

VOL. CLXIV. No. 9 Whole Number 4651 DETROIT, MICH., SATURDAY, FEBRUARY 28, 1925

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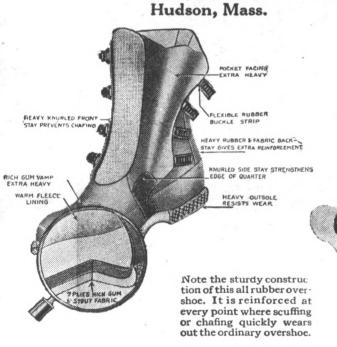
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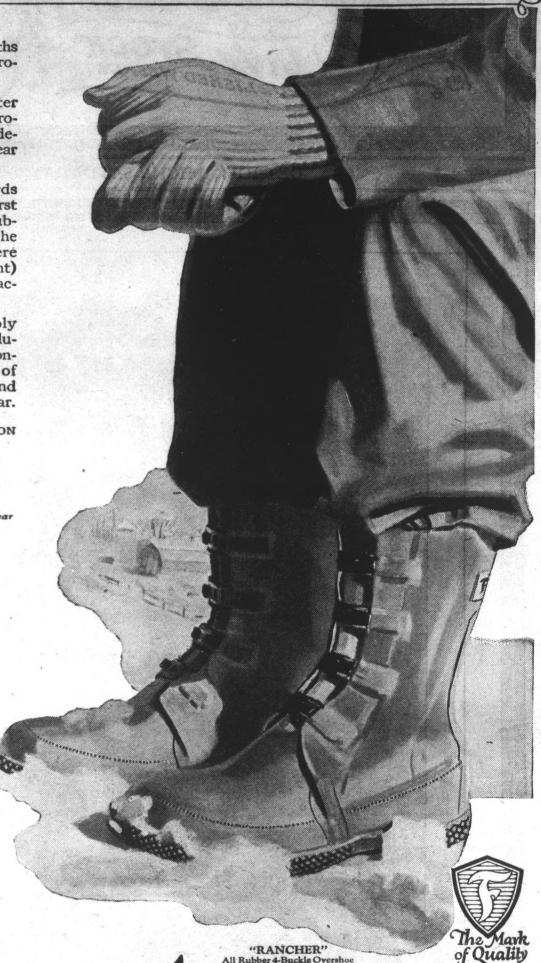
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VOLUME CLXIV

QUALITY RELIABILITY SERVICE

NUMBER NINE

MICHIGAN SECTION THE CAPPER FARM PRESS

The Future of Cow Testing

This is How One of Our Progressive Testers Looks at the Future of Testing Work

By Morris Place

RUTURE development of cow testing associations in Michigan depends almost solely on the effi-cient service of the testers. Extension men can go among a group of farmers and organize them into a cow testing association. But unless these men are made to feel satisfied with the first year's work they are not going to sign up for another year. And if these men that tried the cow testing association would not sign up for another year, surely their neighbors wouldn't either. For one farmer will believe what another farmer tells him, even if all the rest of the world tells him he is wrong. And if a farmer that has tried the cow testing association says that it is no good, it is a waste of time to try to overshadow his opinion among his neighbors. Consequently I would say that the success or failure of the future cow testing associations depends

Among the first things that are necessary is the creation of interest among the farmers in their cattle. For once a member is really interested in what his cows are doing, he will do almost anything that he believes will be for the betterment of his dairying.

on how the testers put the thing

Prize Winning Essay One of the best ways to get a man better ones. He will keep watching it interested is to get him to keep a daily milk record sheet. Before long he will begin to see where one cow that he didn't think much of is holding

and will soon be quite interested in his cows.

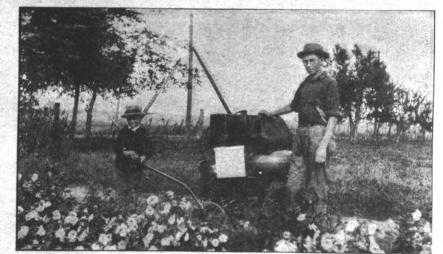
Another way to arouse interest is to tell the member how well certain of up longer than some of his supposedly his cows are doing, considering the

adverse conditions they have to overcome. But when the man gets to thinking that his cows are better than they really are, just take a little conceit out of him by telling him of the cows that are doing better than his cows. Make the contrast the right strength to produce the desired results.

More ways of getting men interested in cows are to get them to read the dairy papers and see what other dairymen and dairy cows are doing, and take them to see some of the more modern dairies of the locality. The aforementioned items are only general rules and cannot be applied in every case, for every member presents a different situation and they all require individual treatment. It being up to the tester to determine how to handle

Besides creating interest among the farmers in their cows it is also necessary to win their confidence. This is another item that requires individual attention. But there are a few things that come in handy in all cases. One of the most important of these is, don't tell the men more than you know. For they will soon find this out and treat the tester with mistrust and ill-feeling.

(Continued on page 296).



Children Sometimes Help the Cow Tester From One Place to Another.

The Grandfather Farm

How Heritage Helps Farming By Jason Woodman

OME years ago, on a mid-summer day, I was driving over a country road on my way to a farmers' picnic. I expected to meet an assemblage I had often faced before, and as I drove I tried to thing of something new to talk about. My thoughts shifted from the speech to the audience that would be made up mostly of oldtime acquaintances and friends and to the appointed place of meeting under the trees clustering around a southern Michigan farm home. Before my mind rose a picture of the old place. An old-time farm house, mansion-like in its proportions, standing on the edge of one of Michigan's little prairies, with a background of broad fields and burr-oaks. The farm had been owned and tilled by four generations of one family. The pioneer, the son who had succeeded him, and the grandson, had all been men, men of standing and consequence. The fourth, a fine young man, well schooled, mentally keen, upright and honest, excelling as a farmer, active and influential in the public affairs of his neighborhood and his country; an ideal citizen.

The thought came to me that there would be others like him in the audience, men and women with the same traditions and ideals; for there were other farms in the neighborhood owned and lived on by descendants of the pioneers who had settled on them some ninety years before.

As I thought of these things, my subject was made plain to me, and I talked that afternoon on "The Grandfather Farm." The ideas that clustered round the central thought seemed to strike a responsive chord. Occa-

In Michigan are many thousands of farms that have passed from father to son. This is a common occurrence. In the older portions of the state there are hundreds now in the hands of the third generation, and in these southern counties, settled almost a century ago, we see here and there a farm still "in the family," owned and lived upon by a great grandson of the pioneer who transformed the wilderness into a

It is worth while to inquire into some of the reasons why these old family places have not been sold, rented to strangers or squandered, and to consider whether these men, any of them, have made a mistake by remaining in the country. Is the community and the state better off? These are interesting topics for discussion.

I have known many of these farmers, and something of their family history. I have noticed that they possess in common certain traits of character. They have good business judgment. They are prudent and thrifty. They are good workers and they love their work. These are fundamental qualities. Unless they are present in every generation, the grandfather farm, as such, ceases to exist. While it is true that to a certain extent these characteristics may be inherited, in the main they are acquired by training and example. The man who has succeeded his father and, as often is the case, has paid off other heirs and supported his parents in their old age, was brought up to work, and work steadily. Work is a sionally since then, I have spoken on habit and like most habits is formed,

larger audience, I write about it. teens. I have never known a man to succeed on a farm or elsewhere for that matter, who spent his youth in idleness when out of school.

> Hand in hand with the habit of steady industry come the other cavdinal virtues, prudence, thrift and a sense of responsibility, qualities that almost entirely are the results of early training. When a farmer who has made good says, "My father and grandfather owned and tilled this farm before me," one may know without being told how that man was brought up.

To many men a farm is solely a business proposition, to be improved, enriched or skinned, moved onto or off from, bought, sold, traded or rented, according to the dictates of cold-blooded business principles. But to the man who has always lived on the acres he tills, who was born, it may be, in the very house in which he lives, who takes his noonday rest beneath the ample shade of trees his father planted, there exists an enduring love for the land that is his. A love that enters into his daily labors and is a potent inducement to keep his home attractive and his acres fertile. That love for home and the land that is a permanent abiding place is the foundation of the truest and finest type of patriotism.

The man on the Grandfather Farm, who is planning for a son to succeed him, is not one of those "who have yearnings for an equal division of unequal earnings." He believes profoundly in "The sacred right to the ownership of private property." He is a conservative. He cannot be anything else. the same subject; and now, seeking a if formed at all, while a boy is in his He is for stability in government and

can be depended on to oppose doubtful experiments and dangerous innovations

Theodore Roosevelt has eulogized "that pre-eminently typical American, the farmer who owns his own farm," and has said, "In every great crisis in the past a peculiar dependence has had to be placed on the farming population, and this dependence has been jus-If that can be said of our farmers as a class, it may be repeated with especial emphasis of the man anchored to the soil that has been the home of his family for generations.

Among the farmers I know are men who have shown in the management of their own affairs and in public matters, an ability equal to that of the most successful professional and business men. Wonder is sometimes expressed why such men stay in the country. They stay because they are what Eugene Davenport terms "country mind-They deliberately prefer the country and what it gives, to human ant-hills.

But you ask, "Would you have the xceptional ability bury himself on a farm?" If he has ability and stability, if he has energy and is mentally well trained, if he !s public spirited and has ambition, he will not be buried. Look over the men who flock to the agricultural college "Farmers' Week," and others like them. Are these men buried? I think not.

And so the Michigan farmer of today, if he is the right sort, can say to a son, "Become the second or third or fourth or fifth generation," as the case may be, "to live on and own the family homestead," and say it without feeling that he is asking a sacrifice.



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CURRENT COMMENT

Cruel Farm Parents? THE consideration of the federal child labor amendment to the constitution giving congress authority over the

youth of the land until eighteen years of age, has brought some interesting criticism and comment. From this, one would judge, that the commercialistic attitude of the farmer toward his children is pronounced.

We would guess that these people have the idea that farm parents do not love their children as do other classes—that all the reason for a farmer rearing a family is to have some one to milk cows, feed the hogs, or weed beets.

But do we show our affection for a thing when we deliberately give it away? Rather, we take all precaution that precious things do not get out of our control.

No class can show greater loyalty to educational programs than can the farming classes. This is substantiated by the records of our higher educational institutions where the attendance of farm boys and girls have been erations. out of proportion to their numbers.

No, without doubt, the very opposite is the case. The very reason for the farmers opposing this amendment is that they do love their children. They would rather trust the care of their children to themselves than to congress.

Radio And Reading THE radio is the marvel of the ages. It seems as if it was the ultimate in distribution of the knowledge and infor-

other better, we come to like each other better.

The radio puts knowledge in the air, free to everybody. All we have to do is to tune in and pick out what we want. But being in the air, it is ethereal like the air. There is nothing of permanency to it.

While the radio serves a very great purpose, civilization would be in a bad situation if it was the only means of record, for it is no record at all. It was the carving on the stones, made thousands of years ago, which bring to light now the wonderful things which happened then. It was the use

so much to our present civilization. It is the invention of the printing press which has made knowledge available in permanent form, to a larger number of people.

It is the permanency of the records of the things which have happened the bugs regardless. that have helped us. It is the permanency of the records of things now happening that will help future generations.

Furthermore, from an individual standpoint, it is the repeated consideration of good thoughts that makes them valuable to us. The thinkers have repeatedly thumbed the pages of good books in delving into the very depths of the thoughts expressed by other great men.

The radio has not changed the means of education, it has just helped it a bit. To learn, still means to study. and to study means to work, to read. So if you wish to make wholesome, inspirational knowledge yours, thus adding to the richness of your life, we hope you will not become a radio bug to such an extent that you will neglect your reading.

One man has wisely said, "Don't let your radio kill your reading, or you will soon be a dead one." On the other hand, if you will have your radio supplement your reading, it will make your reading all the more valuable.

Burton's Death Mourned

THE people of the state of Michigan have been smitten with exceeding sorrow through the untimely death of her illustrious

educator, Dr. Marion LeRoy Burton, president of the University of Michigan, at his Ann Arbor home a weekago Wednesday.

Dr. Burton was taken in his fiftyfirst year. He had been ill since last October, when, at a public gathering at Hill Auditorium, he was stricken.

His remarkable record of building at both the universities of Michigan and Minnesota, was only surpassed by his still more remarkable record as an executive, teacher, friend and character builder in the institutions and states where he served.

His loss is America's loss. Believing that education dominated by high ideals, was the hope as well as the defence of our civilization, he put all the energy of his brilliant mind to the task. So deeply did he lay the foundation of his work, and so well did he build, that his policies will undoubtedly be projected far into the future, and his influence reach out to coming gen-

Don't Forget The Borer

I T is safe to say that the European Corn Borer is going to be with us for a long time. For this reason it should not be for-

gotten. The economic influence of this insect should be constantly in mind.

The damage that the insect can do will not be felt the first year that he reaches a community. Nor will this damage attain its maximum the second and third years. But all the time, unless checked, it will be laying the founmation. It is a great step toward a dation for completely putting the growfuller brotherhood of man, for as we ing of corn to the bad. Such, at least, thoroughly advertised. Albert B. Cook, interchange thoughts we come to know has been the sad experiences of farmeach other better. And knowing each ers in territory infected for a number in the Ionia High School, was in of seasons.

But community effort will stay the damage. It is possible to so disturb the natural changes during propagation that the increase of the pest will be slow. Some are of the opinion that where this work is well done the loss will be almost negligible. The big point is, however, that the work must be well done.

It is a community job. No individual can cope with it alone. His individual work will help; but it will be only half effective where neighbors are negligent.

May it be possible that this and oth-

of the goose quill which has preserved er pests are blessings in disguise, com- Hastings. This event also was an outto us gems of thought that mean ing to us in such manner as to dem- standing one. onstrate the value and power of comthe fight for our crops does not bring these secondary values, we must fight

> Just About

W HAT is a nut? That is the question. (With apologies to Shakespeare). But, in anti-Shakespearian language, a nut is one

who has gone bugs on a subject. In other words, a nut is one who has spent more profound thought on a certain subject than the average individual, and therefore, being ultra average, qualifies one to the title of nut, really a modern title of distinction.

There are a few nut nuts in this country. They are strong advocates of a more prevalent production of that sweet morsel of food which nature covers with a hard outer covering. It seems that monkeys and squirrels have realized the value of nuts more than human beings. The squirrels, at least, are taking such good care of our natural crop that we have to import about \$50,000,000 worth of nuts from other countries to take care of our even moderate use of them.

Such a heavy importation ought to awaken interest in nut growing, which is just in its infancy. There are real opportunities along this line, for there are varieties in every section of the country which can be developed into good commercial sorts. Our state horticultural experts have found some very promising kinds in this state which are worthy of attention by the

Some have doubts that nut growing can be developed to a commercially profitable basis. But we have a few in this state now who are growing nuts successfully. One man, we know of, produced thirty-four bushels of walnuts from twenty-seven twelve-year-old trees, which he sold at \$9.00 a bushel. An income of \$300 from about an acre of land is not bad, most anyone would admit, especially when the cost of production is low.

We are nuts enough on the subject to thing that it has a good future. And we feel that a man would leave his children a good heritage if he would plant a nice grove of nut trees. Even he might reap a reward from them. It is our thought that it will be profitable for a farmer to be a nut nut.

A New Agricultural Force

H AD the Pied Piper of Hameln walked the streets of Ionia last Thursday and fluted as in times of yore he would have

believed as thoroughly as ever, in the bewitching power of his music. Men, women and children came by the hundreds from every direction, but they came not to their destruction, as did the rats and children of Hameln, but rather to their edification.

It was the annual mid-winter festival of the farm folks of that county. A big program had been arranged, and Jr., who heads the agricultural work charge. The chief speakers of the occasion were Aaron Sapiro, marketing expert; Dr. Kenyon L. Butterfield, the president of the Michigan Agricultural College, and Dean Alfred Vivian, of the Department of Agriculture of the was carried out on schedule, with over "You better get a job as clerk on a a thousand people enjoying the admanure cart." Seems ta me the Per-

Only a few weeks ago it was our pleasure to be present at another somewhat similar round-up in Barry county. Among those who took the in' once or twice fer hmiself, too. leading part, was Mr. Townsend, agricultural teacher in the high school at

These two county farmer gatherings munity effort. It may be the stepping are mentioned to bring to the attenstone to better things socially. We tion of readers, the fact that we have hope that this might be true. But, if a new agricultural educational force in tion of readers, the fact that we have our midst. This force has been developed quietly, but nevertheless, it has already become a real factor.

We speak of the Smith-Lever High Schools. In the state there are now over a hundred of these. Already their influence is being distinctly felt in the farming communities where located. Not only do they reach the boys and girls who attend the high schools and take regular class work related to the business of farming, but as at these big meetings, they serve also to reach the adults.

Seven years ago these schools were started, but they have already attained commanding stature. We can expect larger things to come from them in the future.

May we not see here the beginning of that universal agricultural education and culture, destined to put the great business of farming not only alongside of other businesses, but actually where it should be, in the vanguard.

Put an' Take

MAYBE you remember the game what was called Put an' Take, where you spin a top and it would say "put three," "take two," or etc. It ain't one o' them games what you play in sewin' circuls, so maybe you men don't know nothin' about it.

Well, anyhow, it was kinda interestin', 'cause it's so much like life. Even if luck's with you so you could take a lot, there's times when you'd have ta put, too. We can't take somethin' out 'a life all the time, without puttin' somethin' into it sometimes.

And the way it looks ta me we sometimes gotta put somethin' into it



fer awhile before we take anythin' out. Fer inst., Jed Jefferies put wild oats inta his'n and is now takin' wild oats out. And Sadie Osborne put the scorn o' man inta her's and she is takin' the scorn

o' man out now 'cause she is still Sadie Osborne. Alice Summers put love inta her life and there's a dozen men what wants ta love her.

But me not bein' a preacher, will just leave this fer a suggeshun fer some preacher ta use fer helpin' folkses along in their Sunday A. M. naps.

But me bein' a farmer of no repute kin say somethin' about farmin'. Fer inst., in farmin' it's just like Jed Jefferies. If you sow wild oats, you get 'em. I never yet seet a Sweedt potato turn out ta be a Irish one.

There's lots o' farmers like Tom Wilson, what don't play the game fair. They wanta take all the time, until what's ta be taken is all tooken. They work harder'n the devil ta keep on takin'. But they ain't wise; they're just foolish.

Now I'm lazy but I think oncet in a while—when Sofie lets me. And I figure it out this way. If I fed the soil well, it'll grow good crops fer me at no more work than it'll grow poor ones. It's just like this: two acres well fed will give me as much as four starved, and I don't have ta work near so hard on the two as on the four. I get Old Fert I. Lizer ta do lots o' the work fer me.

I got a friend what says when he went ta high school he wasn't very Ohio State University. The program bright and the Perfessor says ta him, fessor was doin' him a honor and didn't know it. 'Cause I think a man what is a good distributor o' manure is a public benefactor and he is think-

Well, I'll have ta go out and spread mine now, so, so long. HY SYCKLE.

Top-Dressing Winter Wheat

It Would Help to Increase the Yield By Ove F. Jensen

7 ITH prospects for an attractive clover, and do much to insure a good that he did not seed a few extra acres increase the wheat acreage, it is not too late to get more bushels There is a way to make the average wheat ed in the succeeding crops. crop produce from five to ten bushels thirty-bushel wheat is but little more than that of producing ten or fifteenbushel wheat.

The value of winter manuring for improving the condition of wheat has long been recognized and practiced. Applications of as little as four to six tons per acre are often very beneficial. far as practicable.

wheat price, many a farmer in catch. In many cases, the effect on southern Michigan will regret the clover will more than pay for the fertilizer. Furthermore, if all of the last fall. While it is too late now to phosphoric acid and potash is not used by the wheat crop there will be no loss, as a residual effect will be notic-

At the Ohio Experiment Station at more per acre. The cost of producing Wooster, spring top-dressing with nitrogen on a silt loam soil gave a net increase in value (over the cost of the fertilizer), of \$4.10 per acre, as an average for twenty-three years. In the twenty-three-year period, ten years were what could be called good wheat years, and thirteen were poor wheat years. In the good years, the average Where plenty of manure is available increase for top-dressing was six bushit would certainly be good practice this els per acre; in the other years it was year to top-dress all winter wheat as 8.4 bushels. Tests in three other parts of the state did not show quite such An advantage in top-dressing with good results, but in all cases except in manure is that it can be done almost the bad wheat years in one test, wheat any time during the winter or early at \$1.50 a bushes more than returned spring, while the ground is frozen. In the cost of treatment. In these tests fact, if the application is delayed until the wheat had been liberally fertilized the ground thaws out, it will be found at seeding time with phosphoric acid



The Hay Crop Will Use Any Fertilizer Left by the Wheat.

very difficult to haul a spreader or and potash, and, therefore, these fertilwagon over the field. There need be no fear of loss of plant food from manure applied on wheat during the winter months. Most of the plant food, if leached out, will be retained by the soil and become available to the plant nitrogen. On the lighter soils, howas soon as early growth starts.

Unfortunately, there is not always enough manure to both top-dress wheat and to plow under for the spring crops. With a limited manure supply most authorities agree that it pays to plow under the manure for corn rather than to apply it on wheat, for corn is a heavy feeder on ammonia and potash, which plant foods are advantageously supplied in manure.

Wheat, on the other hand, needs a larger proportion of phosphoric acid. On the average farm it will be profitable, therefore, to supplement manure with fertilizers. Where it has been impractical to apply the full amount of fertilizer on wheat at seeding time in the fall, there is an excellent opportunity to improve the wheat in both yields and quality by spring applications of fertilizers.

Usually only nitrogen or ammonia fertilizers are thought of in connection with spring top-dressing, and under some conditions, possibly only the nitrogen is needed. Under other conditions, however, both phosphoric acid and potash, either alone or with animonia, will pay in a spring application, although applying these fertilizers at seeding time may be the better practice. Certainly the soils that are in need of phosphoric acid and potash should give a response to a spring application of these fertilizing constituents.

plication of a good grade of fertilizer will result in a larger benefit to the and is practical on a small acreage.

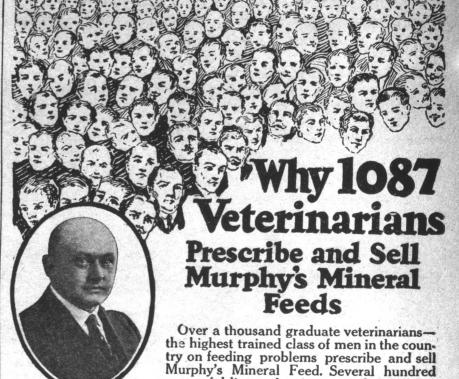
izers were not applied in the spring top-dressing.

Michigan experiments have not shown quite such good results from top-dressing the heavier soils with ever, top-dressing has been profitable. Twenty-four trials on the lighter soils of Michigan resulted in an average increase of 5.34 bushels of wheat at a cost of about \$1.80 per acre for the fertilizer. On wheat that was not fertilized in the fall it would no doubt be profitable to apply a fertilizer containing both nitrogen and phosphoric acid, and under some conditions potash, omitting the nitrogen on the heavier

Top-dressing applications should be made early in the spring, just as soon as the growth starts. On Michigan wheat this will generally be about the first to the tenth of April. There is no hard or fast rule about the time of application. It is only important to get the fertilizer on before the new growth is four to six inches high in order to get the full benefit of the plant food in the period of early growth.

Application can be made most successfully and most uniformly with a fertilizer grain drill, letting the hoes or discs barely touch the ground. If the tillering or stooling has not yet started, the discs may be set to cut into the ground one-half to three-quarters of an inch without materially injuring the wheat.

Broadcast applications are entirely practical if a grain drill is not available. Some end-gate seeders and lime distributors can be adjusted to distrib-Where clover is seeded, a spring ap ute 200 pounds per acre. Hand application is, of course, better than none,



thousands of farmers.

