Receipts 12,000 . Market is generally ed and yearlings $\$ 10.75$; yearlinge average $970 \mathrm{lbs} \$ 8.50$; bulk of yearling at $\$ 10.50$; numerous lots matured and yearlings at $\$ 10.25 @ 10.70$; bulk bulls \$5.40@5.65; bulk vealers and packers Soce. Sheep and Lambs.
Receipts $\quad 3,000$. Very slow; around 25e lower. Ewes, medium to good
$72-1 \mathrm{~b}$ lambs $\$ 14 ;$ good wethers $\$ 7$.

## BUFFALO

## Cattle.

Receipts five ears. Market steady Choice to prime shipping steers $\$ 9.50$ $\$ 8.75 @ 9.25$; heavy fat medium quality $\$ 8.50 @ 9$; mediúm to good $\$ 8.50$ Q 8.75 ; light native yearlings, fancy quality $\$ 9.25 @ 9.50$; medium to good $\$ 8.50(a) 9$; best handy steers $\$ 8.75 @ 9.50$; plain at 7.50@8; handy steers and heifers is Q8.25; western heifers $\$ 8 @ 8.50$; light
Michigan butchering heifers $\$ 808.25$; best fat cows at $\$ 6.50 @ 7$; medium to cutters $\$ 3.75 @ 4$; canners good weight best heavy bulls $\$ 5.50$ bulls $\$ 6.75$; bologna
$221 / 2 \mathrm{C}$. Live poultry, hens $251 / 2 \mathrm{c}$; broilers $48 @ 50 \mathrm{c}$; springers 30 c ; roosters
$131 / 2 \mathrm{c}$; ducks 20 c ; geese 12 c ; turkeys 25 c per pound.
Detroit.-Eggs, fresh candled and graded $25 @ 253 / 4 \mathrm{c}$ : storage $271 / 2 @ 28 \mathrm{c}$. Live poultry broilers 45@52c; heavy hens $28 @ 29 \mathrm{c}$; roosters 15 c ; geese $14 @$

## BUTTER

Receipts of butter at the four leadcent markets increased about 25 per the last seven-day period and prices declined. Values have been above the anticipated storing level and with current arrivals large enough to permit a slight accumulation, the loss in values was logical. The make is gradually increasing. It is not likely that the ecline in prices has been completed.
Prices on 92 -score as follows. cago $401 / 2 \mathrm{e}$; New York $411 / 2 \mathrm{c}^{-}$. In Detroit fresh creamery in tubs sells for 41e per pound.

## Wednesday, May 23.

## POTATOES

Shipments of new potatoes are runyear, thus confirming the reports of a smaller crop. The carlot movement last the new erop states was smaller last week than in the preceding week, but old crop states shipped more freein. New potatoes advanced $50 @ 75 \mathrm{c}$ in eastern markets, while old potatoes were steady to firm at most points.
Northern round whites are quoted $\$ 1 @ 1.05$ per 100 pounds in Chiono

WOOL
Buying of the new clip of wool conat steady prices states last week ported much more activity than others with from 30 per cent of the clip sold in a few states to as high as 80 per cent in others. Prices have ranged from 30 cents for fall wool in California to $551 / 2$ cents for fine twelve months clips in Texas. Buyers are 50 cents in the brigh a market around pending upon shrinkage and states, dethis is substantially lower than prices paid for the bulk of western wools

COMING LIVE STOCK SALES.
bulls $\$ 5.25 @ 5.50$; common bulls $\$ 4 @$
. 50 ; mest feeders 700 to $800 \mathrm{lbs} \$ 7 @$
7.50; medium feeders at $\$ 6.75 @ 7.25$;
stockers good $\$ 6.50 @ 7$; light common
stockers good $\$ 6.507$; light common
$\$ 5.50 @ 6 ;$ best milkers and springers $\$ 80 @ 100$; common and medium at $\$ 40$
Calves, tops at $\$ 11.50$.

## Hogs.

Receipts 40 cars. Market is slow. Yorkers and mediums $\$ 8.25$; pigs
lights $\$ 7 @ 7.25 ;$ heavies $\$ 7.75 @ 8$.