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Why has Murphy's Feeds received such indorsement? No other mineral feed has any such fame. Murphy's is admitted everywhere to be the best because it is

Put a pinch of Murphy's Feed on your tongue. It quickly dissolves -it is digestible. Do the same with an ordinary mixture. It is like a mouthful of sand or grit -indigestible, of little value.

are unequalled in results because they contain only the finest of ingredients. We use no agricultural limestone, although widely recommended—because agricultural limestone is only 3% digestible, and usually contains a detrimental percentage of magnesium. There is no Rock Phosphate in Murphy's, because Rock Phosphate is only 3% digestible. Every mineral that goes in Murphy's Feed must be digestible.

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State Capitol News

By Our Lansing Correspondent

with lobbyists and interested spectators, the house at noon Friday, February 20, by a sixty-one to twenty-four vote, passed Representative Culver's resolution rejecting the proposed federal child labor amendment. The final action was preceded by more than an hour and a half of debate and parliamentary maneuvers. Speeches in opposition to the resolution were made by Representatives Ate Dykstra, of Grand Rapids: John Crutchfield, of Saginaw, and Charles F. Haight, of Lansing. Those supporting the resolution for the rejection of the amendment included Representatives William J. Thomas, of Cannonsburg; John P. Espie, of Eagle; John Holland, of Bessemer, and Gus A. Braun, of

ON the eve of the final consideration of the child labor amendment in the house, a joint public hearing was held in the senate chamber. For more than three hours the battle raged merrily, the larger portion of the time being absorbed by the friends of the amendment. Passage of the proposed amendment was urged by representatives of such organizations as the Michigan Congress of Parent-Teacher Associations, The Michigan Sunday School Council of Religious Education, State Federation of Women's Clubs, Michigan Federation of Labor, League of Women Voters and American Association of University Women. Many of those testifying in favor of the amendment did not state whom they represented, but the feeling was prevalent that they were retained by some organization. Leading attorneys and jurists were numbered among this latter group. These people all declared that child labor conditions in Michigan were very good, but that this amendment was needed to allow congress to clean up the situations in more backward states. They maintained that child labor was a national problem and

ITH galleries and lines packed should be dealt with on a national this amendment was not drafted to fit basis. They bitterly denounced those opposed to the amendment, declaring malicious propaganda. The whole questhe proposed amendment was said to the farms. be a question of the rich man's dollar against the poor man's child.

> THE only voice raised against the ratification of this so-called federal child labor amendment was from the representatives of the Michigan State Farm Bureau and the Michigan State Grange. Speaking for the first organization, Vice-president M. B. McPherson, of Lowell, declared we already had about all the amendments that could be enforced. He declared that if this amendment were so drafted that it would compel every boy and girl to have some kind of useful employment, he would give it his hearty support. He pointed out that great care should be exercised in administering remedies for unsatisfactory conditions. Declaring that the citizens of Michigan were far from being unanimous in support of this proposed, amendment, he pointed out that he not only represented the Michigan State Farm Bureau, but also the Kent County Board of Supervisors and the State Association of Supervisors, and that all of these organizations had gone on record with strong resolutions in favor of rejecting the federal amendment. Discussing the value of useful employment as a means in the development of character, he contrasted the lives of three boys who had worked hard while still in the teen age, with three other young men who had grown up in idleness. The three men whom he held up as examples of youthful industry were President Calvin Coolidge, Governor Alex J. Groesbeck, and Lieutenant-Governor George W. Welsh, while the three who had grown up in idleness were Harry K. Thaw, Loeb and Leopold. Mr. McPherson maintained that

some state thousands of miles away, but that the one state aimed at agrithat they were ignorant and misled by culturally was Michigan, which had been held up to the world as the worst tion of the ratification or rejection of example of child labor employment on

> S PEAKING out of an intimate contact with farm people and rural conditions, Mrs. Dora Stockman, lecturer of the Michigan State Grange, made a strong plea for the rejection of the amendment. She declared that the grange charges its officers to see that children are not overworked or abused and that the grange had jealously guarded the welfare of childhood before many of the other organizations represented at the hearing had been thought of. She pointed out that she had never seen a child injured with a beet knife and urged the strict enforcement of school attendance laws for the remedy of any evils that might exist. Mrs. Stockman brought prolonged applause from the senators and representatives when she said, "For every boy and girl injured in Michigan through overwork, there are two going down to perdition through idleness."

C. H. Bramble, of the executive committee of the State Grange, appeared as an example of what resulted from working on the farm at an early age. He stated he had lived to be over sixty years of age and didn't think ·hard labor had ever hurt him. Resenting the inference that the opponents of the amendment were misled by propaganda, Mr. Bramble stated that in his observation many supporters of the amendment had not thoroughly investigated the situation. He declared he was in favor of limiting the employment of children, but said that those back of this present amendment had intended it to apply to farm children and substantiated his statement by showing that in the United States Senate every amendment which had been proposed to exempt the labor of

children on the farms and in the homes had been voted down.

BILLS seeking to bring about more equitable tax conditions in Michigan are being introduced in quantities. To promote economy and efficiency it is now suggested that the present three-man state tax commission be replaced by a one-man commission.

Representative Charles Evans, of Tipton, has introduced a bill to provide for closer scrutiny of real estate belonging to religious and benevolent societies before tax exemption is allowed. He declares that now real estate to the total value of \$516,000,-000 is being exempt from taxes, although a considerable portion of this property is operated for actual commercial profit.

Representative John Espie, of Eagle, proposed that the stock of investment companies be placed on the tax * * *

O THER interesting bills to make their appearance were as follows: By Senator Frank Young, of Lansing, a measure to provide for a better observance of Sunday by requiring the closing of practically all retail stores on that day; by Representative Frank McKenzie, of Concord, a bill to give quail permanent protection; by Senator George M. Condon, of Detroit, a very strict anti-firearm bill intended to reduce hold-ups and other crimes.

N an effort to check advance of the European Corn Borer in Michigan, Representative Joseph Warner, of Ypsilanti, has proposed a bill to give the State Commissioner of Agriculture authority to prepare and enforce regulations for the control of this pest. The bill provides for an appropriation of \$25,000 to defray the state's share of the expense. If this bill is passed, a considerable amount of federal funds will become available to aid in the control and eradication campaigns.

LATE AGRICULTURAL NEWS

THE WILLIAMS-CAPPER BILL.

THE Williams-Capper bill was revised five or six times before the committees concluded their hearings, and the last edition is known as the Haugen-Capper bill. It eliminates the secretary of commerce from the Feeral Marketing Board.

In making application for registration, the cooperative must show that its financial standing and business methods are sound. It must use all standards for agricultural products established under the United States warehouse act. All disputes must be submitted to the federal board for arnation of its accounts and submit to the board not oftener than twice a year a sworn statement of its financial condition.

McNARY-HAUGEN BILL ADVO-CATED.

HE revised McNary Haugen bill creating a farmers' export corporation, was advocated by several farm organization representatives. George N. Peek, representing the American Council of Agriculture, favored a special session if necessary, to enact the farm export corporation measure. He also asked for a congressional investigation of the activities of Secretary of Commerce Hoover in agricultural affairs. He declared that the recom-

mendations of the President's agricultural conference contained nothing which had not already been advocated by Mr. Hoover. Farm leaders do not favor Mr. Hoover's views concerning agriculture, and will protest against the domination of the department of agriculture by him.

CROP MARKETING ACT AMENDED.

HE federal cooperative marketing act of 1922 is amended so that the marketing agencies composed of middlemen or processors cannot escape the provisions of the Sherman and Clayton acts to protect trade and combitration. It must permit the examimerce against unlawful restraints and monopolies.

SATISFIED WITH JARDINE'S AP-POINTMENT.

M OST of the farm organization representatives in Washington express satisfaction with the appointment of Dr. William M. Jardine, president of the Kansas State Agricultural College, to be secretary of agriculture.

The names of 180 men were presented to the President as qualified for the post, but the contest had narrowed down to two, John Fields, of Oklahoma, and Dr. Jardine. When the Kansas delegation in congress united their efforts upon Dr. Jardine his appointment was assured.

During his boyhood days he worked on his father's farm. After graduating from the Utah Agricultural College, he became manager of a large farming company in Utah. He was made president of the Kansas Agricultural College when Arthur Capper was governor, and has made an exceptionally fine record as the head of that insti-

The name of R. W. Dunlap, an Ohio farmer and breeder, has been presented for the appointment to the post of assistant secretary of agriculture.

TRUTH-IN-FABRICS LEGISLATION.

islation will report to the main committee a textile branding bill which ture). will require the manufacturers of woolen goods that contain shoddy to mark them as to their true contents. The bill would not require the branding of goods made from all new wool. Senator Capper says the bill may not pass during the session, but it will be in position to be rather easily passed in the next session.

MID-WINTER HORT PROGRAM.

HE Michigan State Horticultural Society holds its mid-winter meeting at Traverse City, Michigan, on

Dr. Jardine is a native of Idaho. March 11-12, 1925. The program is as follows:

> Forencon, March 11.
> Address of welcome, James T. Milliken, Mayor of Traverse City.
> Response, George Friday, President Michigan State Hort. Society. Asparagus Growing, George Starr. Fire Blight Control, H. A. Cardinell.

Afternoon. Growing the Sour Cherry, Cultural Practices and Pruning, A. J. Rogers. Spraying and Harvesting the Crop, 7. P. Gray. The Sour Cherry Outlook, W. A. McCool.
The Profitable Utilization of Sound Undergrade Fruit, E. J. Holland, of Chicago, Ill.

A SSURANCES come from Senator Capper that the senate sub-committee considering truth-in-fabrics leg.

| Evening | The Desirability of Combining Fruit Growing with Dairying, E. O. Ladd. Thinking Nationally Concerning Sour Cherries, Moulton B. Goff, Sturgen Ray Wis eon Bay, Wis. Orchard Fertilization, (a motion pic-

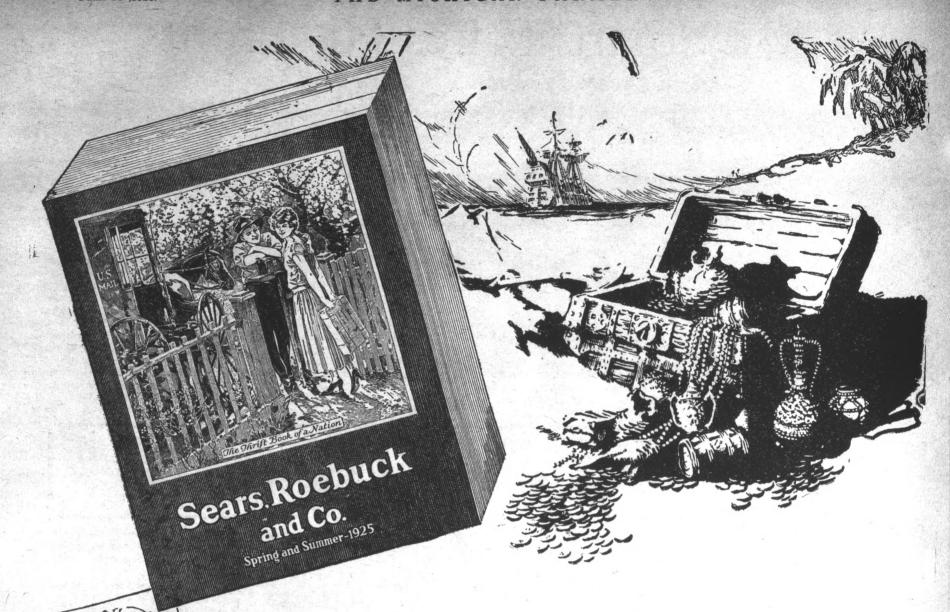
Morning, March 12.

Question Box.
Direct Sales of Sweet Cherries, J.
W. Chapin.
The Sweet Cherry Discussion, Our
Opportunity in Sweet Cherries, A. L.

The Possibilities of Packing Sweet Cherries, G. L. Burnham. Control of Apple and Cherry Aphids, L. G. Gentner.

Afternoon.
Certain Aspects of Winter Injury, F.
Bradford. Power Sprayers—their uses and Abuses, J. W. Freeman. The Spray Calendar for 1925, W. C.

Dutton.



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In Less Than a Day Your Order Is On Its Way

Mr. Stuart Takes His Profits

Gladwin County Man Produces Meat at a Low Cost

OBERT STUART, of Gladwin, who makes no pretensions of being a farmer in the sense that he actually occupies and operates a farm, recently concretely demonstrated that live stock is a paying industry in Northeastern Michigan when common sense and business acumen are harmonious team mates. The dual demonstration was physically and financially effected when he took a seven-months profit of \$950 on fifty steers, and a one-year's profit of \$1,358.84 on lambs from ninety-one

Mr. Stuart called at the office of the Northeastern Michigan Development Bureau on his return from Buffalo where he disposed of two carloads of steers. Fifty steers, he said, bought in the spring, averaged 720 pound each. They were put on some rented pasture the latter part of April and sold November 10 at an average weight of

By Joe Dermody

1.020 pounds each. They were puresstimates that his winter feed for the chased for, and were sold for, seven cents a pound. The 300-pound gain in weight on each steer gave Mr. Stuart a return of \$21 on each. Mr. Stuart's one require any special mathematical expense was \$100 for rental of 240 acres of pasture. His net profit without deducting the freight was \$950. Mr. Stuart points out that the pasture land could be bought for from six to ten dollars an acre, so that none of his profit could be charged up to the land, instances of success from live stock as the rental price paid represents a five to seven per cent return on the land.

live stock is perhaps even more interesting. He owns ninety-one ewes, lambs from which he sold in Buffalo this fall for \$1,143.84 net. He received \$440 for wool. He paid \$75 rent for 160 acres for sheep pasture and he

ninety-one ewes, plus yardage and shed, did not exceed \$150. No one need wear a pencil to a stub, nor does ability to arrive at the correct conclusion that the ninety-one ewes in a single year swelled Mr. Stuart's cash on hand by the not insignificant item of \$1,358.84.

The figures above are not isolated operations in Northeastern Michigan. They are perhaps typical, at least in and. Gladwin county, which ships more live Mr. Stuart's other excursion into stock than all other points on the Mackinaw division of the Michigan Central Railroad.

Echopenhauer's philosophical observation that pain is remembered long after pleasure is forgotten, and that the bad is positive and the good nega-

tive, accounts to some extent for the prevalence in some quarters of the conviction that this land is not adapted to live stock operations.

The case of one man who knew nothing of the game purchasing 4,000 sheep, putting them on a rented tract of land and hiring a manager at \$5,000 a year and expenses—an enterprise that was doomed to failure before it started-illustrates the disastrous effects which inevitably accompany a lack of knowledge and the consequent harrowing reports which have done irreparable damage to the reputation of Northeastern Michigan.

Mr. Stuart's experiences and that of many others accent the fact that a man who understands his business, selects the right pasture, and is at all skillful in buying and selling, can make a pretty profit with either cattle or sheep in Northeastern Michigan, the calamity tales of sensationalists to the contrary notwithstanding.

DUR SERVICE

as Satisfactory Service Cannot be Given to Unsigned Letters

SELLING RADIO SETS.

A friend wishes me to build him a radio set. I cannot afford to do this for nothing. How can I lawfully sell him a homemade one?—B. E.

We are not aware of any legal restrictions as to the sale of such instruments.-Rood.

SELLING ESTATE.

If a man has the deed to a farm, and the man dies, also his wife dies, can the administrator sell the farm, if there is a debt or mortgage, without the heirs signing off?—A. J. T.

The real estate owned by the deceased can be sold for his debts if, and only if, there is not sufficient personal property to pay them, and then is worth per ton, which he wants to only by order of the probate court.-

YIELD OF BUTTER FROM CREAM.

How can I get butter out of cream? Last winter I had ten pounds of butter, often more, and from the same amount of cream, and now only get around seven pounds, and the buttermilk looks very rich. Stir cream often and do not churn until cream is thick and sour, butter comes in about one-half hour.—B. H. H.

There might be several reasons for the cream not yielding so much butter this winter as it did last. If you have a different cow the cream may not raise and form as solid a mass as it did with the other cow, you have a thinner cream.

Again, if the cream is not evenly ripened it will not all churn out together because it takes longer to churn sweet cream than it does sour or ripened cream. This might be the reason for the buttermilk looking rich. Only the fat in the ripened cream being gathered into masses.

Painstaking care must be exercised where one makes butter from a single cow and the small batches of cream have to be accumulated for a churning. The last batch of cream must be ripened as well as the first, and of the same temperature if you want to get exhaustive churning. The cream should be kept in a cool place and every time a new batch of cream is accumulated. it should be thoroughly mixed with the old. The last batch of cream before churning should be thoroughly mixed with all the rest and left to stand for a day before attempting to ripen the whole mass. Then bring the cream

jar to a warm room, set it in a tub of warm water and stir it frequently until the whole mass is at about seventy degrees temperature. Now leave it with an occasional stirring, for twentyfour hours. The whole mass ought to be fairly evenly ripened. Now cool to sixty degrees and churn. The butter ought to come in about half an hour and you should have a fairly exhaustive churning.

DETERMINING VALUE AND WEIGHT.

I have two silos on the farm which I worked the past year. Now I have given up the farm to the landlord and I would like to know what the ensilage

buy, also how to measure the contents of said silos. One is 10x36 feet, which I haven't opened, the other is 10x30 feet, which I have fed down about six or seven feet. Therefore, if I have the rule to measure ensilage I think we can work it out, but the price is what I want to know and how it is what I want to know, and how it is

There is practically no established price for silage and no market for it. We must get its comparative value by comparing it with some well-known food. Timothy hay is the same kind of a food as silage, that is, it is very similar in analysis and contains the essential food nutrients in much the same proportion. Analysis seems to show that timothy, pound for pound, is worth twice as much as silage, or silage is worth half as much as timothy hay. If the price of timothy hay is \$10 per ton in your barn, then you should get \$5.00 per ton for your

To determine the weight of your silage first get the cubical contents of the silo in cubic feet. To do this find the area of the surface by multiplying the square of the diameter by 3.1416 and multiply this area by the depth of silage in feet, which gives the cubic feet of silage in the silo. Multiply this by thirty-five, the average number of pounds in a cubic foot of silage. Now divide this by 2,000, the number of pounds in a ton, reducing it to tons. The number of tons, of course, multiplied by the price per ton gives the

The only speculative thing about this is the weight of a cubic foot of silage. It is very evident that the weight of silage will vary with its depth. The lower portion of the silage will be more compressed by the weight from above and hence of greater weight. The silage will be lightest on top and gradually increase in weight as you go to the bottom.

The Iowa Experiment Station has actually weighed the silage at different depths and ascertained its correct weight, but instead of figuring the actual weights at different depths it will be approximately correct to figure the average weight for a thirty-foot silo, which is thirty-five pounds.

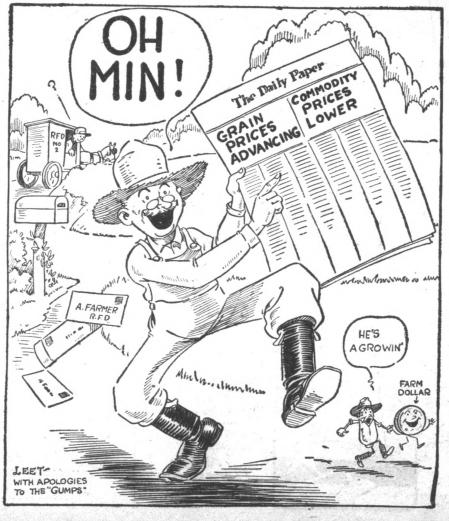
A HAY DISPUTE.

A. lets B. have two fields of hay to put up. B. is to put up A.'s field of hay first and then put up his field. B. put up A.'s field and neglected to put up his field until the last of September. Is there any way that B. can claim part of A.'s hay, A. having forbid B. putting up his field at the right time of year. Is there any time tame hay should be put up?—Subscriber.

If there was a definite understanding as to how the hay crop was to be divided before cut, B. would have no claim on A.'s share.

There, no doubt, is a proper time of year to harvest hay, and due to common practice, one would assume that this time would be within certain definite and reasonable limits. If B. attempted to cut the hay out of season and A. could show that the meadow would be damaged by so doing, he would have a right to enter complaint. -F. T. Riddell.

Are We Down Hearted?



AN ELECTRIC FARM.

M ORE than a hundred electrically operated devices for farm and household work were recently shown in operation on a real farm at a farm products show in Pennsylvania. Never, to our knowledge, have so many devices been brought together on a farm, and set to work. The house, barn, sheds, yard, dairy, workshop, garage, pump house, were all equipped. In the house was every known electrical convenience and equipment for the kitchen, dining room, living room, bedroom, bathroom and laundry.

There was no thought that any farmer would ever find it practical or convenient to equip his farm as completely as shown on this occasion. The idea was to bring under the roofs of one farmstead the outstanding electrical achievements of practical significance to farming.

ACCIDENTAL LESSONS.

M UCH new knowledge comes to us by accident. It was no plan of Sidney Smith, an average of the good farmers of Gratiot county, that his team should run away with a few bags of fertilizer on the wagon. But they did; and as they raced across the unfenced oat field of neighbor Jim Warner, this fertilizer was scattered in the wake of the wagon.

Over the course where the team ran, the oats grew somewhat higher, showed stronger stalk, had larger, better filled heads, and neighbors estimated that it would yield fifty per cent more than the grain where no fertilizer fell. Warner is now sold on the idea that fertilizer is good for crops, at least, under some conditions; a position he would not admit before this happened. -R. Digger.

WHAT MADE OUR BIG CORN CROP.

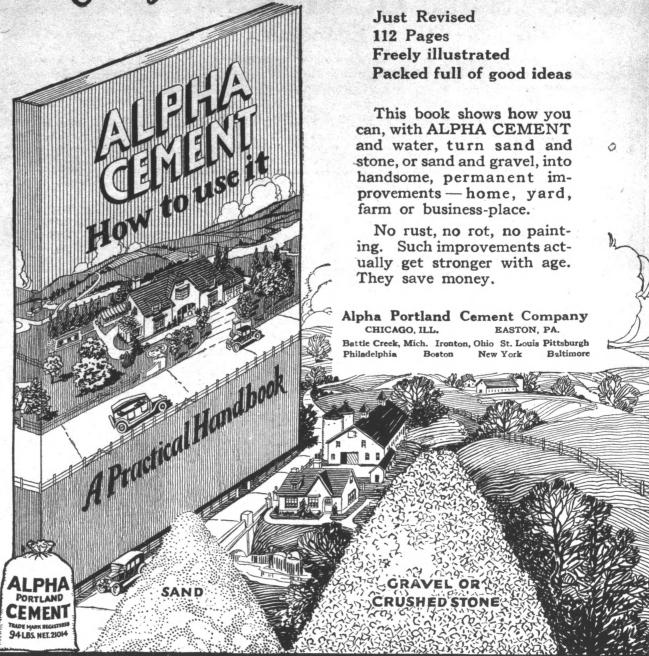
HAVE just discovered the probable reason for one side of our corn field yielding so big a corn crop last year, while the other did only fairly well. Unfortunately we did not measure the yields of the two parts to learn the average per acre; but on a conservative estimate, I judge, it went twenty bushels more per acre on the better half of the field.

In looking over some reports from the Ohio station, I find that it requires about 150 pounds of nitrogen to grow a corn crop. And, according to the same source of information, turning under a good stand of sweet clover early in the spring puts in the soil about 175 pounds of this peppy element. I, unconsciously, did this very thing on the portion of the field that yielded heavy. Right to the row you could see where the sweet clover had grown. In turning the clover down we added ample nitrogen to keep the corn coming. I want, therefore, to put in my testimony in favor of this crop for pepping up the soil for corn, and, no doubt, almost any other crop that is produced here in Michigan.-D. Dinwiddie.

SEED CORN TESTS ARE DISAP-POINTING.

F we must face facts, the sooner we know about it the better it is likely to be for us. This is rightly true when it comes to the matter of sorting out the seed corn. Apprehension regard the quality of available seed corn in this locality is all too true. It is poor stuff, speaking generally; testing from nothing up to fifty per cent in many of the early tests made. Should we learn right away that the corn we are depending upon for seed is no good, the opportunity is still open to secure some elsewhere. But, if we do not know until planting time, or even later, when the plant should be coming up, then our delay has cost us a crop of corn, and there is no chance to re-

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Miagara DUSTS and DUSTERS Protect Fruit and Crops Economically

Here are the plain facts that prove that the Niagara method is the most economical and produces fruit of the highest market value.

Maine Department of Agriculture Bulletin, Vol. 17, No. 3 Rarely is a standard brand at fault

"The cost of material for dusting is about twice as great as for liquid spraying, but the cost of making an application of dust is much less than for one of spray. In general, the total cost per tree is about the same. Such a statement, however, does not take into consideration the time and labor saved, nor that the orchard may receive a complete treatment at a critical period."

Ordinarily the grower thinks of his material and his labor as the two factors that enter into the cost of protecting his fruit either with dust or spray. But when he sprays, he pays for 6 or 7 times as much gasoline and oil. Much more interest and depreciation on his investment and much larger repair bills, to say nothing of 5 to 10 times as many hours work. For, according to the Cornell Experiment Station, Manual of Fruit Diseases, by Prof. L. P. Hesler and H. H. Whetzel, "An orchard may be dusted in one-fifth to one-tenth the time required for spraying same."

Then remember dusting gives the highest finish to apples.

N. Y. Experiment Station

"From the standpoint of finish and lustre of the fruit, the apples dusted with sulphur were superior to those sprayed with lime-sulphur and were unexcelled by the fruit from any of the other treated plots. Jour, Econ. Ent. Vol. 17, No. 2."

Now, Just a Word about Niagara Dusters Themselves

Niagaras are simple, strong, practical. The result of 9 years of actual use in orchard and field where every part has had to stand the real working test and do its job in the best possible way. Remember both Power and Traction Crop Dusters can be fitted with attachments to convert them into Orchard Dusters and the Fruit Duster can be equipped with a crop attachment.

Every grower will find it to his advantage to investigate the the Niagara Method thoroughly and find out how to save money, time and crops by getting the right Niagara for his farm. Talk with your dealer or write us.

Niagara Sprayer Company Middleport, New York Hand-Traction-Power Dusters

More than 400,000,000 pounds of cull apples last year

Most of these culls were caused by aphis. These insects are very destructive. They not only stunt and deform the fruit, but also retard tree growth and help spread scab and blight.

Damage by aphis can be prevented by spraying with Hall's Nicotine Sulphate. It contains 40% pure Nicotine—the deadliest aphis poison known.

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

A ten-pound tin makes 800 to 1100 gallons of spray. The cost is less than 2c a gallon. Buy from your dealer. If he cannot supply you, send us your order along with his name.

NOTE-Hall's Nicotine Sulphate is also deadly effective against red bugs, leaf hoppers, thrips, psylla and many similar insects.

It mixes easily with Arsenate of Lead, Lime Sulphur and any other standard insecticides.



3955 Park Ave., St. Louis, Mo.



3.50 1.25 2-lb. tins, 1/2-lb. tins.

Some Essentials of Spraying

The Relation of Pressure, Quantity and Method to Control

By H. A. Cardinell Horticultural Extension Specialist

for a state average, the subject of

Following such test years many growers are tempted to question the reliability of the brand that was used. and whenever a grower finds a neighbor that had good success with the same brand, he next turns to question causes. whether or not the college spraying calendar was adequate for the conditions of such a season. Usually the recommended calendar was not at fault, but the interpretation of the cal-

endar was too loosely managed. Spray Calendar Help.

The state spraying calendar has not been definite in stating the time or condition when each application should be completed. The 1925 spraying bulletin corrects this weakness. For example: the pink application within a radius of two miles in a single county varied nearly three weeks in 1924. In addition to that fact, many growers were applying the pink application when the writer was making the calyx application in a demonstration orchard, and this delayed schedule was carried through the season until the definite date was announced by the department of entomology when the second brood codling moth appeared in the cages of that county.

This brings us to the most important point in spraying management—timeliness of application. All the remaining points that will be discussed in this paper are secondary considerations and remain of minor importance unless proper timing of each application has been accurate. If the schedule is correct then other features may be of economic value.

Second only to timeliness is the quantity of material applied to each tree. What is the proper quantity that should be applied to each tree? Tables have often been presented showing the range of the average number of gallons that should be used for different ages of average trees of each fruit. There is nothing definite in such tables although they have been useful to beginners. The proper quantity should be the number of gallons applied to trees that will guarantee adequate coverage or protection during test seasons that are favorable for the devel- more minute of time for each tree. opment of pests. When the age of the tree is divided by two the resulting figure is nearly correct to represent the number of gallons that a tree should receive as an average for each application for the entire season.

Pressure.

If the spraying schedule used is accurately timed and the quantity of material applied to each tree throughout the season is sufficient to guarantee protection, of what value is increased pressure? Hitherto unpublished data from the spraying demonstration conducted in the orchard owned by Joseph Smeltzer & Sons in Benzie county, Michigan, in 1923 throws some light on this subject.

In this test three different pressures were used, viz.: 190 lbs, 250 and 350 lbs. The average amount of spray used in each case was 14.2 gallons. The 190 lbs. pressure showed 86 per cent control; 250 lbs., 92 per cent, and 350 lbs., 95 per cent. Which indicates that the higher pressure was best.

In 1924, five methods of application were tried in the Trevor Nichols orchard in Allegan county.

Methods Used.

Row one was sprayed by two operators, one from the top of the tank facing the wind, but always on the east side of the trees, and the other from the ground spraying the inside as well as the outside of the tree, and tity that resulted from this method.

NASMUCH as the spraying program completing it at one operation. This in Michigan in 1924 netted less than method resulted in sixty-three per cent fifty per cent control of apple scab of the tree-run crop of fruit classified as free from scab, worms, sting, aphids spraying dominates the plans for 1925. injury and all other insect blemishes.

Row two was sprayed by tank and ground operators as in the case of row one, except that no inside spraying was done. This method resulted in sixty-six per cent of the crop free of injuries from the above mentioned

Row three was sprayed by one operator standing on tank. The trees were completed by driving on one side and back on the other. This method gave sixty-three per cent clean fruit.

Row four, sprayed by one operator from the ground and spraying the inside as well as the outside portions of the tree, gave sixty-five per cent clean fruit.

Methods Equal in Results.

Row five was sprayed by tank and ground operators, spraying the inside and the outside of the tree, but with the wind, thus leaving the opposite side of the tree to be sprayed when the wind changed. Often, however, if the wind did not change, or subside within three or five days the other side was sprayed, notwithstanding. This method resulted in sixty-seven per cent of the tree-run crop free of pest blemishes.

For the sake of comparison it can be said that the percentage of clean fruit resulting from all of the methods was equal, since it ranged from sixtythree to sixty-seven per cent, well within experimental error in gathering records from 75,000 apples that were examined to get these records.

If the control was about the same, what is to be said for or against each method.

Differences in Methods.

Row three, tank only operator, tied with row two, outside only, two operators, for the lowest time requirement in spraying each of the trees; but the tank only (standing atop the tank) method required six gallons less material than in the case of two operators, even though only the outside of the tree was sprayed in row two.

Row four, ground only-inside and outside spraying-one man, was second lowest in the quantity of material applied but required an average of one

Row two (previously compared with row three) tank and ground outside only, was third in quantity requires ment and tied for honors for time.

Row one, tank and ground inside and outside spraying, was the highest in time of any of the above four methods, but required fifteen gallons more than did the lowest quantity, row three, sprayed from the tank by one operator, and required two minutes more time per tree.

Procedure Must Be Determined.

Row five, tank and ground; inside and outside; with the wind, is in a class by itself because it was the only method requiring that portions of the tree remain exposed for several days hoping for the wind to change. It was tied for the highest time requirement, and required nearly as much material to spray one side of the row as the same two operators used in row two spraying the entire outside of the tree.

Any two application methods of spraying is apt to result in overlapping and with an almost unconscious knowledge that the remainder of the tree will have no protection from that application the tree is sprayed from every possible point of vantage and as a result the trees under this method received two-thirds covering from each side, which undoubtedly accounts for the extreme and uneconomical quan-

Cloverland News

SCHOOL TESTS SEEDS.

THE Menominee County Agricultural School is serving farmers by testing their seed. The service is free. Three Menominee county farmers have raised certified Wolverine oats, this past year. Their crop is being taken locally by their neighbors.

WILL LEARN FIBER WEAVING.

T WENTY Hermansville women have organized a class in art fiber weaving. County Agricultural Agent Karl Knaus is the instructor. The agent is prepared to organize similar classes in other communities of the county, he announces, should there be a demand for them. The work is connected with the rural schools.

WILL BUILD UP GRANGE MEMBER-SHIP.

A T the recent meeting of the Michigan State Grange, A. I. Thompson, of Iron Mountain, was made deputy state master for the Upper Peninsula. Mr. Thompson is developing a program for rejuvenating grange work in the peninsula and has several workers on the job for this purpose.

WOULD SHIP BERRIES IN CAR

A N agitation has been started to se-cure express carload rates on berries shipped from the Upper Peninsula to outside markets. The present method of handling berries, it is claimed, impairs the quality of the fruit when it reaches its destination, and it is too expensive. A Manistique shipper estimates that last season about 30,000 crates were shipped from that point alone and that the returns for the whole peninsula amounted to about one-half million dollars. The express rate to Chicago was \$2.25 per cwt., which is regarded as too high. It is proposed to secure car shipments at

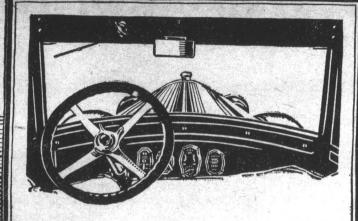
CREAM CHECKS ARE MOUNTING.

S INCE September 1, 1924, fifty cars of grain were shipped from the station of Rudyard, Chippewa county, it is reported. This consisted of fifteen cars of peas, fifteen of wheat, and twenty of oats and barley. From October 1 to January 22, 601 carloads of hay were also shipped from this point. But this is not all-were it so, the agriculture of this section would not be well balanced. The local bank is now reported to be cashing creamery checks amounting to \$200 daily and this is a little lower than usual.

GET HOLSTEIN MEDALS.

THE Holstein-Friesian Association of America has awarded bronze medals to the following Upper Peninsula boys, members of calf clubs, for the excellence of their work as Holstein club members. Arthur Nulund, of Erwin township, Gogebic county; Tolyo Mattson, of Trenary, Alger coun-Egberg Talsma, of Rudyard, Chippewa county; Daniel Ferguson, of Escanaba, Delta county; Joseph Drake, of Crystal Falls, Iron county; Albert Rait, of Newberry, Luce county; Albert Machinski, of Engadine, Mackinac county; Arnold Hoglund, of Skandia, Marquette county; Stanley Gunderson, of Wallace, Menominee county; Richard Menigoz, of Tobax, Ontonagon county; Karl Linderoth, of Manistique, Schoolcraft county.

If we waste today, we can never make it up, for each day will bring its duties as it comes.-Confucius.



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An hour in the seat or two hours afoot— WHICH?

Those with Planet Jr. No. 72 two-row cultivators managed to "make" corn last year in spite the conditions. The extra bushels that timely cultivation gives soon pay for this famous

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Just consider what it means to cultivate rapidly and thoroughly two rows of corn, potatoes, beans, cabbage, etc., at one passage. Remember—Planet Jr. 72 does twice the work of the best single-row riding cultivator with no more horses. Work this out on your own farm. Ask your dealer to reserve you one this year.

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Grow what you eat!

COAL in carload lots at attractive prices. Farmer agents wanted Theo. Burt & Sons, Melrose, Ohic



the Seed?

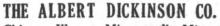
FELLOW wouldn't be far wrong if he answered, A "Everything!" The wrong kind of seed may mean the difference between profit and loss on a whole season's work.

The Seed Laws help. But even if the tag on the bag is correct, the tag alone never can tell the whole story as many a farmer has learned to his sorrow.

Before you buy your seeds this spring, get all the information you can about seeds and seed testing.

"7 Lessons in Judging Seed" is the title of a little book that is worth dollars and cents to every

farmer. Not a seed catalog but an authoritative discussion of seed buying, prepared by seed experts. It is sent free on request. Write for your copy today.



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How Much Depends on Tuning Tractors for Spring

Time to Get Iron Horses Groomed By Frank A. Meckel

I N order to do the best kind of work, them well in gasoline or kerosene. Afany machine must be in the best townish to winter any machine must be in the best

kind of condition. That's just as true for the human machine as it is for a tractor or grain binder.

There are times when a machine will become ill and break down entirely, just as does the human machine. Such times bring about losses and delays, and the best way to avoid the long delays and the big losses is to follow a course of prevention rather than a course of cure. The old saying that an ounce of prevention is worth a pound of cure is certainly applicable to power farming machinery. The tightening of a nut or bolt when first discovered will usually prevent a serious delay later on which would occur if the part were allowed to remain loose.

The time for fitting out a machine is before there is an immediate need for it, and the most logical time to do the work is during the slack winter season.

A general overhauling of the farm tractor should include a good cleaning of the engine. The cylinder head should be removed and the carbon thoroughly cleaned out. This can be burned out in a shop equipped for the work, but on the farm the usual method is scraping. A narrow putty knife or a stout screw-driver or a regular bearing scraper will make excellent tools for this work. Spark plugs should be removed and carbon deposits cleaned from them also.

Valve springs should be taken out, dipped in a can of kerosene and wiped clean. The valves should then be carefully ground to a good seat, for on them depends, to a large extent, good compression.

The next thing in order would be a esting and adjustment of the main and connecting rod bearings. Any knocking or rattling that may have been noticed when the tractor was in operation might easily be caused by loose bearings.

A thin shim or two taken out of the joint and the bearing bolts again drawn up snug should suffice for adjustment, but considerable care is necessary in securing a perfectly fitting bearing. After the bearings are adjusted, do not be alarmed if the motor turns over with some difficulty. Of course, it should not bind to such an extent that it can not be cranked, but it can be pretty stiff and still all right. The first time the engine is run after any bearings have been adjusted be sure that there, is plenty of clean oil in the crank case and that the engine is operated slowly for short intervals until the bearings wear in properly. It is not a wise plan to put the tractor at any heavy work until the engine has been limbered up a bit after such adjustments have been made.

It is important that the cooling system be carefully checked. The radiator should be drained and cleaned. A solution of lye and water will answer very well for taking the direct and accumulated grease out of the radiator, but the entire cooling system should be well rinsed with clean water after such a treatment. heat recording device in the radiator cap. The working temeprature should be kept as near 180 degrees as is possible. If this temperature varies to clogged radiator, a loose fan belt or a faulty pump for the cause. Every tractor operator should have a spare fan

After the engine and all of its parts have received attention, the wheels should be gone over. It would be wel! the anti-friction bearings and clean ing upon their sale.

ter wiping them with a clean rag, they should be well smeared with a good grade of grease and replaced and drawn up snugly at the same time. A front wheel with a loose roller or ball bearing will soon be ruined, especially if it should be the wheel which runs in the furrow. It is always a good plan to inspect the furrow heel of any tractor after every day's run in the field.

The cannon bearings or outer bearings of the rear axle should be well supplied with fresh grease. Some tractors are now equipped with pressure lubricating devices which enable the operator to force the lubrication to the most remote portion of the bearing.

Another item for inspection is the frame. All nuts and bolts should be given a turn or two with a wrench to insure against any parts working loose. Wheel lugs should be tightened in the same way. Should a wheel lug be unduly bent or broken it is best to remove it and either have it straightened or replaced with a new one.

Perhaps a general inspection of this kind will bring to light some broken parts which must be replaced before the tractor can be used for regular work. These parts will be on hand in plenty of time if ordered now, but if one waits until the day before he wants to go into the field with the tractor, he may experience a rather costly delay.

Radio Department

RADIO A BOON TO FARMERS' FAMILY.

WHEN we bought our radio we intended it more for our own use than for the children. However, it has helped us all so much more than we could possibly have anticipated. We now have no trouble whatever in keeping our older children home at nights and a good many of the neighbor children, too, spend their evenings at our house, enjoying the radio with us.

Another phase of the benefits derived is the way the little tots hurry into their nighties to sit on Daddy's knees while the bedtime stories are coming in, and then when that is over they go off to bed so contentedly. There is no more need for us to mention bed.

For myself I find that the darning and mending basket that before seemed bottomless, now goes automatically and without knowing I have been working, I find myself at the bottom while enjoying the music from all over our United States.

One thing that has worried us in living so far from a city has been the religious life of our children. Now we all enjoy several sermons every Sunday, and we visit around at all different churches and creeds.

I would say that the radio is a boon to any farmer's family.-Mrs. E. R., of Stambaugh, Mich.

The great fault with our marketing A mighty good system has been that the seller has tractor accessory is some kind of a usually been well informed as to the demand and supply of farm products, while the buyer was more or less ignorant. As a consequence, the farmer was at a disadvantage, and took a any great extent, one can look to a price below what conditions warranted.

The radio is changing this situation. Through it the farmer not only secures the information in the hands of the middlemen, but he has that information at practically the same time. It is possible for buyer and seller in these days to meet on the level, knowto remove the front wheels, take out ing all the conditions and factors bear-



They Cut a Hole in the Ice and Wait for the Fish to Jump Through.

Let the Snow Bawl

-And the Ice Cream By Harv Hess

one of our local dairymen who till I was past thirty. Homer was and that dumb-bell comes back with: "Homer was the guy Babe Ruth made famous." That's a good one, and I'll say this for the cow-guardian: he wasn't no ace when it come to the classics but it looked to me like he knew his sport sheet and, it's my opinion that the little old sport sheet is one of the best and cheapest elixirs of youth we can buy. As Grantland Rice says: youth, and youth's eternal." "Sport is

There's lots of us buzzards that's getting too old and stiff to draw much applause from the howling mob if we were to try our hand at pole-vaulting or hockey, and the only chance we got of keeping in the running and finding out who's who in the sport realm is by reading the athletic column. shouldn't devote all our reading to doings of the grange. We should read something about the achievements of a much better known Grange, namely, "Red," versatile half-back of the University of Illinois. No, I don't know the gentleman, nor I've never had the privilege of watching him in action, but I get a big kick out of reading the papers after one of his performances and I imagine myself as a young buck, between the ages of fifteen and eighteen, playing left tackle on our little high school team. Young again? You bet, and it's a great tonic.

But this ain't supposed to be a lecture; it's a lyric poem. If you remember a short while ago I put you to sleep by relating a few cold facts about our Northern Michigan winters, and this evening, if the editor is willing, I will lull you with a travesty on how some of us boys, who are lucky enough to own farms bordering a lake, put in the few idle hours of winter. So behave, for a few minutes, and we'll introduce our atheltic director, Mr. Jack Frost. Step out, Jack, and meet the bunch.

I gets a letter the other day from a friend down in Peoria, Illinois, and among other flattering compliments he "What in the world do you do for entertainment up there in Snow Man's Land in the winter?" Some of those old roosters make me tired, honestly. They think we're grizzlys and hibernate after November 1. This baby who wrote that query is a doctor and he thinks the only thing ice is for is to reduce a swelling. It will also produce a swelling if you hit it head-on, like I done the first time I shook hands with a pair of skates. Ain't they a two or snowshoe and it makes each wicked little thing for a rookie to get one of your dogs too heavy for third mixed up with? Where I come from, zone parcel post. But a little half-mile

HE other day, somebody asked pitchers and I'd never mounted skates

It looked so easy to see the young bucks gliding along without no effort whatever and, if they wanted to give her a little more gas, why, they'd just rig up a sail out of an old shawl or a horse blanket, hold that outfit up so the wind would hit it good and, believe me, they'd step right out. This is the first thing I did, or didn't. I hadn't gone ten yards before I collieded with a congealed piece of the lake and right away I heard 'em sing. They'll tell you, these astronomers. that stars are billions of miles away and that it takes whole years for them to get down to where me and you are. They're wrong. There was a couple hundred planets within a few feet of my observatory ten seconds after I done my dive. If I'd only known, I could have rigged up in a football outfit; but to go out there with nothing on your head, or in it, and with just a thin pair of trousers on, why, you're flirting with a nurse, that's all. No, sir, I'm too old for such toys and the only skates I'll get on again will be horses. In that case you've at least got soft ground to fall on.

I never yet took a tumble in the dark where nobody could see me. They've always been public events and, on this occasion, one of the hyenas present managed to quit laughing long enough to suggest that I trade them for a pair of snowshoes. Now, snowshoes can hardly be classed as a winter sport. It's almost a necessity. A snowshoe has the same relative significance to our mode of travel as gasoline has to the people in Akron. The first time I ever saw a pair of snowshoes I started looking for the tennis Say, couldn't a guy play a peach of a net game with one of them? You could reach all over the court. Anyway, they're a good, clever institution and I'll bet the fellow who invented them has made enough so as he can be wearing patent leather pumps in southern California.

But really, as I said before, this hardly falls under the caption of "sports." The only sport there is to it is watching the other fellow learn. One thing that's fond of our winters is chillblains and to prevent them from getting too much of a foot-hold (laughter) we wear two or three pair of wool sox, a pair of felts with arctics on top of them. It's quite a feet to carry all that and then you go to work and add a yard of

(Continued on page 282).



Beach Sports in the Winter Time.



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BEFORE you buy fence be sure to get full information about our improved Super-Zinced Fences. They are armored against rust by the heaviest coating of zinc that can be successfully applied to wire. We use a special formula of steel, and by our improved process the zinc is so closely bonded to the wire that it will not crack or peel.

are made in a wide range of styles and weights for farm, poultry and garden. Their sturdy hinge-joint construction and superior rust protection establish a new standard of fence service and durability.

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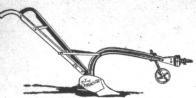
There is a John Deere-Syracuse plow for every field condition—in level land, on the hillsides—in hard, stony land or in wet, sticky subsoil, in clay loam or sod—they never fail.



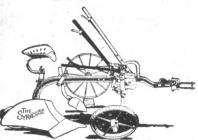
John Deere-Syracuse No. 1441 Plow



John Deere-Syracuse Hillside Series



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For Every Soil

Plows of the 1441 Series represent the greatest value in walking plows offered today. They take either chilled or steel bottoms, as condi-tions may require in different sec-tions. Strong steedy supplies seed tions. Strong, steady-running, good penetration. The latest addition to penetration. The latest our line of walking plows.

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Our line of hillside plows, headed by the 821 Series, is complete and highly efficient. They do excellent work in level land as well as on hillsides. Plow body swivels on chilled bearings—release lock by touch of the toe. Nos. 226 and 236 and No. 26 are great favorites.

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Farmers requiring small plows will get the best results with either the No. 459 or No. 1459. The former is our smallest, lightest-draft plow, but has all the qualities of our larger plows. No. 1459 is slightly larger.

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No plow of its type pulls lighter than the John Deere No. 210. All weight is carried on oiled bearingsrolling landside serves as third wheel. Front furrow wheel casters on turn— Plow runs guides plow perfectly. level at any depth-plows deep when turning square corners.

Go to your John Deere dealer's and sect the Syracuse plow you need. Write r booklet—address John Deere, Moline, . , and ask for booklet XY-422.



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Wear the Brooks Appliance, the modern scientific invention which gives rupture sufferers immediate relief. It has no obnoxious springs or pads. Automatic Air Cushions bind and draw together the broken parts No salves or plasters, Durable. Cheap. Sent on trial to prove its worth. Beware of imitations. Look for trade-mark bearing portrait and signature of C. E. Brooks which worth. Beware of imitations. Look for trade-mark bearing portrait and signature of C. E. Brooks which appears on every Appliance. None other genuine. Full information and hooklet sent free in plain, sealed envelope BROOKS APPLIANCE CO., 323 Mat Si Harshill Michael Co. BROOKS APPLIANCE CO., 323A State St., Marshall, Mich

To End Broken Hame Strap Premax Hame Fastener is the only flat link fast-ener; quick, easy lever method of adjustment; pressed steel with rust-proof finish; adjustable—never too tight or too loose; spring snap—cannot drop off when harness is removed. Send 50 cents for a pair.