Sheep and Lambs
Receipts four cars. Market steady. @12.50; wethers $\$ 8.50 @ 8.75$; ewes at

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June 14 -Wm. F. Shehan, Howell, Mich. Shorthorns.
May 31 . Simon G. Maichele, MiddleMay $31-\mathrm{H}$. W. Daring, Rives Junc-
tion, Mich. Angus.
June 1-Cloverly Stock Farm, George June 12 -Michigan, Aberdeen. Angus Sale, East Lansing, Mich.
Herefords.
June 7 -Ramsey's Sale, Atherton Station, P. M. R. R., near Harbor Beach. F. F. B. Sotham \& Sons, Sales Mgrs. B. Sotham \& Sons, Sales Mars. F. F. B. Sotham \& Sons, Sales Mgrs.

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THE EGG-LAYING CONTEST.
I $N$ spite of the snow storm, the hens 1 showed a slight increase in produc tion for the week ending May 15. The production for the week was 3,952 , making the total to date 79,843 .
The Leghorns still hold high rank in production. Their percentage during the past week was 67.3. The Anconas, came next with 54.4 per cent; the Barred Rocks came third with 49.8 per cent; Rhode Island Reds, 45.7 per cent, and the Wyandottes, 36.9 per cent.

The Northland Poultry Farm Leghorns led the week's production with fifty-seven eggs. Those belonging to Lozis N. Clark, and the pen of the Ontario Agricultural College came sec ond with fifty-six eggs.
Hen No. 2, belonging to E. E. Shaw's pen, finished the week with a perfect score by producing seven eggs. Her total production to date is 155 egss. The Barred Rock belonging to Dunn, came second with a total production of 152 eggs.
The leading pens in the contest are as follows:
E. E. Shaw, South Haven, Mich.,
(Leghorns) Northland Farms, Grand Rapids, Mich. (Leeghorns Ail........... Thompson, Alien, (Leghorns) Pouitry Farm, Ho......... land, Mich., (Rocks) ..........1,03 E. D. Taylor, Kalamazoo, Mich., w. C. Eckard,
(Leghorns) Ferris, Grand Rapids Mich., (Leghoras) ....... Evergreen Poultry Farm, GreenVille, Mieh, (Wyandottes) $\%$,
H. E. Denison, East Lansing, Mich.,

COUNTY CROP REPORTS.
Calhoun County, May 17.-Wheat and rye show some improvement since ing sold at $\$ 6 @ 7$ per cwt. Farmers lost a large percentage of spring pigs. Dealers are buying a few clips of wool
at fifty cents per pound. Help farms is seventy-five per cent short.
Farmers are working hard, but with the late spring and no help, a good
deal of corn will be planted late.deal of corn will be S.
F. Esabella County, May 14.-Wheat Isabella County, May 14.- Wheat
and rye poor. Spring work is back-
ward. Last year's crops are practi-
cally all out of the farmer's hands, with the exception of hay and potatoes, Labor is high and scarce. On account
of cold weather, pig and lamb crops
have suffered. The sugar beet acreage is the largest ever planted in this about ten per cent high.-W. H. H. Oakland County, May 14.-The
heavy fall of snow that visited this district May $8-9$ was of great value to made up in a large measure the lack of moisture. While the freezing weathtle damage to early fruit, the detriment to farmers is small since fruit
St. Clair County, May 12.-Winter wheat is looking good. Spring seedseems to be in good condition. Farm-
ers are now working on their corn and ers are now working on their corn and
bean ground. A large acreage of sugar beets is going in. Factories are con$\$ 1.10$; barley $\$ 1.30$ per cwt.; oats 45 c
per bushel; hay around $\$ 12$. Labor is scarce and wages are higher than the farmers are able to pay.-G. S. Q.
Calhoun County, May 16.-Wheat was damaged by ice last winter and dry weather early this spring. The old erop is entirely sold. Rye looking good, and oats are now coming on
nicely. Clover seed is coming along fine. Farmers cannot get help and are
doing the best they can without it.L. J. D. Aicona County,-Work generally has been very backward on account of the cold, late spring. Grains and grasses are, therefore, small for this season. Some potatoes are being sold at $45 @$
50 c per bushel. Hay is being offered at $\$ 6$ @ 7 per ton.-A.
Cheboygan County, May 12.-Winter wheat is looking fair, and the old crop few potatoes still remain in farmers completed. Not as many cows being

CHICKS from good selected heavy


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