Six Sizes WRENCH SET
Sizes 5-16" to 5-8" on ring; stamped from hard, cold-rolled steel; white nickled finish; fit hexagon or square nuts on auto, radio, lawn mower, corn sheller, and other articles. Send 25 cents for complete set of six. money PLAN

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HB-35. Wearing floor varnish per gallon....\$2.50 HB-40. Inside spar varnish per gallon....\$3.00 HB-45. Outside spar varnish per gallon....\$3.25 FREE! Ask for your copy of our Paint Color Guide Card, showing actual colors of outside and inside paints, stains. etc.. No. HB -42. Dept. HB-42.

HARRIS BROTHERS CO. 35th and Iron Sts., CHICAGO, ILL

Let the Snow Bawl

(Continued from page 281).

the world if you had to wallow through here's more power to the snowshoe heads together, though, and try and invent some kind of a rig for horses. If you want to take a shot at it some time, pick out some place where the snow ain't very deep, because if your snowshoes should ever get foul of each than coaxing to get you out.

Well, that's that.

Now, take a look at the picture showing the little houses on the ice. When you get 100 of them all within a radius of a mile, you've got the capital of Iceland right at your front door. It's the winter residence of our male population—the Talm Beach of our county. Inhospitable looking little igloos, ain't they? And all built alike. If you were to go up to Jones' farm and ask for Mr. Jones and his wife would tell you he was down in his shanty, wouldn't you have a sweet time locating him? There are no streets, not even a alley, and none of the houses are numbered. I don't see how even the owner can distinguish his own, and lots of them can't, either. They have to tie cans or pieces of different colored strings to the doors as a means of identification. With town houses, it's different. One will be built of brick, another of logs; one is a colonial type or a Siberian bungalow; there's an ash tree in one yard and an ash can in another; one house boasts an Airdale, another a goat, and so on. But these shacks chute like a 44 bullet leaves its hangare all designed by the same firm of and it almost takes a bloodhound to just like he'd been dumped there by locate the one you want.

It don't require a carpenter to build one; a guy wants to be a paper hanger. They are made of pasteboard boxes which are flattened out and tacked on a wooden framework. The wheelbase of these one-story apartments is 4x6 feet, with a hole cut in the floor to let the fish come in. They are made light in weight but dark in color, and are built on runners so as you can run down to the other end of the lake in a hurry if you hear the fish are biting down there. In each kennel is a little stove, usually constructed of a five-gallon cream can, with eavespoting for the chimney.

I've attempted to give you the low down on what our fish shanties look like, and if you'll stay with me a little while longer I'll tell you how the fish are caught. But remember; once a fisherman, always a liar.

If you're going to fish, slide your shanty out in deep water, say about fifty to 100 feet. Cut a hole in the ice and set the shanty over the hole. Bait the hook, let it down to within a foot of the bottom and keep it moving up and down. The kind of fish we go after is the lake trout and they are the wisest, the reason being, so they say, because they're always found in schools. You can generally tell a trout's bite-two longs and a shortand when you get that signal you want made in a single afternoon.

easily see the bottom, but the fish can't station specialists.

jaunt would seem like a trip around see you. Spearing requires a decoy, which is a little artificial minnow you a couple or three feet of snow, so drop down the hole and keep him moving up and down. Honestly, you'd manufacturer. They ought to get their think all fish were suckers, they're so easily fooled. All of a sudden a big one will come racing in after the decoy and all you have to do is to drop the spear on him. Sounds easy, doesn't it? Try it. I've seen guys who can heave a mighty mean spear miss them time other in a big drift it would take more after time. It requires a lot of skill and patience, which is something I ain't got.

Now, that's about all there is to this fishing deal. Henry VanDyke, or Isaac Walton could have written a couple of volumes on it, but I farm for a living. Come up some week end and try your luck, but don't bring a bamboo fishing pole nor a can of worms.

Don't laugh at this one, but did you ever see a skii jump? I think there must be a little Scandinavian blood in me because I can get the greatest kind of a kick out of watching an event of that nature. To see those snow-birds come thundering down an iced incline, 100 feet high, all crouched down till they reach the end of the chute, then straighten up and shoot right out into nothing but space and land way down the hillside. Cold turkey! What a thrill you get! They tell me those babies attain a speed of a mile a minute. When I move that fast I want something under me besides a couple of barrel staves. Some of them will take terrific tumbles, too, and laugh about it. I seen one fellow leave the ar, turn two complete somersaults architects, Messrs. Hook & Sinker, away up in the air and light in a heap a snow shovel. And he gets right up, reclimbs to the top of that slippery sluiceway and comes flashing down again, this time maintaining his balance.

> One of those eagles, I've forgotten his name, but I'd gamble it ended in "son," yumped 152 feet, which at that time was a world's record. The other day one of his countrymen hopped off for a mere 208 feet. In a few years they can probably jump right across from Norway. I'll never try to break any of their records. Not me. I haven't a single friend among the undertaking fraternity.

PRUNING APPLES.

H OW much to prune and in what way to prune apples are questions which will soon occupy the thoughts of many fruit growers. Horticulturists at the State Agricultural Experiment Station at Geneva have conducted pruning experiments with apples for a number of years and have accumulated information on this subject, much of which is now available in a station bulletin which may be had free of charge for the asking.

The pruning tests were made with Baldwin, Boiken, Esopus, Hubbardston, McIntosh, Spy, Greening, Rome, and King, all good standard varieties. The to give him the hook. Nine times out comparison of little and much pruning of ten you'll miss him, as it takes prac- was made with trees all headed about tice, but I've seen some fine catches two feet above the ground when set out in the orchard. After the tree is If you'd rather try your hand at started properly, little pruning will latspearing, slide the shanty in to more er produce a tree with a larger head, shallow water, from eight to twenty having a greater bearing area, with feet deep. By having the interior of less effort on the part of the orchardthe fish house all darkened, you can ist than will much pruning, say the



WORLD EVENTS IN PICTURES



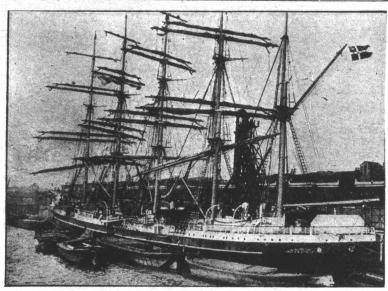
A fireman's job is a hero's job anywhere, but in Montreal it needs a super-hero Polar Bear.



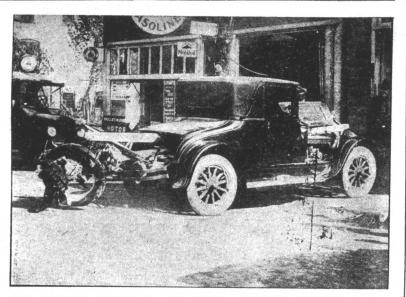
This chemical fire engine has been placed on duty to protect the ancient Way Side Inn, at Sudbury, Mass., purchased by Henry Ford for preservation as a historical relic.



Kansas wheat girl, Vada Watson, tosses tiny bags of golden grain to Wall Street crowd.



This five-masted bark, Kobenhavn, the world's largest rigger, is used as a training ship for Danish cadets, 48 of whom comprise her crew. Virtually all the cadets are at least six feet tall.



Traveling 35 miles an hour in Illinois, this car struck a wooden fence, knocked down five stout posts, was pierced by two top rails. The driver was uninjured, his companion had a broken leg.



Landing at Anxio, Italy, the European end of the first direct Italy—U. S. cable, which will connect directly with Rome.



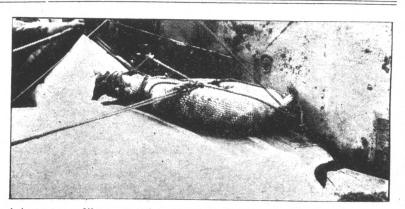
Gertrude Warren, specialist U. S. Dept. of Agriculture, brightens lives of farm daughters.



According to English gypsy custom, the van in which Mrs. Sarah Bunce spent 60 years travel from county fairs to races was burned.



Great crowds gathered at the entrance of Sand Cave, Cave City, Kentucky, to watch the rescue of Frank Collins, cave explorer, trapped in one of its dark tunnels.



A huge crocodile captured in the Everglades of Florida, securely lashed upside down with care, to the wing of a bi-plane, which transported him to a north ern zoo.

S ELINA had been married almost three years when all letter from Julie Hempel, now married. It had been sent to the Klaas Pool farm and Jozina had brought it to her. Though she had not seen it since her days at Miss Fister's school, Selina recognized with a little hastening heart-beat the spidery handwriting with the shading and curleycues. Seated on her kitchen steps in her calico

dress she read it. Darling Selina:-

I thought it was so queer that you didn't answer my letter and now I know you must have thought it queer that I did not answer yours. I found your letter to me, written long ago, when I was going over Mother's things last week. It was the letter you must have written when I was in Kansas City. Mother had never given it to me. I am not reproaching her. You me. I am not reproaching her. You see, I had written you from Kansas City, but had sent my letter to Mamma to mail because I never could remember that funny address of yours in the country.

Mamma died three weeks ago.

Last week I was going over her things—a trying task, you may imagine—and there were your two letters addressed to me. She had never destroyed them. to me. She ha Poor Mamma

Well, dear Selina, I suppose you don't even know that I am married I married Michael Arnold of Kansas City. The Arnolds were in the packing business there, you know. Michael has gone into business with Pa here in Chicago and I suppose you have heard of Pa's success. Just all of a sudden of Pa's success. Just all of a sudden he began to make a great deal of mon-ey after he left the butcher business and went into the yards—the stock-yards, you know. Poor Mamma was so happy these last few years, and had everything that was beautiful. I have two children. Eugene and Pau-

I am getting to be quite a society person. You would laugh to see me. I am on the Ladies' Entertainment Committee of the World's Fair. We are supposed to entertain all the visiting big bugs—that is the lady bugs. There! How is that for a joke?

Selina, holding the letter in her work-stained hand, looked up and its remnant fluttering in the light, across the fields and away to where the prairie met the sky and closed in on her; her world. The Infanta Eulalie of Spain. . . She went back to the letter.

Well, she came to Chicago for the Fair and Mrs. Potter Palmer was to give a huge reception and ball for her. Mrs. P. is head of the whole committee, you know, and I must say she looks queenly with her white hair so beautifully dressed and her diamond dog-collar and her black velvet and all.
Well, at the very last minute the Infanta refused to attend the ball because she had just heard that Mrs. P. was an innkeeper's wife. Imagine! The Palmer House, of course.

Selina, holding the letter in her hand, imagined.

It was in the third year of Selina's marriage that she first went into the fields to work. Pervus had protested miserably, though the vegetables were spoiling in the ground.

"Let them rot," he said. "Better the stuff rots in the ground. DeJong women folks they never worked in the fields. Not even in Holland. Not my mother of my grandmother. It isn't for women."

Selina had regained health and vigor after two years of wretchedness. She felt steel-strong and even hopeful again, sure sign of physical well-being. Long before now she had realized that this time must inevitably come. So had said. "Except you stop living you she answered briskly, "Nonsense, Per- can't run away from life." Working in the field's no harder than washing or ironing or scrubbing or standing over a hot stove in August. Women's work! Housework's the hardest work in the world. That's why men won't do it."

She would often take the boy Dirk with her into the fields, placing him on a heap of empty sacks in the shade. He invariably crawled off this lowly throne to dig and burrow in the warm black dirt. He even made as though to help his mother, pulling at the rooted things with futile fingers, and sitting back with a bump when a shallow root unexpectedly yielded.

SO BIG--By Edna Ferber

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"Look! He's a farmer already," Per- his shirts, take pride in the great rudvus would say.

But within Selina something would cry, "No!" No!"

During May, June, and July Pervus night, but by moonlight as well, and Selina worked with him. Often their sleep was a matter of three hours only, or four.

So two years went-three yearsfour. In the fourth year of Selina's marriage she suffered the loss of her one woman friend in all High Prairie. Maartje Pool died in childbirth, as was so often the case in this region where a Gampish midwife acted as obstetri-The child, too, had not lived. cian. Death had not been kind to Maartje

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Klass answered these questions just nine months later by marrying the Widow Paarlenberg. High Prairie was worked not only from morning until rocked with surprise. They had gone to Niagara Falls on a wedding trip; Pool's place was going to have this improvement and that; no, they were going to move to the Widow Paarlenberg's large farmhouse (they would always call her that); no, Pool was putting in a bathroom with a bathtub and running water; no, they were going to buy the Stikker place between Pool's and Paarlenberg's and make one farm of it, the largest in all High Prairie, Low Prairie, or New Haarlem. Well, no fool like an old fool.

Nothing of the dreamer about this lad. The one-room schoolhouse of Selina's day had been replaced by a two-story brick structure, very fine, of which High Prairie was vastly proud. The rusty iron stove had been dethroned by a central heater. Dirk went to school from October until June. Pervus protested that this was foolish. The boy could be of great help in the fields from the beginning of April to the first of November, but Selina fought savagely for his schooling, and "Reading and writing and figgering

ing sewed together by his mother. A brown blond boy with mosquito bites

on his legs and his legs never still.

is what a farmer is got to know," Pervus argued. "The rest is all foolishness. Constantinople is the capital of Turkey he studies last night and uses good oil in the lamp. What good does it do a truck farmer when he knows Constantinople is the capital of Turgey? That don't help him raise turnips."

"Sobig isn't a truck farmer."

"Well, he will be pretty soon. Time was fifteen I was running our place." Verbally Selina did not doubt this. But within her every force was gathering to fight it when the time should come. Her Sobig a truck farmer, a slave to the soil, bent by it, beaten by it, blasted by it, so that he, in time, like the other men of High Prairie, would take on the very look of the rocks and earth among which they toiled!

Dirk, at eight, was a none too handsome child, considering his father and mother-or his father and mother as they had been. He had, though, a "different" look. His eyelashes were too long for a boy. Wasted, Selina said as she touched them with a fond forefinger, when a girl would have been so glad of them. He had developed, too, a slightly aquiline nose, probably a long-jump inheritance from some Cromwellion rapscallion of the English Peakes of a past century. It was not until he was seventeen or eighteen that he was to metamorphose suddenly into a graceful and aristocratic youngster with an indefinable look about him of distinction and actual elegance. It was when Dirk was thirty that Peter Peel the English tailor (of Michigan Avenue north) said he was the only man in Chicago who could wear English clothes without having them look like Halsted Street. Dirk probably appeared a little startled at that, as well he might, West Halsted Street having loomed up so large in his background.

Selina was a farm woman now, nearing thirty. The work rode her as it had ridden Maartje Pool. In the De-Jong yard there was always a dado of washing identical with the one that had greeted Selina's eye when first she drove into the Pool yard years before. Faded overalls, a shirt, socks, a boy's drawers grotesquely patched and mended, towels of rough sacking. She, too, rose at four, snatched up shapeless garments, invested herself with them, seized her great coil of fine cloudy hair, twisted it into a utilitarian knob and skewered it with a hairpin from which the varnish had long departed, leaving it a dull gray; thrust her slim feet into shapeless shoes, dabbed her face with cold water, hurried to the kitchen stove. The work was always at her heels, its breath hot on her neck. Baskets of mending piled up, threatened to overwhelm her. Overalls, woollen shirts, drawers, socks. Socks! They lay coiled and twisted in an old market basket. Sometimes as she sat late at night mending them, in and out, in and out, with quick fierce stabs of the needle in her work-"Wait a minute. Wait a min-scarred hand, they seemed to writhe and squirm and wriggle horribly, like snakes. One of her bad dreams was that in which she saw herself overwhelmed, drowned, swallowed up by a huge welter and boiling of undarned, unmended nightshirts, drawers, socks, aprons, overalls.

Seeing her thus one would have

A MORNING'S LESSON

Ida M. Budd

Brisk toiling in the morning sun. Her silken web a spider spun Deftly from tree to tree; Made fast each thread with patient

care, And as I watched her, spinning there, I wondered much to see.

Across the intervening space The gauzy fabric grew apace, United at length it hung. A thing of beauty, lace-like, fair, Soft shimmering in the summer air By breezes gently swung.

When lo! a hungry robin sped, Intent upon his "daily bread," And by his heedless wing The fairy web was ruined quite, A wrecked and broken thing.

To work, at once, the spider went, Without a sign of discontent The mischief to repair,

And soon, across the torn web's space, Another trembled in its place, As delicately fair.

But now, alack! a careless hand, Upraising high a leafy wand, The new creation spoiled. Undaunted still the spinner true Took up, with zeal, her task anew, And still as bravely toiled.

Oh, heart of mine! can'st thou not see The lesson Heaven hath sent to thee In this most humble scene? Tho' treasures all be swept away, And life left cheerless, dull and gray, As if they had not been.

Still must thou hope and courage take, And, for the blessed Master's sake, With patient toil pursue The task His love hath set for thee, And know that, in some glad morn,

He Will crown thy life anew.

Pool. It had brought neither peace nor youth to her face, as it so often Selina, looking down at the strangely still figure that had been so active, so bustling, realized that for the first time in the years she had known her she was seeing Maartje Pool at rest. It seemed incredible that she could lie there, the infant in her arms, while the house was filled with people and there were chairs to be handed, space to be cleared, food to be cooked and served. Sitting there with the other High Prairie women Selina had a hideous feeling that Maartje would suddenly rise up and take things in charge; rub and scratch with capable fingers the spatters of dried mud on Klaas Pool's black trousers (he had been in the yard to see to the horses); quiet the loud wailing of Geertie and Jozina; pass her gnarled hand over Roelf's wide-staring tearless eyes; wipe the film of dust from the parlor table that had never known a speck during her regime.

"You can't run far enough," Maartje

Well, she had run far enough time.

Roelf was sixteen now. Geertie twelve. Jozina eleven. What would this household do now, Selina wondered, without the woman who had been so faithful a slave to it? Who would keep the pigtails—no longer giggling in clean ginghams and decent squaretoed shoes? Who, when Klaas broke out in rumbling Dutch wrath against what he termed Roelf's "dumb" ways, would say, "Og, Pool, leave the boy alone once. He does nothing." Who would keep Klaas himself in order;

So insatiable was High Prairie's curiosity that every scrap of fresh news was swallowed at a gulp. When the word went round of Roelf's flight from the farm, no one knew where, it served only as sauce to the great dish of gossip.

Selina had known. Pervus was away at the market when Roelf had knocked at the farmhouse door one night at eight; had turned the knob and entered, as usual. But there was nothing of the usual about his appearance. He were his best suit—his first suit of store clothes, bought at the time of his mother's funeral. It never had fitted him; now was grotesquely small for him. He had shot up amazingly in the last eight or nine months. Yet there was nothing of the ridiculous about him as he stood before her now, tall, lean, dark. He put down his cheap yellow suitcase.

"I am going away. I couldn't stay." She nodded. "Where?"

"Away. Chicago maybe." He was terribly moved, so he made his tone casual. "They came home last night. I have got some books that belong to He made as though to open the suitcase.

"No, no! Keep them." "Good-bye."

"Good-bye, Roelf." She took the boy's dark head in her two hands and, standing on tiptoe, kissed him. He turned ute." She had a few dollars-in quarters, dimes, half dollars-perhaps ten dollars in all-hidden away in a canister on the shelf. She reached for it. But when she came back with the box in her hand he was gone.

Dirk was eight; little Sobig Decook his meals, wash his clothes, iron Jong, in a suit made of bean sack-



all leaveners. Every ingredient used officially approved by U.S. Food Authorities.

SO BIG-By Edna Ferber

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is so dependable—so uniform that the results obtained from its use are always satisfactory. It raises toods to their highest nutritional value because of its more-than-ordinary leavening strength.

Calumet goes farther—you use less—it makes more bakings. The most economical and satisfactory of all leaveners. Every ingredient used officially approved by U.S. Food Authorities.





The red strip in the tread is more than a mark of identification—it is a tough red rubber reinforcement placed where the extra wear comes. Upper and sole, the Red Tread Boot gives full dollar for dollar wear. It is a sound investment second only to the popular Hood Red Boot.

If you have been too busy to follow the improvements Hood have made in rubber footwear—improvements that mean something to you in added comfort, extra wear and greater economy—drop into the store the next time you are in town. Don't put it off—ask to see the Red Tread Boot—or the Hood Red Boot. Go over the special features of the Kattle King. Learn what White Rock Rubbers can save in rubber bills for the children, and for all the family.

If you will do this, it will convince you, more than anything we can say, of the dependability of the name HOOD on rubber products — as a time-tested guarantee of design, materials and workmanship.

HOOD RUBBER PRODUCTS COMPANY, Inc. Watertown, Massachusetts

The popular -HOOD Red Boot

FIFE RUBBER PRODUCTS SINCE 1896

thought that the Selina Peake of-the wine-red cashmere, the fun-loving disposition, the high-spirited courage, had departed forever. But these things still persisted. For that matter, even the wine-red cashmere clung to existence. So hopelessly old-fashioned now as to be almost picturesque, it hung in Selina's closet like a rocy memory. Sometimes when she came upon it in an orgy of cleaning she would pass her rough hands over its soft folds and by that magic process Mrs. Pervus De-Jong vanished in a pouf and in her place was Selina Peake perched a-tiptoe on a soap-box in Adam Ooms's hall while all High Prairie, open-mouthed, looked on as the impecunious Pervus DeJong threw ten hard-earned dollars at her feet. In thrifty moments she had often thought of cutting the winered cashmere into rag-rug strips; of dyeing it a sedate brown or black and remodeling it for a much-needed best dress; of fashioning it into shirts for

Dirk. But she never did.

It would be gratifying to be able to record that in these eight or nine years Selina had been able to work wonders on the DeJong farm; that the house glittered, the crops thrived richly, the barn housed sleek cattle. But it could not be truthfully said. True, she had achieved some changes, but at the cost of terrific effort. A less indomitable woman would have sunk into apathy years before. The house had a coat of paint-lead-gray, because it was cheapest. There were two horsmare, blind in one eye, that they had picked up for five dollars after it had been turned out to pasture for future sale as horse-carcass. Piet Pon, the mare's owner who drove a milk route. had hoped to get three dollars for the animal, dead. A month of rest and pasturage restored the mare to useful-Selina had made the bargain, and Pervus had scolded her roundly for it. Now he drove the mare to market, saw that she pulled more sturdily than the other horse, but had never retracted. It was no quality of meanness in him. Pervus merely was like

But the west sixteen! That had been Selina's most heroic achievement. Her plan, spoken of to Pervus in the first month of her marriage, had taken years to mature; even now was but a partial triumph. She had even descended to nagging.

"Why don't we put in asparagus?"

"Asparagus!" considered something of a luxury, and rarely included in the High Prairie truck farmer's products. "And wait three years for a crop!"

"Yes, but then we'd have it. And a plantation's good for ten years, once it's started."

"Plantation! What is that? An asparagus plantation? Asparagus I've always heard of in beds."

That's the old idea. I've been reading up on it. The new way is to plant asparagus in rows, the way you would rhubarb or corn. Plant six feet apart, and four acres anyway.

He was not even sufficiently interested to be amused. "Yeh, four acres where? In the clay land, maybe." He did laugh then, if the short bitter sound he made could be construed as indicating mirth. "Out of a book."

"In the clay land," Selina urged, farmer in High Prairie raises cabbage, and they're better quality than ours. anything, so what difference does it make if I am wrong! Let me put my own money into it, I've thought it all out, Pervus. Please. We'll underdrain the clay soil. Just five or six acres, to start. We'll manure it heavily—as two years we'll plant potatoes there. We'll put in our asparagus plants the third spring—one-year-old seedlings. I'll promise to keep it weeded-Dirk and I. He'll be a big boy by that time. "How much manure?"

"Oh, twenty to forty tons to the

He shook his head in slow Dutch opposition

"-but if you'll let me use humus I won't need that much. Let me try it, Pervus. Let me try."

In the end she had her way, partly because Pervus was too occupied with his own endless work to oppose her; and partly because he was, in his undemonstrative way, still in love with his vivacious, nimble-witted, high-spirited wife, though to her frantic goadings and proddings he was as phlegmatically oblivious as an elephant to

About Al Acres

M R. FRANK LEET, the creator of Al Acres, is still suffering from an illness, but our latest reports are that he is convalescing nicely and will be able to record, in a few weeks, what Al, Slim and all the rest of them are doing. From the reports we get, we are sure that our readers will be glad to have our old friends back again.-Editors.

a pin prick. Year in, year out, he maintained his slow-plodding gait, content to do as his father had done before him; content to let the rest of High Prairie pass him on the road. He es—the second a broken-down old rarely showed temper. Selina often wished he would. Sometimes, in a sort of hysteria of hopelessness, she would rush at him, ruffle up his thick coarse hair, now beginning to be threaded with gray; shake his great impassive shoulders.

"Pervus! Pervus! if you'd only get mad-real mad! Fly into a rage. Break things! Beat me! Sell the farm! Run away!" She didn't mean it, of course. It was the vital and constructive force in her resenting his apathy, his acceptance of things as they were.

"What is that for dumb talk?" He would regard her solemnly through a haze of smoke, his pipe making a maddening putt-putt of sleepy content.

Though she work as hard as any woman in High Prairie, had as little, dressed as badly, he still regarded her as a luxury; an exquisite toy which, in a moment of madness, he had taken for himself. "Little Lina"-tolerantly, fondly. You would have thought that he spoiled her, pampered her. Perhaps he even thought he did.

When she spoke of modern farming, of books on vegetable gardening, he came very near to angry impatience, though his amusement at the idea saved him from it. College agricultural courses he designated as foolishness. Of Linnaeus he had never heard. Burbank was, for him, non-existent, and he thought head-lettuce a silly fad. Selina sometimes talked of raising this last named green as a salad, with marketing value.

He said, too, she spoiled the boy. Back of this may have been a lurking jealousy. "Always the boy; always the boy," he would mutter when Selina planned for the child; shielded him; took his part (sometimes unjustly). "You will make a softy of him with your always babying." So from time to time he undertook to harden Dirk. crisply. "And out of a book. Every The result was usually disastrous. In one case the process terminated in turnips, carrots, beets, beans, onions, what was perilously near to tragedy. It was during the midsummer vaca-That west sixteen isn't bringing you tion. Dirk was eight. The woody slopes about High Prairie and the sand hills beyond were covered with the rich blue of huckleberries. They were dead One shower would spoil them. Geertje and Jozina Pool were going huckleberrying and had consented to much as we can afford-and then for take Dirk-a concession, for he was only eight and considered, at their advanced age, a tagger. But the last of help. To Dirk's, "Can I go berrying? The huckleberries are ripe. Geert and Jozina are going." his father shook a negative head. (Con. next week).

SEVENTIETH SEMI-ANNUAL STATEMENT

The National Toan & Ancrestment Company

of Detroit, Michigan, January 15, 1925 **ASSETS**

Real Estate Mortgages......\$7,585,192.64

Stock Loans Real Estate Real Estate Sold on Contracts. Home Office Building. Furniture and Fixtures Due from Members (secured) Unexpired Taxes Accounts Receivable Liberty Bonds Cash on Hand and in Banks.	56,118.26 23,528.71 150,500.00 8,026.00 71,509.31 3,922.53 2,987.18 102,615-67	A CONTRACTOR SALES CONTRACTOR OF THE PARTY O
	\$8,200,043.77	
LIABILITIES	φο,200,040.11	
Class "F" Semi-Annual Dividend Stock. \$5,716,180.00		
Class "F" Cumulative Stock		
Class "F" Installment Stock		
Class "H" Pass-book Stock		
Berrowers' Stock		
Dillowers Stock	\$7,753,977.14	
DIVIDENDS CREDITED:	φι,ιου,υι	
Class "F" Cumulative Stock\$ 36,758.30		
Class "F" Installment Stock 2,464.56		
Borrowers' Stock		
	\$ 299,305.96	
Adv. Dues and Int. and Prem \$3,556.57		
Due Borrowers Incomplete Loans 2,300.34		
Due Agents and Stockholders on Par-		
tial Payments on Loans 3,182.69		
Undivided Profits		
Reserve 93,735.35		
	-\$ 146,760.67	
	\$8,200,043.77	
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COMPARATIVE STATEMENT OF ASSETS

January	15,	1920 \$4,338,710.3	70
January	15,	1921 4,738,820.0	00
January	15,	19224,986,644.2	29
January	15,	1923 6,116,580.	77
January	15,	1924 7,079,684.3	27
January	15,	1925 8,200,043.	77

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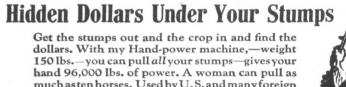
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Fred P. Todd, Secretary
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DETROIT, MICHIGAN

Christ Before Pilate

Our Weekly Sermon-By N. A. McCune

N 1900 died Michael Munkacsy. He Christ Before Pilate ever placed on canvas. It has been styled by many critics the greatest religious picture of the nineteenth century. You doubtless remember it. I do, for it hung in the sitting room during boyhood days. Pilate sits on the judgment seat, four steps above the floor, and before him stands the Prisoner, as straight as a soldier, clothed in white. The Prisoner does not cower. He looks directly into the eyes of the judge. About him stand the crowd. Burly, unwashed men wave their arms and yell, while farther back are the priests, urging the ignorant and excitable mob to cry, 'Crucify Him!" And they are shouting it at the top of their voices. It is a gripping scene, and well it might

> be, for it is the world's greatest trial, though it was but a mocktrial, the way it was conducted.

> This painting has been exhibited in all parts of the world and was finally bought by

Wanamaker of Philadelphia, for \$120,-000. It is worth it. I am glad, for one, that the imagination, hand and heart that could produce this canvas should be rewarded thus. The world is richer for it. The life of anyone who looks at this scene with unsealed eyes will live a fuller, deeper life for doing so.

It was a rearranged trial. There was no escape for Christ, once in the hands of Annas, Caiaphas and their gang. They feared the earnest, direct appeals of the young Reformer. He spoke too plainly about the right and wrong. The people hung on his words. They talked about Him on every corner. They would have Him for a king, if that were possible. The world was too small for one like Christ and one like Annas to live in. At least Palestine was too small. One must go.

NNAS was a rich man. He and his A NNAS was a rich man. of high priest, which was a moneymaking sinecure. The traffic in the temple which yielded a very large sum every year, was carried on by the agents of these men. We may imagine their dismay and rage when they learned that Christ had driven out their agents from the temple. They were shrewd, unscrupulous politicians. Anyone of them might have made a very successful mayor of a large city. They were rich

It was illegal for the sanhedrin to meet before sunrise, or about six * o'clock. But in this case these members were eager to push the trial at. once. Hence they held an informal meeting the night of Christ's arrest, and fixed things so that when the legal meeting was held it would need only to go through the formalities of a trial. While the city was wrapped in sleep, the trial was held.

nesses did not agree wnat they did agree on was too trivial to make out a case against the Prisoner. Then the high priest rose and asked the direct question, "Art Thou the Christ, the Son of God?" The answer was direct and affirmative. With a gesture of hypocritical horror, the high priest tore his robe in token of blasphemy, as a sign that he was worthy of death. And so it was voted. One man has counted up twenty-seven irregularities in the trial, any one of which was enough to annul the sentence. From the standpoint of legal procedure now, there would be more irregularities than this.

While waiting for the formal meetpainted what is probably the most ing of the sanhedrin, Christ was left realistic and powerful picture of in charge of the temple police, it would seem. They had a lot of fun with their prisoner. They mocked Him, blindfolded and struck Him, asked Him to prophesy to them, spat on Him. "The hands that they had bound had healed the sick and raised the dead, the lips they smote had calmed the winds and the waves. One word, and the splendors of the Mount of Transfiguration would have filled the chamber; one word, and the menials now sporting with Him at their will would have perished. But, as He had and continued, He would end-as self-restrained in the use of his awful powers on His own behalf as if He had been the most helpless of men. Divine patience and infinite love knew no wearying. He had but to will it and walk free, but He came to die for man, and He would do it."

> THE suicide of Judas showed more of the good in him than almost anything else that we know of. He had some conscience left. But it was the conscience of despair. A little greed sometimes leads to hell. Judas had hell within him before he went to his own place.

> The next step was to take the accused to Pilate. The Romans would not permit the Jews to exercise the death penalty. Hence the sanhedrin had to take their prisoner to the governor. They expected to carry their point by popular pressure, and sweep the governor's better judgment by the clamor of many voices. In this they succeeded. Using the ever-ready weapon of threat, they shouted to Pilate that he was no friend of the emperor, if he permitted any one to claim that he was a king. These shrieked thrusts went to the mark. Pilate was moved, intimidated, overcome. He admitted that the accused was a just man, and went through the silly performance of washing his hands, as if that would exonerate him from the crime of imposing the death penalty on an innocent man. His wife had a dream and sent a warning note. But politics first! Jesus was handed over for death.

> P ILATE was governor of Judea for about ten years. Charges were then brought against him at Rome, that he was cruel to the Samaritans, and on other grounds, and he was dismissed from office. It is said that he died miserably.

When brought to face the point, Christ did not deny that He was a King. John's gospel gives a full account of His talk with Pilate. His silence amazed the governor. When accused by the chief priests and the rabble, He made no answer. What was the use? To ignore them was the most fitting attitude to take. To deny what they said would have only elicited more railing and accusation. He was sent forth to be scourged. This ordeal frequently ended in death. But when, arrayed as a mock king, He was brought forth, there was no voice roused in pity. Pilate tried once more to The trial did not go well. The wit. save Him. "Behold the Man!" he cried. But they screamed, "Crucify, crucify!" It was done as they demanded. The King went away to death, the puppet went back to his throne. The die had been cast, the decision given. Henceforth the one was to be the Name above every name, the other to be a synonym for cowardice and craven self-seeking.

SUNDAY SCHOOL LESSON FOR MARCH 1.

SUBJECT:—Christ Before Pilate. Mat-thew 27.11 to 31.

GOLDEN TEXT:—He was wounded for our transgressions, He was wounded, bruised for our iniquities. Isaiah 53.5.

PREVENTING HEART DISEASE.

ICHIGAN'S sister state, Wisconsin, is preparing a campaign against heart disease that will be carried on by the Wisconsin Anti-Tuberculosis Association. They have done well in the fight against tuberculosis and feel that they now may give a share of their attention to heart disease which now kills and cripples more than tuberculosis.

If you have heart disease you may live to a good old age by taking excel- peeled away and apply again. lent care of yourself, being very particular to avoid strain or exhaustion, and taking some helpful remedies. But your life will always be a restricted life. There is no real cure for heart disease once it is firmly established. The outlook for cure is nothing like as favorable as in dread tuberculosis.

But prevention! That's where the opportunity comes. Almost all cases of heart disease are preventable. The Wisconsin Anti-Tuberculosis Association intends to show Wisconsin people how to prevent this handicap. It means educating parents and children to the fact that the care of the teeth prevents heart disease. It means teaching people that diseased tonsils, old catarrhs, rheumatism, "growing pains," and such apparent trifles may indicate a pus infection that will lead to heart disease. Parents must learn that when their little ones have the "diseases of children" they must rest in bed long enough to get perfectly sound, or heart disease may follow. Boys and girls who go in for athletics must be physibut distasteful substance.

cally examined and regulated to prevent over strain. Heart disease can be greatly reduced if we learn about the little things of life.

TROUBLED WITH WARTS.

My daughter has a wart on her right hand and from its side grew other small warts. Is there any relief?—H. J. hand

Such warts may be removed by the application of Glacial Acetic Acid. Apply three or four days in succession; then wait until the dead tissue has

PITYRIASIS ROSEA.

Have you ever heard of, or have you even seen a case of skin trouble called Pityriasis Rosa? If so, is it infectious or contagious? What is the best way to prevent it from spreading to others, and what is the best way to treat it?
—Mrs. B. M.

Pityriasis Rosea is a skin disease characterized by an eruption, of reddish color, which scales like bran. It is non-contagious and usually ends favorably by keeping the patient quietly at rest. One must be very careful not to confuse this with scarlet fever, which is quite a different matter.

SUCKS UNDER LIP.

I have a little girl that sucks her lower lip. Have tried medicine and tape on it. Will you please tell me how to break her of the habit?—L. M.

Ask your doctor to give you a preparation of collodion to paint on the lip and to add a little of some harmless



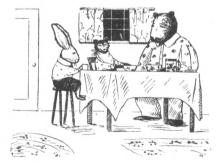
Doings in Woodland

Brownie's Trick Turns on Himself

DON'T want my porridge," said the get in Woodland and the animal folks after he had come to live with Rolly Rabbit and Bruin. Now Brownie remembered one of his old tricks he used to play on his mother, but neither Rolly Rabbit nor Bruin new about it.

Rolly thought Brownie must not be feeling well, but when he looked at his tongue it was as pink as the early blossoms in the peach orchard.

Rolly Rabbit wanted little Brownie



Little Bears and Big Like Maple Syrup.

to eat his breakfast. So he asked to be excused, and in a minute was back to the table with the jug of maple syrup. Rolly poured it liberafly over Brownie's porridge.

Little bears and big bears, too, have always liked maple syrup. This was the very trick Brownie used to play on his mother. When he refused to eat his porridge she would always cover it with maple syrup. And my, how little Brownie would smack his lips when he ate his porridge with maple syrup on it.

little Brown Bear one morning soon only served it when company came.

Now the next morning and the next, and the next, little Brownie would not eat his breakfast porridge until it was covered with maple syrup.

Bruin did not say a word about the little bear's behavior all this time, but he felt sure he was playing a trick. He knew it was a very bad habit for little bears to eat too much maple syrup, for then their tongues would not be as pink as the early blossoms in the peach orchard, and they would not be frisky.

So on the fifth day when Brownie would not eat his porridge without maple syrup, Bruin said, "Come with me, Brownie. Keep our porridge warm until we come back, Rolly," and Bruin and Brownie went out to the wood pile that Bruin had cut the day before.

"Now we'll pile the wood," said Bruin. They piled and piled and piled. The little bear grew tired and hungry. But they piled the wood and piled the wood until it was all piled in an even row in the woodshed.

"Now we'll have our breakfast," said Bruin when they had finished.

And Brownie ate his porridge without maple syrup that morning and really liked it because he was so hungry, and never, never again did the little Brown Bear play his maple syrup trick.

Pa went to a high-class restaurant the other night. They served clam chowder, chicken a la King, Waldorf salad and a great many other things, making it an altogether elaborate meal. When Ma asked him if it wasn't rup on it.

a splendid dinner he said, "No, this is But maple syrup was very hard to poor butter they're using."

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Budgeting Cuts Clothing Costs

By Home Sewing, the Homemaker Can Cut the Cost of the Family Clothing Bill

HE clothes problem is a problem that has been handed down to us by Mother Eve, and the prob lem of clothing a farm family in these days of quick changing styles and high-priced textiles is not a simple one.

If all farm families were in a position to budget their incomes, the clothes problem would be much simpler, as most farmers and their good wives try to live within their income. If, in addition to her other work Mrs. Farmwife can do her own sewing, there is the possibility of cutting down clothing expenses and, also, the chance to buy a better grade of materials; materials that will hold their colors better, give better and longer service, hold their shape better, and will be better made. Materials purchased by the piece or yard and, with all "findings," made up at home will cost considerably less than when purchased ready made.

Plan Family Wardrobe Ahead.

There is nothing so inflexible as fact, and "fact," or the state of one's bank account, income or source of income must be taken into consideration when we sit down to plan the wardrobe for our family. There are several ways in which we may make the money go farther, and every farm-wife usually knows, to a penny, how much she oan spend on clothing. Watch the sales is a good slogan. Out-of-season buying of textiles is another.

To wait a few weeks longer for a pair of shoes, a coat, a hat or dress, or the material to make coats or dresses or underthings, and then, to be able

GRAY hair is beautiful in itself, and so softening to the complexion and so picturesque in its effect that many a woman who has been plain in her youth is, by its beneficent influence, transformed into a handsome woman.-Miss Oakey.

to purchase these things around half price is a saving that is, to say the least, decidedly worth while.

Shoes and rubbers, everyday necessities, are one of our greatest problems unless we learn to watch the sales, for ever-changing styles are constantly throwing extremely good wearing and good looking shoes on the bargain counter. It is within the realm of possibilities to keep the feet of the whole family, father included, well shod at moderate cost, and all because of the bargain counter. Good rubbers for mother and the girls may be purchased around seventy-eight cents per pair; the smaller size will cost less. Father's rubbers will average around \$1.35 per pair and brother's the same. Small boys' rubbers, good, tough grade; may be purchased for ninety-eight cents per

Overcoats for father and the boys, if purchased at the annual mid-winter mark-down sale, are a considerable saving and serve, for best, three winters. The same may be said for good suits, union suits, rain coats and sweaters.

Saving in Doing Men's Sewing.

Sweaters are usually home-made these days, and cost merely the price of the yarn that goes into them. The housewife may, if handy with the needle, make the shirts for her husGracia Shull

one-half of what a ready-made shirt would cost.

There is a saving on cotton plisse or crepe, cretonne, unbleached muslin, cambrics, chintz, plain ginghams and chambrays if purchased by the bolt. The unbleached muslin will make the daintiest and most serviceable house dresses imaginable. Cut in one-piece

band and sons. The saving is about times fade prematurely and the fashions change so quickly that it is extravagant for folk in moderate circumstances to purchase them to any great extent. Dresses for the little girls, made very plain, hand-trimmed or, in the case of wash dresses such as plain percales, chambrays and muslins, the pipings, bias bands and appliqued flowers, fruits, animals, etc., may be

Clothing a Family Like This One is a Real Problem, But the Solution Would be Enjoyable.

ings of flowered chintz or cretonne or plain or checked ginghams with pocket and girdle to match, they are a "thing of beauty and joy forever." These dresses launder well and wear beautifully and one always has such a neat "ready-for-company" appearance. The crepe should be utilized in making night gowns and underthings for mother and the girls and a whole bolt will cost less than what we would pay for two good, ready-made nightgowns.

This is the home needle-woman's day. Dainty crochet, rick-rack, or scalloped edgings, bead-work, wool, silk or sansilk flowers, knots, outlines and motifs may be applied to our dainty un-

STRENGTH is natural, but grace is the growth of habit. This charming quality requires practice if it is to become lasting.-Joubert.

every daughter of Eve will and does

Two Old Dresses Make One Good One. Combination dresses are now in high favor and this enables us to make over our old wardrobe and utilize all good material in these becoming combinations. Wool fabrics may be combined with silk and we, quite frequently, are able to pick up striking, worthwhile remnants and lo, and behold! we have material for a becoming and stylish

Some of the newer fabrics have large flowered designs. These should be used sparingly by the woman who must be, constantly, on the alert, that her clothing bill does not grow out of bounds. The flowered fabrics some-

style with neck and short sleeve bind- made from scraps of new material salvages from the scrapbag.

A good grade satine for winter, and light grade satine, (light colors), or plain or flowered crepe (never silk) for summer make good bloomers for mother and the grils. The above material will wash and wear well.

Hats for the feminine part of the household may be home-made if you are clever along this line. Never try to make the frame. Purchase a becoming shape and window shop along Broadway some day. Notice the prevailing fashion in trimmings and go home while the ideas are new and evolve your own "creation." You will find that, from three to seven dollars may be saved on each hat.

I, in fact, evolved, for \$3.68 the exact duplicate of a hat that was priced, in a milliner's window at \$16.75. The saving, you see, was well worth while.

When farm women come to realize that it is possible to get a most attractive hat, housedress, apron or frock for slipping off.-E. M. G. dies that adds a distinctive touch that approximately half-price if it is fashsible to possess the loveliest of dress accessories if some work and thought are given to them, more of them will begin to think of plying the needle, using the easy, new patterns, the dye pots, their own individual ideas for trimmings as a way to create beautiful, useful things, and to save money or stretch that sadly over-worked dollar. Then learn to eliminate and, if possible, "start a budget."

SHORT CUTS IN COOKING.

HEN making apple dumplings, wash the apples before peeling, and put peelings and cores into a

saucepan to cook ten minutes. When making the dumplings pour this water over them instead of clear water. It gives them a more delicious flavor.

Wet the knife with cold water when cutting a meringue pie and the meringue will not stick.

Heat a small quantity of vinegar in a dish and all odor of onions or fish is removed.

In the course of the scriptural span of life (three score and ten) it has been estimated that man spends fully three years in eating.

A SICK ROOM JOY.

A MINISTER of the writer's acquaintance recently suffered from a broken hip, caused by slipping on a waxed floor, while playing basket ball with a group of his young people. The accident caused him to be confined to his bed for many weeks. At his direc-

tion, the following small piece of furniture was quickly made by a handy young chap.

The worker took a stout box, obtained at a grocery store. It had one open end. The box was cut in two, so as to leave a top, two ends and a bottom just like the top. This bottom board was removed, leaving a bench-shaped article of the following dimensions: The top was thirty-six inches long, and twenty inches wide. The ends were sixteen inches deep and twenty inches wide. From the bottom board which had been removed, two cleats were cut and the edges smoothed. Each cleat was an inch and a half wide.

These pieces of wood were nailed firmly to either edge of the top and sides of the improvised table. These cleats served as a brace, or what is called a "box" on a chair. The top of the table was neatly covered with oil cloth, and the ends were painted white.

When the invalid was ready for a meal, the bed-table was a real joy. It was roomy enough without being clumsy. When the invalid wished to write a letter, the table was at hand. If he desired to read and consult rather heavy books, it was especially help-

Later, when a child in the family was confined to bed for a few days, the bed-table came into play to hold paints and pictures to color, and books and toys. At this time, an improvement was added, by fastening a moulding around the back and two ends of the top of the table. Small wire nails held the moulding in place. This prevented pencils and small articles from

Codfish is delicious cooked in the following manner: Freshen and simmed in clear water until tender. Drain, Make a saucepan of plain milk gravy, pour the codfish (shredded) into the gravy and boil five minutes. Season with salt and pepper to taste. Stir in one minced mango pepper and one tablespoon of chili sauce. Serve on triangles of crisp toast. Sprinkle chopped hard-boiled eggs on top. This is a tasty and satisfying luncheon (or supper) dish.

Uncle Si says he likes to have company for meals well enough, but he does hate to keep passing things, and they never seem to ask for what they hen

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Conquered by NEW Radio Idea

Wonderful New Invention Costing But a Trifle, Makes it Inexcusable for Anyone to Remain Hard of Hearing.

SENT ANYWHERE FOR 10 DAYS FREE TRIAL

Now comes a new radio discovery which should bring joy to all deaf persons and their families. Radio science has wrought another miracle. A miracle for the deafging sood hearing at once to poor ears and ending the discomfort and embarrassment of deafness.

The makers of the famous ACOUSTICON. for 20 years recognized as the world's best hearing aid, announce a vital refinement to this remarkable little device.

The ACOUSTICON is now based upon the same sound-sending, reproducing and amplifying principles of the radio itself—with the deaf person as his own receiving and sending station.

deaf person as his own receiving and send-ing station.

Like the radio, the ACOUSTICON has a transmitter and a receiver. Sensitive to a pin drop. So powerful they pick up any sound the human ear can hear and deliver it clearly, distinctly and resonantly to the impaired auditory nerve.

FREE 10 DAYS' TRIAL.

FREE 10 DAYS' TRIAL.

The new radio-built ACOUSTICON is a marvel of lightness, comfort, inconspicuousness. A joy to wear and use. We are so sure it will delight you, regardless of what other device you are now using, that we insite you to try it 10 days without a penny of risk. No red tape to go through. No deposit or payment of any kind. Just send your name, address and free trial request to the DICTOGRAPH PRODUCTS CORPORATION, Dept. 1301J, 220 West 42nd Street, New York City.

The Radio-built Hearing Aid Hcousticon Try it Ten Days FREE

F-I-S-H ---

100 lbs. Lg. Dressed Herring or Bluefins \$4.50; Round Plokerel \$6.50; Headless and dressed Plokerel \$8.50; Large Mullets \$4.50; Tulibee Whitefish \$7.50; No. 1 whitefish, dressed \$13.50, less than 100 lbs. ½c per lb. extra. Packing charge 35c per box of 125 lbs. or less, extra. Smoked Tulibee Whitefish 10 lbs. \$1.50; Bluefins \$1.00. Smoked Fish delivered by parcel post in Mich. 29c extra per 10 lb. carton. Write for complete price list.

Johnson Fish Co., Green Bay, Wis.



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Automatic Fresh Water Supply Systems. Running Water Inside and Outside under pressure, in ample supply as needed. Full line of different sizes for all requirements.

Permanent, Profitable Work Any energetic man can earn a steady and lucrative income and build up a permanent business.

Big Demand—Easy to Sell Every farm, country house or store needs running water. Will you take the

profitable orders? We ship direct to your customers, collect and send you checks for commissions.

Get Started Now Get the agency for your county. Write us today. We send complete selling outfits free. Send local references.

MILWAUKEE TANK WORKS One of the largest manufacturers of tanks and pumps in the world Milwaukee, Wisconsin

Mother's National Congress Milder Musterole

It's 28th Birthday Registers Great Achievement

brim full of birthday cakes, ice cream and what-not for boys and girls. St. Valentine and the red candies so dear to every child; George Washington and his hatchet; Abraham Lincoln and his shovel-slate have always stood in the high-lights of childconsciousness when thinking of Feb-

And now all over the world, especially in our United States, the mothers and fathers have a birthday anniversary to celebrate which includes all who love the child in home, church, school and state.

Picture Contest

WHEN John Howard Payne wrote, "Be it ever so humble, there's no place like home," he expressed the sentiment of a great nation. The scenes about the home are always interesting.

So for this week we will have a picture contest. Send in your pictures, taken in and around your home. The pictures will be returned if a stamp accompanies them.

For the five best pictures we will give our handy rubber kitchen aprons. Address your pictures to Martha Cole, Michigan Farmer, Detroit, before March 6.

a group of earnest mothers and teachers responded to the call of one beautiful woman whose vision embraced the childhood of the world. Alice Mc-Lellan Birney held a vision of the power of healing and of inspiration for the motherhood of the nation, and she was never disobedient to that heavenly vision, but gave unceasingly to the promulgation of the gospel of motherhood and childhood as exemplified by her own beautiful life.

She felt the power of banded ill,

HE little month of February is But felt that love was stronger still, And organized for common good The world's united Motherhood.

As a result of that conference when the National Congress of Mothers was created at Washington, D. C., we now have the National Congress of Parents and Teachers. We are now of an age when all manhood and womanhood functions most capably.

Parent-Teachers' Associations form the bridge that connects the home and school, the clearing house for the misunderstandings and unbelief that creeps into the home atmosphere where teacher and parent are strangers. Today will never come again, let Years ago, twenty-eight to be exact, our first impulse in the early hours direct us to hearing and seeing the viewpoint of the child.

> No community, unorganized, can ever hope to reap the benefits of community improvements in the same measure that unified and federated forces will bring. To create a healthy public opinion toward the policy of community cooperation is one of the high functions given to Parent-Teachers' Associations.

> In the words of our reporters from many affiliated associations in our state—and our 45,000 members—come the glad news of such accomplishments as these:

> Swinging bond issues for new school houses, purchasing playground equipment, neighborhood "bees" for grading grounds, gymnasiums, libraries, lunch rooms, rest rooms with "first aid" equipment, dental and medical inspection, better ventilation, better lighting, school buildings made into "Community Centers," "Knowing Your School Programs" and how your boy and girl works in school, school orchestras, better (but entertaining) films, clean recreational activities, better conditions for mothers and pre-school children, delightful and tactful chaperonage of junior and senior students' affairs social and child labor controlled.

> If your community needs direction toward organizing a P. T. A. we shall be pleased to help you in this great cause.—Mrs. L. C., Whitlark.

Household Service

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

HOW TO PACK BUTTER.

Would you please tell me a good way to pack butter away?—Reader.

If butter is to be packed away for future use it should be made from sweet cream after the usual process. The usual amount of salt is added and may be packed solid in stone jars or made into pound bricks, wrapped in parchment paper, and then packed in jars. The jars should be thoroughly scalded and free from taint or odor. The butter should be completely covered with a brine solution in which the weight of the salt is one-fourth the weight of the water. The butter is weighed down by a plate or header of some odorless wood, with a clean stone on it, and stored in a cool place.

FLOWER CAKE.

WHEN you have time to do a little fussing, or want to make something different in a birthday cake, try this one.

Pansy Cake.

First batter: One cup of white sugar, half cup of butter, half cup of sweet milk, two scant cups of flour, one and one-half scant teaspoonfuls of baking powder. Whites of three eggs, and half teaspoonful of lemon extract. Color half batter pink, using a few drops of cake coloring.

Second batter: Make the same as first batter, use yolks of eggs instead of whites. Flavor with vanilla and color half of batter brown with melted chocolate or cocoa, using enough to make it dark brown.

Bake in round cake tins, making four layers. Divide each pan from center into quarters.

Make the first layer by arranging white dough around edge of pan. Then vellow, finally brown in the center. The second layer is made in this order, starting at the outside, pink, white, brown, yellow. The third layer, yellow, brown, white and pink. The fourth layer, brown, yellow, pink, and white. Bake in moderate oven. Put layers together with caramel icing.-Mrs. H. H., of Kalamazoo, Mich.

CREAMED SALSIFY OR VEGE-TABLE AYSTER.

Y ESTERDAY my son brought some salsify from the garden and this is the way I am going to cook it. Scrape and wash roots in cold water. cut in slices half-inch thick, cook in water salted to taste until tender, add half pint each of sweet milk and cream. Also six or eight crushed crackers. Let them come to a scalding heat and serve hot with more crack-Delicious.—B. O. R.

Next to a five-and-ten-cent store, most women's idea of a good time is to go through a second-hand store.-Mrs. E. M. C.

Shiftiness drives a man to bankruptcy, thriftiness to the bank.

for Small Children

Thousands of mothers tell us they would not be without Children's Musterole, the new and milder form of good old Musterole especially prepared for use on babies and small children.

In the dead of night, when they are awakened by the warning, croupy cough, they rub the clean, white ointment gently over the child's throat and chest and then go back to bed.

Children's Musterole, like regular Musterole, penetrates the skin with a warming tingle and goes quickly to the seat of the trouble.

It does not blister like the old-fashioned mustard plaster and it is not messy to apply.

Made from pure oil of mustard, it takes the kink out of stiff necks, makes sore throats well, stops croupy coughs and colds. In jars, 35c.

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Just address—no money—and we will send us your name and address—no money—and we will send you, postage paid, 20 yards of first class piece goods in remnants from 2 to 5 yards, for the remarkably low price of \$1.98. Every bundle contains such materials as chambrays, fancy color voiles, percales, linencs, curtain scrim, crash and lawns. You can't make your own selection of goods. Bundles

are worth double our price.

Don't Send I Penny stating that you want 20 yards of remunatts, and we will send this bundle to you. Pay the poetman \$1.98 for it. he have paid the transportation charges. If the goods are not better than you expected, return it as our expense and we will cheerfully refund your money at once, order by No. 3. 20 yards of piece goods, prepaid, \$1.98.

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Free information on your furs and hides. Send for prices and cir-culars.

Tell us the kind of fur you have, we give correct information as to the tanning and make up, what they will best work into.

We tan horse hides, beef hides for robes and coats, tan furs for chokers, neck scarfs and make up ladies coats, make rugs of all kinds, mount Deer Heads. Buckskin Leather coat and Jumpers.

W. W. Weaver,

Reading, Mich.



The DETROIT is scientifically constructed to give big states of lusty, fast grow-sing chicks.

Temperature is automatically regulated by a Miller than the second of the second directly purpose that cate of the second directly purpose that cate of the second directly of the second detailed by double walls having dead description and get the second directly of the second description and get the second directly second description and get the

Big Combination Offer it - Alliance Incubators and Brooders



Wm. Campbell, President Detroit-Alliance Incubator Co. Dept. 11 Alliance, Ohio

BOWERS Colony Brooder

Burns any fuel--costs less This broader raises more and better chicks at lowest cost. Stove is sturdy, safe, air-tight, self-regulating—bettin world to hold fire. Burns soft coal better than any other broader. Also burns hard coal, wood, etc. Automatic regulator maintains uniform heat night and day. Canopy spreads heat evenly over chicks—plenty of air and room. Backed by 8 years' success. 1000 Chick Broader, \$21.00 \$3 stovepipe outfit sent FREE
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IRONCLAD INCUBATOR CO. Box 83 Racine, Wis

Hatching and Rearing Facts

T the poultry meeting at the Col- membered that his mother had good discussed hatching and rearing chicks. A few pointers were given first on methods of pedigreeing chicks. The hens must all carry numbered leg bands. Trapnest records are kept on a sheet which can be transferred to a permanent record book.

The eggs are marked with the number of the hen and the breeding pen number. They are tested on the seventh and fourteenth day. On the eighteenth day the eggs are placed in pedigree baskets, each basket containing either eggs all from one hen, or eggs from different breeds so the chicks can easily be separated.

A small numbered pigeon band is placed on the leg of each chick. When the chick is three weeks old the leg band is replaced by the wing band. This year double clinch bands will be used in the pedigree work. The numbers of the chicks are placed on record with the number of the hen.

Incubators should be disinfected with some coal tar dip, a 1-16 solution is about right. The machine need not be opened until the morning of the third day and a temperature of 102 to 103 degrees is about right. A temperature of 102 degrees recently gave a fine hatch at the college poultry plant. Figure the per cent of hatch on the total number of eggs used and not on the total number of fertile eggs. Turn the eggs twice a day. Recent results seem to indicate that cooling is not so necessary as it was once considered. But with the little incubators, cooling to some extent may be helpful.

Overheating causes more trouble than letting the machine run down a few degrees. Shut the machine on the seventeenth day and do not open until should be all out by the afternoon of the twenty-first day.

Brooding the Chicks.

be obtained from the M. A. C. Poultry Department. Have the temperature at ninety degrees near the edge of the hover. Use the fifty-two-inch canopy advertised for 1,000 chicks and it will furnish plenty of room for 300 to 350 chicks. Hard coal is best and there is less fire risk than with oil-burning brooder stoves. Professor Card states he has not heard of a case of a brooder house burning due to a coal burning brooder stove,

A strip of felt roofing paper fifteen inches high can be used around the brooder stove to keep the chicks near the source of the heat. The roofing paper stops all draught and is liked a little better than the chick protectors of hardware cloth.

Hold up the feeding of the baby chicks until they are sixty to seventytwo hours old. Feed at 7:30, 10:00, 12:30, 3:00 and 5:30. Give the amount the chicks will eat in about fifteen minutes. Scatter the feed on newspapers and burn the papers afterward. A good starter can be made of equal parts bran and rolled oats plus five per cent charcoal. The college has stopped recommending the use of raw egg in the starter as it might spread white diarrhea.

The fine commercial chick scratch feeds are best, as it is hard to make the feed fine enough with home-grinding. Starting the chicks on self-feeders sometimes causes impacted crops from too much stuffing at an early age. It often works best to start the chicks on self-feeders when they are seven to ten days old.

Professor Halpin, of Wisconsin, re-

lege Roundup, Prof. C. G. Card luck with chicks, although they were fed largely on yellow corn meal. So he has experimented and developed the following ration, which has given good satisfaction. It consists of eighty parts yellow corn meal and twenty parts standard middlings to which is added five parts of ground bone, five parts of pure limestone and one part salt. This is mixed dry for the young chicks and fed from the start. They vision of chicks and fed from the start. They are given plenty of milk but no scratch feed. A bulletin entitled, "New Chick Raising Facts," has recently been published by the University of Wisconsin Experiment Station at Madison, which gives considerable information on their new methods of feeding chicks.

You must have pure sunshine with the Wisconsin ration. The direct rays of the sun overcome leg weakness. It's the sun and not the ground which gives the chicks a resistance to leg weakness.

TREATMENT FOR WORMS.

In your issue of January 3, 1925, ou printed an article about an Ohio poultry man whose hens were infected with worms, and that he used concen-trated lye for tapeworms. My hens with worms, and that he used concentrated lye for tapeworms. My hens have tapeworms and the flock is nearly ruined. I have a valuable flock of hens, as I have been culling the hens for about four years, and they were our main support. We have had lots of eggs from them other winters, but none this winter. Could you tell me how to use the concentrated lye treatment, as you did not give any directions how to use it. Would greatly appreciate any help you could give me on treatment for tapeworms. Would it be safe to raise chickens on the same ground where I had chickens last year, and if not, where would it be safe?—W. A. S.

Two pounds of tobacco dust contain-

Two pounds of tobacco dust containthe end of the hatch. A good hatch ing not less than one per cent nicotine, can be added to 100 pounds of the laying mash to remove worms. About every other week the flock can be Plans for a 10x10 brooder house can given epsom salts at the rate of one pound for each 100 birds. It is given in the drinking water in the morning when the hens are thirsty.

The Storrs, Conn., Experiment Station, recommended two tablespoonfuls of "Blackleaf 40" in a quart of water mixed in a moist mash and given to the hens in the evening after they have been hungry all day. At sundown give epsom salts. Often a lot of the worms can be removed from the dropping boards the next morning.

I have had no experience with the concentrated lye treatment for worms and do not know the source of the article in the January 3 issue.

It is advisable to raise young chickens on clean soil if the range has been infested with worms. I believe that weeks of zero winter weather must be a fine help in cleaning up a poultry range and making it safe for the new stock. But if the range has been in bad condition it will help to plow the soil and plant rye or some forage crop. This turns under the noultry manure and turns un clean for the poultry.

DAMP POULTRY HOUSE.

I have a coop 30x44 feet, has eight windows, size two feet five inches by five feet, have double floors with tar paper between. Three ventilators 5x5 inches, which reach down within nine inches from the floor. This coop is built with air space in wall, then plastered. I have about 160 chickens in tered. I have about 160 chickens in this, divided in four pens, but the place is very frosty so that the litter gets very damp. Can you tell me how to remedy this condition?—R. F. M.

When a poultry house is damp the only sure remedy I know is to open



Official Record—285 Eggs Net Profit of \$7.00

PROF. E. C. FOREMAN

All birds used in our breeding pens must pass inspection and have O. K. of America's Production Expert. Scientific methods of incubation and rigid inspection assures you of Strong, Sturdy Chicks that can be raised without pampering, 100% live delivery guaranteed. Postage prepaid to your door. Write for:

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15Years of Breeding to Lay

White Leghorns exclusively. Foundation stock is Tancred's Best Backed by five generation of 300-egg hens. Three Great Matings

Send for free catalog which gives full particulars. GUARANTY 100% Live Delivery

Wolverine Hatchery 100% Good Condition. Zeeland, Mich. Box 9

Chicks for 1925

Again we are ready to book orders for Baby Chicks: Barred and White Rocks, Reds, White and Silver Laced Wyandottes, White and Buff Orpingtons, Black Minorcas, Anconas, White, Brown and Buff Leghorns. Send for Poultry Circular with price list. 100 per cent delivery.

cent delivery.

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Active member International Baby Chick Association,

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ICHIGAN HATCHERY

Pedigreed, Heavy-Egg Strain Chicks White Leghorns headed by males direct from Eckart; last year's M.A.C. International Egg Contest winners. Also leading strain Anconas, Rocks, S.C. Reds. Culled by experts. Modern hatching methode. Guarantee 100% vigorous delivery. Free Catalog.
Michigan Hatchery, Box 1, Holland, Mich.



CHICKS That Satisfy Big, husky chicks, from heavy layers, S. C. Eng., White and Brown Leghorns, 12c; Anconas, 13c; Barred Rocks and R. I. Reds, 15c; Assorted chicks, 10c; Class A. chicks only. No money down. Pay full amount ten days before chicks are shipped. 100% live delivery. Postage paid. Catalog free.

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SEND NO MONEY FOR SILVER CHICKS

Just mail your order, we ship C. O. D. and guarantee prepaid 100% live delivery of sturdy, purebred chicks from healthy, bred-to-lay flocks. Wh. Br. Buff Leghorns, 13c; Bd. Rocks, S. C. Reds, 14c; Wh. Rocks, 14c; Buff Rocks, Buff Orps., Wh. Wyand., 16c; Mixed, 10c; Blk. Minorcas, 15c. Silver Lake Egg Farm, Box M, Silver Lake, Ind.

WHITTAKER'S TRAPNESTED REDS Both Combs, Michigan's Greatest Color and Egg Strain. Chicks and Eggs from Vigorous, Hardy Stock. Our 16th Annual Catalog is yours for the asking. Write for it. INTERLAKES FARM, Box 39, Lawrence, Mich.



English Producer White Leghorns Larger size 5-1b. hens. The kind for farmers and egg producers. Strong husky chicks our specialty, \$15 per 100. Eggs \$8.00. Free Catalog. Mapleside Leghorn Farm, Box O.







White Leghorns Tancred-Helly-wood-Barron strains Anconas

Sheppard Strain, direct

Bar'd Rocks Parks dark colored Br. Leghorns

5% Discount On all prepaid orders placed 30 days before shipment.

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Special Star: White Leghorns,
250-288 males. Anconas,
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Pure-bred carefully culled and selected. Hundreds of satisfied customers. Our chicks will improve your stock and increase your profits.

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Order early. Ref.; Farmers' & Mechanics' Bank, Ann Arbor. One-fifth down. 100% live delivery guaran-teed. WASHTENAW HATCHERY, Geddes Road, Ann Arbor, Michigan.

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

LAYING LEGHORNS BLACK-BROWN-BUFF-WHITE

ANCONAS AND MINORCAS

Plymouth Rocks, Barred, Buff, White, Rhode Island Reds, R. C. and S. C. Silver-laced Wyandottes and White LIGHT BRAHMAS and JERSEY GIANTS. Write for Prices

CRESCENT EGG COMPANY, ALLEGAN, MICHIGAN Egg Cases, Fillers, Cartons — Everything reguired for packing eggs properly; and Jamesway Equipment for Poultry Houses and Dairy Barns

BABY CHICKS

Chicks from winter laying, farm raised, mature stock S. C. W. Leghorns, R. I. Reds. Barred Rocks, White Rocks, White Wyandottes, Minorcas, Whita Orbingtons, Anconas, Black Jersey Glants, White Orpingtons, Anconas, Black Jersey Glants, White Indian Runner Ducks, Pekin Ducks, \$15 per 100 up. Live delivery guaranteed. Parcel Post prepaid. Hatching eggs, \$8 per 100 up. Circular free. GLEN ROCK NURSERY & STOCK FARM, Ridgewood, N. J.



WHITE LEGHORNS
BROWN LEGHORNS
WH. & B'D ROCKS
Zeeland, Mich, B. 56

enough of the windows so that the outside air will enter freely and keep the wall and litter dry. When a large number of glass windows are used in a poultry house the house heats up during the day and cools rapidly at night, causing moisture to condense on the walls and ceiling. The next day when the sun warms the house the litter becomes damp.

I have found it possible to keep the poultry houses dry by using plenty of open front, although such houses are rather cold at times. I have noted that my Barred Rocks stand the cold in an open front house better than my Leghorns. It is almost impossible to obtain heavy winter egg production if a house is too cold, but a damp house makes an unhealthy flock. Personally, I had rather have the houses a little cold, but dry.

PULLETS NOT LAYING.

I have sixty-five Barred Rock pullets hatched in May. They seem healthy but will not lay only three and four eggs a day. I am now feeding about ten quarts of oats in the morning, a mash of oats and corn (warm) about six quarts at noon, and a twelve-quart pail of corn on the ear at night. They pail of corn on the ear at night. They have oyster shells, wood ashes, table scraps, at all times, and, of course, warm water. I have been thinking of changing to White Leghorns. What would you advise?—R. B.

A lack of protein in the ration is probably holding back egg production. Try one of the commercial laying mashes or a homemade mash composed of equal parts of bran, middlings, ground oats, ground corn and meat scrap. If plenty of sour milk is available you can reduce the meat scrap one-half. A lack of maturity in some of the pullets may cause low egg production. This flock will probably improve rapidly as conditions become more like spring.

Changing from Barred Rocks to White Leghorns is largely a matter of personal preference. Both breeds contain a large number of good layers. It is the individual bird and not the name of the breed that determines egg laying ability. In general the White Leghorns make the best fowls for commercial egg farms, while the combination of meat and eggs from a breed like the Rocks is appreciated by many farmers and small flock owners.

GREEN FEED FOR HENS.

Will you kindly inform me whether the following foods are good for lay-ing hens: Raw potatoes, apples, mel-on vines, and radishes. If the radishes are not good, how about the leaves?
—L. H. B.

Raw potatoes and apples are relished by the hens and add succulence to the ration. However, a balanced dry mash should be used at the same time to encourage egg production. Melon leaves and vines are rather tough and not usually eaten by the hens when they have access to other green feed. A clover pasture or the succulent leaves of Swiss Chard will be much

Cull radishes and the leaves will be picked over by the hens. They like the roots but do not relish the tough leaves. Other grasses and green feed are better poultry feed. Much depends on the quality of the poultry range. Hens in small yards will seem to like certain tough leaves that they will never touch if more tender and succulent green feed is available.

MATING TURKEYS.

I wish to ask how many hen turkeys You buy experience with our chicks. For years we have being school one should keep for one tom?—Mrs. H.

A young tom of good vigor is sometimes mated with as many as fifteen turkey hens. When the flock consists of twenty or thirty hens, it is best to use two toms and alternate them with use two toms and alternate them with the flock to avoid fighting. There is no definite rule to follow, but one tom Big 5-Lb English W. Leghons Larger hens, better Chicks, tatching eggs. Free catalog describes them and is full of practical, money making poultry information. Send for it. A. W. WAUCHEK, Gobies, Mich.



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Who Works the Hardest?

A Fair Discussion of the Subject

Dear Uncle Frank:

I have been very quiet all summer on the bobbed hair and knicker question, but I thought I ought to say something about "whether girls work hard-er than boys or not." I have worked in the house and out doors, so I ought to know something about this question.

What T. Hurd said seems true to boys who have not worked in the house, but I have worked in the house and know what it is. Now, this is the way I had my experience.

My mother fell sick and as there was nobody around our place that wanted to work at that time, I had to do the housework.

I would get up in the morning and get breakfast. As soon as breakfast was over I had to wash the dishes and the milk cans, of which there were four. After I had done this I had to straighten up the house. By the time I had done this, it was generally time to start dinner. After dinner I washed the dishes and straightened up the house. This did not take so long, so most always I had a little time in the afternoon.

After I had prepared supper and it had been eaten, I would wash the

I will tell about my experience out doors.

In the morning I would get up, go out and help milk and feed the cattle and horses. After this, I came up and ate breakfast. After breakfast, I went out and helped water up the stock. After this we hitched the team on the wagon and went out to the field to draw hay. Of course, we did not do this every day last summer, but I am telling about those days because I had to work hardest then. We stopped work at noon for dinner. Before I went to the house I helped feed the horses and water the cows. After dinner we came out and watered and hitched up the team, then went out to the field again. We generally quit about half-past five. After we came up we took care of the team and watered the cows before supper. After supper we milked, and then came up to the house to read or do something

Now, after having worked inside and outside, I have decided that I like to work outside far better than inside. I have not said this to try to prove that girls work more than boys, but to try to make some boys see that they do dishes, and after doing a few other not do so much more work than the things I was glad to go to bed. Now girls.—Robert Green, Waltz, Mich.



My main pastime is drawing pictures and playing piano. Some combination, eh! I don't read stories very much. The reason is, I am too much occupied with other things.

I have just finished my portrait with my pen. My face isn't as natural as it might be, but anyway, my legs are just about natural, also my feet.

I must also apologize for not writing before. Am a sort of a slow poke. This you can easily see by my picture. I have to move the furniture before I can turn my feet around. Ha!

Well, I guess I'll shut off the draft and go to bed.—Albert Alfredson, Whitehall, Mich.

Say, Uncle Frank, can you tell me something to stop a girl from growing so fast? I am thirteen, and five feet five inches, and weigh 120 pounds.
Well, I must go back to school. Love to all, Verda R. Cole, M. C., R. 7, Mt. Pleasant, Mich.

No, I have not forgotten you and am glad you came back. You have read good books. Whatever would stop your growth would also affect your health, so just keep a growing.

Dear Uncle Frank:

I live on a 200-acre farm with my parents, sisters, and brother. People don't know what they are missing by not living in the country, anyway in the summer.

the summer.

Is the city better than the country? Some people say it is, and also claim it is more healthy in the city. They say that the farmers "garbage" goes in the back yard; dirty dishwater, too. They say in the city it isn't that way, but is it that way in the country? What do you say, boys and girls?

That is station M. V. S. F.—Meadow View Stock Farm, near the vicinity of Holland, Michigan, now signing off at 7:30 o'clock, central standard time. Good evening, Ruth Kleinheksel, R. 5, Holland, Mich.

Somebody has a radio. The matter

Somebody has a radio. The matter of health depends more upon one's care of his health than upon whether one lives in the country or city.

Dear Uncle Frank:
Can't I chatter for a little while and not have to bother with W. B.? I think Marcia Rowe's suggestion is a good cue. I don't think any boy is manly that smokes. I have seven brothers and none of them smoke.
Well, I guess I must close my chatterbox. Hope I win in the contest for once. Your niece, Gladys Knecht, M. C., Cadillac, Mich.

I am glad to get your smoking ideas. Let's have some others. Do you like them smoked or unsmoked, girls?

Dear Uncle Frank:

I have a story about raising pigs. Once I was at a man's house. He had a bunch of pigs. He had one very small one, and he told my brother and I that the one who caught it could have it. I got the pig, took it home and fed it. After six months he weighed 180 pounds and brought \$11.50. I expect to, or would like to, join the boys' pig or calf club.

I like to work on the farm. I would like to get a pin. Am eleven years old have a story about raising pigs.

like to get a pin. Am eleven years old and in the seventh grade.—Ferris Caskey, Gregory, Mich.

You are quite a live stock farmer already. You have an especially good start for a boy eleven years old. Just keep it up and you will be some farmer.

Dear Uncle Frank:

Dear Uncle Frank:

I wrote you a letter about two years ago and it was printed. About two days after it was printed I received several letters from readers of the Merry Circle page. It was so funny, too. Every one, (just eleven), were girls. Not one boy. I'll bet the boys all write to the girls. I answered all the letters, but one alone answered. I get at least a letter from her once a week, and last week I got two. That's going some, I'll say. Especially in view of the fact that she has never seen me. seen me.

You remember I wrote you about the Sacred cattle. The calf was lost in the swamp, but we have another one now. The other was yellow, and this one is grey and ever so much different.—George Conway, Manistee, Mich.

Your correspondence experience is interesting. I remember the sacred cow and your past reference to only girls writing.

Dear Uncle Frank:

As the M. C. has made progress why not have it make more progress? My idea is that, to have some fun and excitement, we should vote for a president, treasurer, and law-maker. I mean



Emily Usborne, Girls' Chairman, Ag-HE Exposition, Hastings, Mich.

when I say law-maker, that we should have a person who is supposed to make taws and send them to you to

make laws and send them to you to see if they are good.

If you have any other offices to fill will you name them? We would like you to tell what each one is to do. We should have a primary election to decide for which one to vote.

There should be parties and each one should have a name, such as, Re-

There should be parties and each one should have a name, such as, Republic, Democrat, Federalist and Whig. The M. C.'s should write on a piece of paper, their name, and age, and also of what party they want to belong. Good-bye, with best wishes from your nephew, Clinton Van Dwine, R. 1, Dorr. Mich.

Dorr, Mich. Here's an idea. Let's have some

opinions on it. It's not new, but is a little different than some others expressed.

Dear Uncle Frank:

I suggest that we have a discussion or contest, on, "What do we get from the dictionary?" For we surely get or contest, on, "What do we get from the dictionary?" For we surely get many things from it. Our grammar is bettered by just the simple dictionary. Things that we couldn't understand are explained. But still people wonder what good it is to anyone.

I am very glad I am a Merry Circle member, as I have secured many friends, some with which I have corresponded over a year.

Well, good-bye Uncle Frank. Hope someone gets good from this.—Your niece, Geneva Kohlenberger, 309 Sheridan Avenue, Big Rapids, Mich.

Yes, the dictionary is more useful

Yes, the dictionary is more useful than most of us think. I have found it really more interesting to ramble through, for in it I have found words which were like nuggets of gold. I am glad you have found good friends through the Merry Circle.

Dear Uncle Frank:

Dear Uncle Frank:
Perhaps you have forgotten me, as I haven't written for so long, but I haven't forgotten you nor the M. C. In fact, have missed but very few letters in our department. It is laughable to see so many take our discussions so seriously. When I read some of them I just say, "It is to laugh!"

I have read recently, Pollyanna, Prudence of the Parsonage, Pilgrim's Progress, and have started Just David, besides some books in the school library.

Favorite Winter Sports

By Prize Winners

By Mary Heath, Mesick, Michigan. fox and geese best, for it gives plenty of exercise and fresh air.

We are stirring all the time at that game and we can play a long time out of doors without getting cold. I think the more we children are out playing, the healthier we are, for I know by experience that last winter Mama wouldn't let me play out of doors hardly any, and I was sick a great deal. I missed two weeks of school during the winter.

This winter I have played out every day with the rest of the school children and I haven't missed a day yet, and am feeling and looking good.

We have great times sliding down hill at school, and on Sunday when the weather is fit, we get up a bunch of us and take a little wood and kindling and a little bottle of kerosene and a few matches, and our sleds and skiis and go to the big hill and build a fire and just have a big time.

By Le Roy MacKellar, Decatur, Mich. Skiing is a winter sport in the north of Europe, Canada, and the United States. The ski, or Scandinavian snowshoe, is a flat slat, usually of hard pine or ash, somewhat wider than one's boot, a quarter of an inch thick, and from six to ten feet long. These narrow to a point at the toe and are turned slightly upward so as to slip over small objects. The foot is held on by a thong. A groove along the middle of the under surface prevents slipping sideways. In skiing one carries a strong stick with a wheel at one end. This serves for steering when sliding down steep places.

And now the thrills have begun! You will be on your skis every free moment you have, when the snow is right and when you get the knack of it, so that you can take the steep slopes without too much fear, you will be ready to say that there is nothing short of flying that can beat it. The king of winter sports—that is its name.

When I say skiing is the king of winter sports there is another kick coming, and that is getting up hill. The easiest thing is to pick a course zig-zag. The poles are handy in hill climbing.

Skiiers also make great jumps and do many other tricks. Therefore, I think the title is correct, because of the fun and advantages on skis. Fun can be had from skiing in addition to the health and the self-respect that comes from mastering grim mountains in zero cold.

MIXED WORD CONTEST

OUR last mixed word contest which appeared February 14, must have been easy, as nearly every one of the thousand or more had it right. I just mixed up the big pile of answers and pulled out with my eyes closed, the ten who are to receive the prizes this week. All others who had correct answers and are not Merry Circlers, will years from top-dressing? get M. C. buttons and cards.

Fountain Pens.

Mary Shoemaker, M. C., 1506 Deyo able? Mary Shoemaker, M. C., 1506 Deyo Street, Jackson, Mich.
Leone Nixon, R. 2, Standish, Mich.
Dictionaries.
Ruth G. Moline, M. C., R. 2, Manistee, Mich.
Grace Cramer, Comstock, Mich.
Lillian Skytta, Rumley, Mich.
Knives.
Ella Engelhard, R. 3, Sebewaing, Mich.

Alice Buist, M. C., Martin, Mich. John Cook, M. C., R. 1, Allegan,

Arlene Bohrer, M. C., R. 7, Traverse City, Mich. Astrid Peterson, R. 1, Hermansville,

The girls seem to be in the great majority in this contest, while the boys come stronger in cross word puzzles. Quite a few missed out on this contest because they spelled scythe wrong.

Some also lost a chance by not put-For out-door sports, I like playing ting their names and address on their papers.

> ANSWERS TO FARM WORD CON-TEST.

THE following are the correct words made from the mixed up words in the contest which appeared in our issue of February 14:

1. horses chicken rooster

wagon

reaper scythe 14. sprayer 15. windmill separator pails 16. pigs cultivator tractor radio

18. wire 19. sheep 20. children 10. automobile

11. thresher

THE MERRY CIRCLE FUND.

THE Fund is still alive and kicking, and it is growing, even though it has been quiet. Boys and girls are occasionally sending in their nickels and dimes, and sometimes more. I am working on a special purpose for this fund and in a short time expect to announce it. Then we will have to get busy and have a regular campaign to make things hum. In the meantime, if you have any bits of money that you would like to contribute toward making it more pleasant for unfortunate children, please send it to the Merry Circle Fund, Michigan Farmer, Detroit, Michigan.-Uncle Frank.

Read-and-Win

W E have had quite a few new kind of puzzles lately, including, of course, the cross word puzzles, so we have somewhat forgotten the old reliable Read-and-Win. So, for a change we will have one this week. For those who have not taken part in the Readand-Win the following suggestions are

The answers to the ten questions below will be found in this paper. When you find the answer write it out as short as possible to make sense, and number it the same as the question is numbered. Do not write out the question. Write on one side of the paper only and put your name and address in the upper left hand corner of the first sheet. If you are a Merry Circler, put M. C. after your name.

All the correct and neat papers will be put into a basket and ten will be pulled out for prizes. The first two prizes will be handy nickled fountain pens; the next three, useful school dictionaries, and the next five, handy little pocket knives.

All sending in correct papers and who are not Merry Circlers, will get M. C. membership cards and pins.

This contest closes March 6, so send your papers to Uncle Frank, Michigan Farmer, Detroit, Michigan, before that time.

1. What was the average increase in yield of wheat in the good wheat

2. What per cent of the cow testing association cows were found unprofit-

3. How can a dairy ration be cheapened?

4. What is the only way to run away from life? 5. What did the duplicate of a \$16.75 hat cost?

6. What will take the accumulated grease out of a radiator?

7. Who will be next secretary of agriculture? What did Wanamaker buy for \$120,000?

9. How many pounds of nitrogen does it take to grow a corn crop? 10. Who is the pre-eminently typical American?

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150,000 chix 9c up. From highest-producing contest-layers. Free circular. Hatching eggs. 10 chix free with early orders. Lawrence Hatchery, R. 7, Grand Bapide, Mich.



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the entire contest for the
first two weeks, and on
Feb. 6 led all the Leghorns. High breeding
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Stock all Pure Bred and Blood Tested for Baccillary White Diarrhea.

This assures you of more healthy, sturdy chicks. The kind that live and grow into money making flocks. Flocks have all been thoroughly culled for years by experienced men.

Four Leading Varieties: Barred Plymouth Rocks, Rhode Island Reds, S. C. Mottled Anconas, S. C. English White Leghorns. Write for price list and catalogue describing in detail about our test for Baccillary White Diarrhea

DUNDEE HATCHERY, Box A, Dundee, Michigan

Early Maturing BABY CHICKS

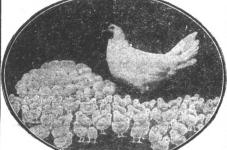
From Pure Bred, Blood Tested Stock

All of our breeding stock has been tested for Bacillary White Diarrhea, and Culled for Egg Tyle and Standard Requirements. This should greatly aid in the control of White Diarrhea Troubles. Write for prices on our B. P. Rocks, R. I. Reds, White Wyandottes, W. P. Rocks, and S. C. W. Leghorns.

MILAN HATCHERY, Box 4 Milan, Mich.



FIRST CLASS CHICKS \$10 per 100 and up. From pure-bred flocks on free range, culled by an expert, 100% Live Delivery Guaranteed. Postpaid prices 25 50 100 500 1000 expert. 100% Live Delivery Guarantees.
1 S. C. White Leghorns
Brown Leghorns
Rock: S. and R. C. Reds
assorted. 25, \$3; 50, \$5.50; 100, \$10. Ref.: State
You take no chances. Free Catalog.
BOX 36, HUNDERMAN BROS ZEELAND, MICHIGAN



S. C. White Leghorns Chicks—Eggs—Stock

From world-famous layers. Tancred strain, 250-280. Barron strain, 230-270. Birds culled by experts from the state university. All our pens are mated with males from dams of high records. 100% live delivery guaranteed. 5% discount on orders placed before April 1. Write for guaranteed. 5% discount on orders placed before April 1. Write for our illustrated catalog showing our poultry show winners. "Regular Egg Machines," said W. W. Zike, judge of Holland show, after looking over our pen.

Reliable Hatchery and Poultry Farm, Box3 Holland, Mich.

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For plowing, harrowing, seeding and cultivating the CENTAUR TRACTOR has no equal. It never tires, never loses time—but is "on the job" ready for action every minute of the day. It is light weight, strong, easily handled—and costs only 10 cents an hour to operate.

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unit will do for you.

The Central Tractor Co.

55 Central Ave., Greenwich, Ohio

The Central Tractor Company 155 Central Ave., Greenwich, Ohio. Please send CENTAUR Catalog to

Address

Future of Cow Testing

(Continued from page 271).

The sooner a tester learns to say, "I trouble of keeping a breeding record don't know, but I will find out for you," the sooner he will win his members' confidence and the better off he

The tester must also make the members feel that he is right at home with them. He must live like they do, enter their sports (not more than his time permits), enjoy their fun, grieve over their sorrows, and in general make them feel that he is just an ordinary person like themselves.

Another great aid, perhaps the greatest in securing their confidence, is to be exact and careful in the work performed. In order to satisfy the men it is necessary to make them feel that their work is being done right. Therefore, the tester should always show carefulness in doing his work. If he is in a hurry he must hurry in a careful way, not by banging things around. A tester should never be in too much

book. He can advise as to the best time for the herd to freshen. He can help in the treatment of sterile cows, take blood samples for contagious abortion, and act as a first aid man in general around the barns in which he

Another important duty he should perform is giving suggestions for farm management. It is quite often hard for the farmer dairyman to know just what rotation to use, to know how large to make each rotation, how much hay and grain he will need this year and how much pasture he will need next year. The well-trained tester in the future will be able to aid him in these difficulties.

Marketing, the greatest of all farm difficulties, will be studied for the twenty-five or thirty farmers collectively by one man, the cow tester. With the aid from the M. A. C. marketing



The Cow Testers of Michigan.

of a hurry to stop and answer questions and explain things. That is what he is there for.

Great care should be taken in writing up herd books. Many members are pretty choice of their herd books and a nice neat looking book makes them feel pretty good. I carry my own ink, using the same color and brand at all times. It shows up well to have the whole page filled in neatly with the same colored ink.

After the tester has gotten the members really interested in their cows, and has their full confidence he can go ahead with a very constructive program. Among his first items will be rearranging of feeding practices, balancing rations, etc., weeding out the poor cows, recommending the use of silos and the growing of alfalfa, urging the use of better pure-bred sires, pushing the tuberculosis eradication, and many other items that are now receiving much discussion and should receive earnest attention, both now and in the future.

But in the future I think the tester can branch into other fields. He can help the dairyman with his other problems. He can aid in planning improvements in the dairy barn and yards. By going from one farm to another many ideas are picked up. These ideas and the help from M. A. C. that is available would make the tester a real help in dairy barn construction, arrangement, ventilation, etc.

He can also make the farmer a more competent judge of dairy cattle. The farmer, by having judging thoroughly demonstrated to him, can go out and buy cattle more intelligently. And thus make fewer poor buys.

Again, the tester can explain the laws of breeding to the farmer and aid him in practicing them. Make him more familiar with the better strains of his breed of cattle, and help him in buying a bull best suited for his strain of cattle.

Herd management is another problem in which the tester can help the dairyman. He can make out handy breeding record charts to be tacked

experts, the tester will be able to give expert advice on marketing to the various members of his cow testing association.

As the boys and girls on a dairy farm are brought up under quite a strong dairy environment, it will be easy for the tester to organize calf clubs or at least aid in their organization. But he need not confine himself to calf clubs. He may be active in various other boys' and girls' club work, according to the need.

No one is better situated than the tester of a cow testing association to advance the opportunities for further education among farm boys and girls. This I consider is one of the greatest opportunities for the tester to be of real service to mankind at large. Too many farm boys and girls quite school when they finish the eighth grade and go to work on the farm, with no higher ideals or no special training for their work. They are just farm help. And it is a pity, but we are overstocked with that kind of help.

The tester can put before these young people the advantages of proper training and in doing their life's work. And if, as we said previously, the tester has the full confidence of his patrons, then these young men and women will listen to him more than they would to some others and he will be able to induce them to continue their training. They won't all respond to the extent that they will be college graduates. to high school and part of them will graduate. Possibly a few will finish college. Others will be scattered among the various business schools, normals, short courses offered at this institution, etc. Some will take a business or short course without the high school course. But it matters not what particular training these rural young people take, or what walk in life they plan to follow, the cow tester can do his mite and start them in the pathways that will lead them to learn that they must get fitted for their job in life.

There are remaining two of the greatest possibilities for betterment up in the barn, reducing greatly the by cow testers, namely, improvement ecord

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his territory. There are many things er at the plant. that can be done by the tester to enlighten the drudgery of the farm families' home life. He can interest them in good books, papers and magazines. He can help fix small conveniences bulletins on packing lunches, the latest canning methods, remodeling and redecorating homes and many others as the occasion demands it. In short, he can be a handy Johnny around the house.

In community social work the tester should take an active part. He should support and advance any project that is good for the community as a whole. He should always be alert to do his bit, whether it is for the association members or not. He should always be on hand to help in any good cause to the extreme extent of his ability. People enjoy having a pleasant sociable sort of a fellow around. And it will help to induce more men to join the cow testing association if they know that all testers are real live wires.

We have outlined many improvements for the cow testing association, and now all we need is testers able to carry out such a program. The judges will probably think this is all bunk and heave it into the waste basket the first thing. But what is life without things beyond our reach, or if you wish, without higher ideals? And as we approach our ideals must we not move them ahead? For if we reached our goal what would be the use of living any more? Our work would be accomplished and we would have nothing more to do. We would merely be in the way of progress. I think it is better to always have something for which CHEAPENING MILK PRODUCTION. to strive. Though we do not reach it, yet we can at least say "I have tried. I failed because my ability was not equal to the task."

so shall it be the closing thought. Good, whole-hearted, energetic service has made success for the cow testing association in the past and will make greater success for it in the future.

CREAMERY HAS BIG SEASON.

THE Crystal Falls Creamery Company—a farmers' cooperative concern-manufactured, last year, 99,704 pounds of butter, which was a thirtyfour per cent increase over the year before. This increase was mainly in out purchasing high priced feeds. By the winter months which was advantageous both for the creamery and the farmers. It is expected that larger quarters will become necessary, if the present rate of progress continues. tion.—Leo C. Reynolds.

of the social and living conditions in Electricity has replaced steam for pow-

MICHIGAN COW TESTING WORK FOR 1924.

1.-30,506 cows in 2,641 herds under around the house. He can distribute test in 105 cow testing associations in Michigan.

2.—3.79 per cent butter-fat cows in Michigan in cow testing association work-highest in United States.

3.—14.3 per cent of the cows in Genesee county in nine cow testing associations, highest per cent of cows in any one county in the United States under test.

4.—Forty new cow testing associations organized December 1, 1923, to December 1, 1924—growth fifty-eight per cent.

5.—Sixty-five cow testing associations-ninety-six per cent-reorganized for another year's work.

6.—Average Michigan Cow Testing Association cow produced 7,201 pounds of milk and 277.3 pounds of butter-fat during 1924.

7.—Average Michigan cow produces 3,700 pounds of milk and 160 pounds of butter-fat.

8.--8.5 per cent of cow testing association cows found unprofitable during 1924-or ninety carloads sent to the

9.—Three hundred and forty-three pure-bred sires purchased by cow testing association members.

10.—Record of Performance instituted in cow testing association work 714 entries received by January 1,

HE cost of milk production depends very largely upon the cost of foodstuffs. Therefore, to cheapen So, as service was the opening word, milk production I believe dairymen should feed large quantities of leguminous roughages, such as alfalfa, clover hay, bean pods, possessing high digestible content. Corn silage and leguminous roughages should form the basis of the dairy ration. I think with this source of high digestible materials the grain ration can be materially cut down and the cost of the dairy ration decidedly reduced.

It has always been a problem at Forest Grove Farm to compound a dairy ration sufficiently rich in protein withthe feeding of leguminous roughage I believe we are in a large measure solving our problem and materially cheapening the cost of milk produc-

December Dairy Honor Roll

Following is a list of the high cows of the various classes in the Michigan cow testing associations for the month of December

-vear Class			
11-16-24 10-29-24 10-15-24 11-10-24 11- 1-24 10-27-24 10-14-24 12- 1-24	1845 1932 2136 1389 1950 2167 1071 1587 1364	4.3 4.1 3.7 5.3 3.4 4.7 4.7	79.3xx 79.2xx 79.0xx 73.6 70.2xx 69.3xx 68.5xxx 65.0x
vear Class	1404	0.0	63.0xx
$\begin{array}{c} 10 - 22 - 24 \\ 11 - 18 - 24 \\ 11 - 00 - 00 \\ 10 - 00 - 24 \\ 10 - 21 - 24 \\ 11 - 18 - 24 \\ \\ \\ \\ 10 - 10 - 24 \\ 9 - 30 - 24 \\ \end{array}$	1138 2114 2436 1984 1434 1438 1394 1727 1810.4	5.4 4.2 3.6 3.7 5.0 4.9 5.0 4.0 3.8	90.98 89.0xx 87,6 73.4 70.7 70.4 69.7 69.1 68.8x
· · · · · · · · · · · · · · · · · · ·	1425	4.7	67.0
1024 11-15-24 11-20-24 11- 8-24 12- 1-24	2477 1820 2458 2536 2529.1 2436.6 2223 1475.6 1531.4	4.3 5.8 4.2 4.0 3.7 3.6 3.8 5.7 5.4	106.5xx 105.6x 103.2x 101.4xx 93.6xx 87.6 84.5x 84.1 82.7 80.9
e-vear Clae		0.1	80.9
11-10-24 12-6-24 11-15-24 11-10-24 11-10-24 11-8-24 10-29-24 11-2-24	2994 2396.3 2529.1 1758 1894 2195 1714.4 2052 1541	3.5 3.7 5.3 4.0 5.1 4.2 5.5	100.6xx 93.9xx 93.6xx 93.1x 90.9xx 87.8x 87.6 86.2x 85.1xx 84.8x
	2-year Class 11-10-24 10-15-24 10-15-24 11-10-24 11-1-24 11-1-24 11-1-24 11-1-24 11-1-24 12-1-24 12-1-24 12-1-24 12-1-24 11-18-24 11-10-00 10-00-24 11-18-24 11-10-12-24 11-15-24 11-15-24 11-2-24 12-1-24 11-2-24 11-15-24	10-29-24 1032 10-15-24 2136 11-10-24 1950 11-1-24 1950 11-1-24 1950 11-1-24 1071 10-11-24 1071 12-1-24 1202 year Class. 10-22-24 1138 11-18-24 2114 11-00-00 2436 10-00-24 1984 10-21-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 1438 11-18-24 2458 11-19-24 2458 11-10-24 2458 11-10-24 1327 /e-year Class. 11-10-24 1327 /e-year Class. 11-10-24 2994 12-6-24 2396.3 11-15-24 2529.1 11-10-24 1758 11-10-24 1758 11-10-24 1758 11-10-24 1758 11-10-24 1758 11-10-24 1758 11-10-24 1758 11-18-24 1758 11-18-24 1758 11-18-24 1758 11-18-24 1758 11-18-24 1758 11-18-24 1758 11-18-24 1758 11-18-24 1758 11-18-24 1758 11-18-24 1758 11-18-24 1758	2-year Class. 11-10-24

One x denotes three times milker; two xx denotes four times milker; xxx denotes 21-day test.

Which BY THESE

By the Milk your cows put in the pail day after day.

By health conditions— better development of heifers and calves.

Use these three ways to test your home mixed rations, or any feed you buy. You will know then, without puzzling your brain about proteins, percentages, digestibility, etc., what ration is best and most economical for you to feed. Sugared Schumacher Feed is proving "BEST and most ECONOMICAL" for thousands of dairymen and farmers. W. S. Kerr, Cohasset, Mass., writes:

From THE OAKS FARM Cohasset, Mass.

The Quaker Oats Co., Chicago, Ill.

"In Sugared Schumacher Feed you have a feed that will prove very profitable to anyone who gives this feed an opportunity to show what it will accomplish.

"We have been feeding it for nearly three months as the base of our ration. Visitors have remarked at the improvement in general conditions of our large herd of pure bred Guernseys. In addition to this, they have also shown a large increase in milk flow."

Test Sugared Schumacher—check it by the "A-B-C" standards of More Milk – Better Conditions – More Profit and you will find it PROVES UP 100% as Mr. Kerr found. Write for free "Schumacher Feeding System" containing a dozen tried and tested dairy rations. Your dealer has Sugared Schumacher, if not write us.

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ERE is the silo for your farm-at a price that you can pay. It is easy to set up by your own labor. Erecting brackets are furnished with it. Storm-proof—fire-proof—and practically freeze-proof. The



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has many new features. It is of the permanent type, but you can add capacity at any time it is needed. The doors are continuous, and they are all the same size. The chute is rigid, extremely well built. Once erected, this silo requires no expense or labor for upkeep.

The Copper-ized Metal Silo will produce the best possible silage, containing the fullest food value and keep it indefinitely. Copper-ized Metal has been used in silo construction for ver 12 years, and there is nothing experimental about this.

Write today for catalog and prices. Special offer to club buyers. Agents wanted.

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Simple construction, with few parts and rigid one-piece main frame assure long life. Every part is easy to get at and the knives can be quickly changed. Over 50 distributing stations assure prompt service in emergencies.

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We'll also send U. S. Gov't. Bulletin, "Making and Feeding of Silage".

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identifies this copperbearing, longer lasting

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A postal brings official Proof of Tests from Indiana State University, Burgess Laboratories and Hunt Laboratories. They show you that "Galvannealed" Square Deal must outlast all other farm fences. We'll also send Ropp's Calculator, figures interest, grain, and answers thousands of farm questions—and—the questions — and — the Square Deal Catalog. Write today, all three sent free to landowners.

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THE BROWN FENCE & WIRE CO. Dept 2808, Cleveland, Ohio

Keen Interest in Livestock

Many Organizations Elect Officers

N spite of the fact that conditions for the live stock breeder and feeder have not been particularly encouraging during recent years, the many meetings held by live stock organizations during Farmers' Week at the Michigan Agricultural College, were well attended and the keen interest shown indicates that the live stock men are confidently looking for better times in the near future.

The Thirty-fifth Annual Meeting of the Michigan Improved Live Stock Breeders' and Feeders' Association was held Tuesday afternoon when the following addresses were given: "M. A. C.'s" New President," by L. Whitney Watkins. Address, President K. L. Butterfield. "The Dairy Situation from a Statistical Standpoint," by T. R. Pirtle, Bureau of Agricultural Economics, United States Department of Agriculture, Washington, D. C. "Selling the Public," by John M. Kelly, formerly with the National Holstein Association.

The officers elected for the coming year are: President, Jacob DeGues, Alicia; vice-president, E. C. McCarty, Bad Axe; secretary, G. A. Brown, East Lansing; assistant secretary, W. E. J. Edwards, East Lansing; treasurer, H. F. Probert, Jackson: executive committee, J. Lessiter, Orion; W. E. Livingston, Parma; H. W. Norton, Jr., Lansing; H. W. Wigman, Jr., Lansing. Want Milking Shorthorns Recognized.

About seventy breeders were present at the Michigan Shorthorn Breeders' Association meeting. A movement was started to have a classification for milking Shorthorns offered at the Michigan State Fair. The following officers were elected for the year: President, S. H. Pangborn, Bad Axe; vice-president, H. W. Hayes, Chelsea; secretary-treasurer, W. E. J. Edwards, East Lansing; directors, Jay Smith, Ann Arbor; W. B. Mcquillan, Howell; F. A. Clark, Ypsilanti; James Kirk, Vassar; George Hoxie, Ionia.

Voted for Tour.

There was a good attendance at the Hereford Breeders' Meeting. Those present endorsed the Detroit Fat Stock Show held in December, and decided to conduct an auto otur among the Hereford breeders of the Thumb District next summer. Officers elected for the year are: President, James Campbell, St. Johns; vice-presidents, E. C. McCarty, Bad Axe; Dan Miller, Swartz Creek; Harold Harwood, Ionia; secretary-treasurer, V. A. Freeman, of East

Will Support Detroit Show.

The Aberdeen-Angus Breeders held an enthusiastic meeting and were in favor of giving more liberal support to the December Fat Stock Show in Detroit.—Their motto was, "An Angus Herd at Every Michigan Fair." The officers for 1925 are: President, Sidney Smith, Wildwood Farms, Orion; vicepresident, Avery Martin, Port Huron; secretary-treasurer, James Curry, of Marlette

Red Polled Breeders' Select Officers.

The Red Polled breeders were not out in large numbers, but showed considerable enthusiasm. The officers for the year are: President, N. C. Herbi-Westbrook, Ionia.

Ton Litter Winners Get Rewards.

A large crowd was in attendance at the Michigan Swine Breeders' Association meeting. Of particular interest was the presentation of gold medals by Professor G. A. Brown to the winners in the Ton Litter Contest, and the talks by J. R. Pfander, secretary of National Duroc Jersey Association, of Peoria, Illinois, on "How Can we Increase the Demand for Pure-bred Swine?" and Professor W. W. Smith, Purdue University, Lafayette, Indiana, on "When is the Best Time to Market the Spring Pig Crop?" Officers for the

ensuing year are: President, F. E. Haynes, Hillsdale; vice-president. John Noon, Jackson; secretary, Virgil Davis, Loeb Farms, Charlevoix.

Want Advanced Registry.

The Poland China breeders at their meeting discussed plans for an Advanced Registry for Michigan Poland Chinas, based on a weight scale for different ages. The officers for 1925 are: President, W. E. Livingston, of Parma; vice-president, F. E. Haynes, Hillsdale; secretary-treasurer, A. E. Feldkamp, Manchester.

Urge Better Breeds.

The attendance at the Duroc Jersey Breeders meeting was larger than has been seen in recent years. J. R. Pfander, of the National Duroc Jersey Association, stated that owing to the unfair ratio between hogs and corn that had existed for some time, many breeding herds had been badly depleted while many others had been dispersed. He emphasized the importance of improving the quality of our herds now by weeding out the inferior animals, proper feeding, and by the addition of choice individuals when they can be purchased at comparatively low prices. Mr. Pfander's advice was, that in this way breeders will be in a position to reap the full reward of advancing prices which are somewhat apparent at present, and which must go considerably higher, owing to the scarcity which will follow the period of liquidation we have just passed through. Professor W. E. J. Edwards, in his talk on swine types brought out the point that the experimental evidence at present available is not sufficient to settle this much discussed question and that more work must be done before it can be said that any one type is superior to all others. The Duroc Jersey officers are: President, O. F. Foster, of Clarkston; secretary, F. J. Shaffer, of Detroit.

Discuss Several Issues.

Pig club work, better feeding methods and other questions of interest were discussed at the Chester White Breeders' meeting. Following are the officers elected: President, John C. Wilk, St. Louis; vice-president, Dan C. Miller, Swartz Creek; secretary-treasurer, Frederick H. Knox, Portland.

O. I. C. Breeders Choose Officers.

The O. I. C. breeders discussed several matters of interest and re-elected the following officers: President, Edward A. Smith, Saline; secretary, E. R. Morrish, Flint.

Plan For Drectory.

The Spotted Poland China Association showed considerable activity considering that it is the youngest of the State Swine Associations. Plans were discussed for the publication of a breeders' directory and it was decided to continue backing pig clubs. Officers: President, G. S. Coffman, Coldwater; secretary, C. L. Nash, Cassopolis.

The Hampshire Swine breeders met and elected the following: President, Lloyd Aseltine, Williamston: secretary, Clarence L. Campbell, Parma.

Advanced Registry For Sheep.

Although the Michigan Fine Wool son, Birmingham; secretary, M. R. but one year ago, sixty fine wool breeders were present at their meeting. The breeders were very enthusiastic and confident that the wool market will continue strong for some time. A complete program was outlined and adopted for the advanced registry of fine wool sheep based on wool production. The officers for 1925 are: President, E. M. Moore, Mason; secretary-treasurer, R. J. Noon, Jackson.

Lamb Feeders Happy.

The steadily advancing lamb market with higher prices than have prevailed for several years brought out a large number of sheep breeders and feeders to their annual meeting. Those who





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Toledo, Ohlo.



were fortunate in putting in a large number of feeder lambs early in the season were particularly happy and will no doubt show a good balance on the right side of the ledger. The offisecretary, V. A. Freeman, East Lansing.

tests.

Several questions of interest were discussed at the Michigan Horse Breeders' Association meeting. The value of horse pulling contests in advertising horses at our leading shows was dealt with at length. Officers for the year are: President, L. C. Hunt, Eaton Rapids; vice-president, Sidney Smith, Orion; secretary-treasurer, R. S. Hudson, East Lansing.

SHEEP AT CHATHAM.

 $R^{\rm \, EPORTING}$ on the results obtained from the flock of sheep of the Michigan Agricultural College Experiment Station at Chatham, Upper Peninsula, Mr. G. W. Putnam, the director of the station, states that the flock consists of 236 ewes, thirty-one yearlings, and fourteen rams. These sheep are either pure-breds or cross-breeds from the Hampshires, Shropshires and Rambouillet breeds.

Last year the last lamb of the flock was born on May 12. "We sent to pasture 236 lambs from the 236 ewes, says Mr. Putnam, which is regarded as a very satisfactory lamb crop. The first income from the flock came from the wool clip, which was light, averaging 6.25 pounds per fleece. Wool prices were good, however, and the flock netted from wool \$630.48.

The flock went to pasture on May 10. These pastures are typical cut-over land pasture and comprised 250 acres, fenced with woven wire fencing and having running water. Feed was abundant. The pasture is broken up into three lots and the sheep are rotated from one lot to another, thus keeping free from parasites. Also old pastures renew themselves in a few weeks. Up to shipping time—October 27-seventeen lambs were lost out of the 236 sent to pasture in the spring.

In the fall the surplus stock for which there was no winter feed was turned off and sold on the Chicago market. The returns on 220 lambs thus sold, aggregating 16,060 pounds. were \$1,895.25. The shipping expense was \$160.57, leaving net returns of \$1,734.68. The total returns from the flock for the season were \$2,365.16, available for outlay for pasture, labor, winter feed and overhead.

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The station wintered 225 ewes, twenty-five ewe lambs to replace culls that were sold, and thirteen rams. Last summer there were put in storage fifty tons of clover hay and about twenty tons of peas and oats to carry the flock well through the winter to a time about six weeks before breeding season, when there will be fed daily about a half-pound of oats to each ewe along with a small dose of potassium iodide to prevent goiter. Mr. Putnam asserts that sheep are well adapted to the cutover country and when properly handled will afford a nice profit one year with another.

START LAMBS EARLY.

U SUALLY the lambs put on the early summer market in prime condition bring the biggest price. We have secured as much as two to three dollars more per hundredweight than could be had a month or more later. In order to get lambs on the market early and in the best condition, it is necessary to start them on feed as soon in the spring as they will begin to eat. They usually show a desire for some feed within two weeks after they are born, when they begin to nibble at their mother's feed in the racks.

At this time it is a good plan to provide a creep on one side of the shed and arrange suitable boxes to put feed

cers for the ensuing year are: Presi- and one part oats. Linseed meal is dent, Charles Burtless, Manchester; also excellent to use with grain mixtures after the lambs become three or four weeks old, as it is laxative and Horse Breeders Discuss Pulling Con- rich in protein. By using sufficient protein in the lambs' feed it will be found much easier to properly dry the ewes off by the time, or before, the lambs are sold.

In order to improve the appearance of the lambs and to make them fatten rapidly, their tails should be docked and all the males castrated. This work is done most satisfactorily before the lambs are more than two or three weeks old. Nice, trim-appearing lambs often sell much better than those not properly attended to in this respect.-J. L. Justice.

Veterinary.

CONDUCTED BY DR. W. C. FAIR.

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

Bruised Belly.—Recently a bunch appeared on lower part of belly of my idle mare. Please tell me what to do for her. H. S., Millington, Mich.—Apply equal parts tincture of iodine and camphorated oil twice a day. bunch softens, open it.

Hip Lameness.—I have a horse that seems to have trouble when stepping sideways and for some time he has shown some lameness. A. E. K., Ludington, Mich.—Apply equal parts of turpentine, aqua ammonia, raw linseed oil to hip and stiffe daily oil to hip and stifle daily.

Exostosis.—Have mare with a small hard bunch on shin, which causes no lameness. What shall I apply? J. N. D. C., Fowler, Mich.—Clip off hair, apply tincture of iodine daily.

cow Fails to Come in Heat.—Cow calved in September, 1924, since then she has failed to come in heat. She is a young cow and has had two calves. F. S., Fremont, Mich.—Give her one dram of fluid extract of nux vomica and a tablespoonful of bicarbonate of soda in ground feed or in drinking water twice a day.

ter twice a day.

Calves Shed Hair.—Our calves have caives shed Hair.—Our caives have skin trouble and the hair is shedding, but they are thrifty. B. R., Three Oaks, Mich.—Apply one part oxide of zinc and eight parts vaseline to bald parts once a day. Do you groom your calves and keen the skin clean? and keep the skin clean?

Swollen Hock.—We have a valuable Jersey calf with swollen hock, which is painful. E. F., Kalkaska, Mich.—Apply equal parts tincture of iodine and spirits of camphor to hock three times a week

and spirits of camphor to hock three times a week.

Soft Bunch on Udder.—I have a cow that has soft bunch on bag and I believe it contains blood. This cow is in fine health, bunch is not tender. She was tuberculin-tested last summer. M. S. Fruitnert Mich — Leave the bunch. S., Fruitport, Mich.-Leave the bunch

Heifers Have Never Been in Heat. I have two Holstein heifers which will soon be two years old, have never nosoon be two years old, have never noticed either of them in heat. Had I better treat them? R. R. B., Fremont, Ind.—Give each heifer thirty grains of powdered, or ground nux vomica, and a teaspoonful of ginger at a dose in ground feed twice a day.

Cow Not With Calf.—I purchased a cow last summer, which was represented to be with calf and would freshen in December. but she shows no indica-

ed to be with calf and would freshen in December, but she shows no indication of being with calf. The man I bought the cow from hasn't any property and I should like to know what can be done about it. Mrs. I. E. S. Breckenridge, Mich.—Waste no valuable time or money, is my advice to you.

able time or money, is my advice to you.

Weak Sheep.—I have a flock of sheep, heavy with lamb, have lost two, and two more are sick. At first the animal acts as if weak, in a day or two go blind, refuse to eat, then in three or four days die. Our local veterinary thought they might have worms. I cut one open, failed to find any liver worms. R. E. C., St. Charles, Mich.—If your sheep suffer from liverfluke they are incurable. However, they may have some other variety of intestinal parasite, or may have grub in the head. Please make a careful examination of one, then write us.

Feeding Orphan Pigs.—I have a sow that has large litters of pigs. This last litter was nineteen, and as she can only raise twelve of them, I should

Chronic Nasal Catarrh.-We have two good cats, but both have catarrh, one of them has been ailing for two years. They are fat and both good hunters. J. W., Grass Lake, Mich.—Dissolve a teaspoonful of bicarbonate of soda in one-half pint of tepid water, then dip nose into this solution once or twice a day.

Live on Cattle.—If cattle are fed a mixture of sulphur and salt, will it prevent them from being troubled by lice? C. H., North Star, Mich.—No, it will not will not.

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We assume all responsibility for building right; see what owners say in our "Book of Proof" (free for the asking).

Portland Vitrified Block Silo is a handsome, cherry-red tile; furnished in glazed or unglazed block, plastered or not, as you prefer; PORTLAND CONCRETE STAVE SILO (wet-mix) gives amazing strength with scientific hooping and poured joints. Steel back ladders built into walls in both types of silo. Ask for our special Spring discounts.

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THE PORTLAND SILO COMPANY. Portland, Indiana

New Double Reversible Glove



Leavengood Glove & G. Co. Dept. 5, Coshocton, Ohio

BREEDERS' DIRECTORY

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Registered *Aberdeen-Angus, six bulls from eight to sixteen months, large and growthy. Price reasonable. F. J. WILBER, Clio, Mich.

AYRSHIRE BULL 10 months old. Dam made in 10 months. Also herd bull. Accredited Herd. IRA EBY, Wakamsa, Ind.

Registered Guernseys LONE PINE RANGER our new Herd SIRE has a Dam with an A. R. O. record 936 fat. When in the market for better Guernseys, write GILMORE BROS., Camden, Mich.; J. W. WILLIAMS, No. Adama, Mich.

Reg. Guernseys For Sale Springing cows, bred helfers, Bull calves.

For Sale Reg. Guernsey Cows, Bulls and Rose Breeding. JOHN EBELS, R. 2, Holland, Mich.

39 LBS. AT PONTIAC

39 LBS. AT PONTIAC

Pontiac State Hospital announces a record of 39.06 lbs. butter and 589.7 lbs. milk, just completed by Pontiac Barine 666499 at 4 years 7 months of age.

PONTIAC BLOOD WILL TELL
As a Sr. 2-year-old Pontiac Barine made 17,-493.9 lbs. milk and 764.33 lbs. of butter, showing that she is not merely a seven-day cow. She is a daughter of Plint Hengerveld Lad, a former herd sire at Pontiac State Hospital, and a great grandson of one of the sires that made the Pontiacs famous—Hengerveld DeKol.

DO YOU WANT A PONTIAC IN YOUR HERD?

Write for our list of bulls from Pontiac and other MICHIGAN STATE HERDS.



Bureau of **Animal Industry** Dept. C Lansing, Michigan

of Registered and grade Holsteins, Brown Swiss and Guernseys will be sold March 10th at the Village Farms stables at Grass Lake by the Grass Lake Cown Testing Association. All animals owned by members of this association, and records will be given at the Grass Lake, Michigan

Asking for Catalog.

FOR SALE one Reg. Holstein Bull six months old; Also some nice Bull Calves by same sire, at the right price, E. A. ROHLFS. Akron, Mich.

Quality Holsteins of age. Good Individuals and Well Bred, at from \$50 to \$75, according to age.

I. M. SHORMAN, Fowlerville, Mich.

Financial King Jerseys our bulls of service-but we have a few bull calves of excellent breeding, sired by our great herd sire, Financial King Sensa-tion. Our prices are reasonable. COLDWATER JER-SEY FARM, Coldwater, Mich.

JERSEY BULL Dropped Mar. 2. 1924. Sire, ble grandson of Fauvic's Prince. His dam, Senator's Surprise, R. of M. record 485 lbs. butter at 2 yrs. 3 mo. of age. She is a doublegranddaughter of Oxford Daisy's Flying Fox. Jesse A. Kline, Gladwin, Mior.

MICHIGAN JERSEY CATTLE CLUB Pure-bred or grade cattle for sale. Can quote prices on individuals or carloads. R. of M. and Cow Test-

ing Association records. H. E. DENNISON, Field Man, East Lansing, Mich

Jerseys For Sale

R. of M. dams. Accredited herd. Smith & Parker,
R. D. No. 4, Howell, Mich.

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

ELM LAWN SHORTHORNS one bull calf 8 months; a few cows and helfers. HARRY CROSBY, Grand Blanc, Mich.

Shorthorns
STOCK FARM, Box D, Tecumseh, Mich.

Best of quality and breeding. Bulls, cows and helfers for sale. BIDWELL

Shorthorns For Sale both sexes. Barr & Curtiss, South Bay City, Mich.

Polled Shorthorns both sexes. Federal acquack, R. 2, Sault Ste. Marie, Mich.

Red Polled Cattle Bulls, cows and heifers.
DON P. CARR, Homer, Mich.

HOGS

DUROC JERSEY SWINE for sale. Type and quality our aim. Write your Alma, Mich.

Duroc Sows and Gilts

Choice sows and gilts bred to Michigan's Grand Champion Boar for March and April farrow. Also a few swine boars. LAKEFIELD FARM, Clarkston, Mich.

O.I.C's last spring pigs, either sex, not akin, from SCHULZE & SONS, Nashville, Mich.

O.I.C's

Registered and shipped on approval. Bred gilts, tried sows, service boars, and pigs at Farmers' prices. Earle R. Morrish, Morrish Crossing on D. U. R. Atherton Road, Route 6, Flint, Mich.

O. I. C's Fall pigs, Sired by "Giant Boy" and Bulls. Mile H. Peterson, R. 2, Ionia, Mich.

Chester Whites also fall and summer DORR, Clinton, Mich.

Glits bred to son of Lengthy Prince, Iowa grand champion. ALBERT

Francisco Farm Poland Chinas

Now offering some wonderful bred gilts, granddaughters of National Grand Champion—at prices you can pay. P. P. POPE, Mt. Pleasant, Mich.

Big Type Poland Chinas
Choice gilts bred for Mar. & April farrow, for sale.
WESLEY HILE, Ionia, Mich.

Fall Pigs either sex, by the great Boar, The Wolverine. Priced reasonable. Best Livingston, Parma, Mich.

For Sale Large Type Poland Chinas either Swiss Bulls.

A. A. FELDKAMP, Manchester, Mich.

Hampshires For Sale Choice bred gilts, 12th year. JOHN W. SNYDER, R. 4, St. Johns, Mich.

SHEEP

FOR SALE 25 Registered Shropshire Ewes. To start lambing about April 1st. H. A. HEBBLEWHITE, Armada, Mich.

FOR SALE

20 Registered Black Top Delaine ewes; Ten ewe lambs, and ten ewes from one to five years old. Ewes bred to prize winning rams. \$600 takes the bunch. W. C. HENDEE & SON, Pinckney, Mich.

20 Registered exceptionat quality tablished 1890. C. Shropshire ewes 1-5 yrs, old, bred for Mar. and April, to ram of Also 20 ewe lambs. Flock established 1890. C. LEMEN & SONS, Dexter, Mich.

SHEEP FOR SALE 50 Registered Hamp-Prize Winning Rams, to Lamb in April. A. M. WELCH & SON, Ionia, Mich.

Breeding Ewes for sale, extra good young Delaines, V.

Dispersal Sale For Sale of The Ton Type. B. A. Hodges, Belmont, Mic Vollenburg, Milan, Mich. Percheron Stallion, 3 years old, of The Ton Type. E. R. Van

Michigan Jersey Breeders Attention.

37—HEAD OF REGISTERED AND PURE BRED JERSEYS—37
PARMA JERSEY FARM

MARCH 9, 1925

PARMA N Complete Dispersal MARCH 9, 1925 PARMA, MICH.

the leading herd in Jackson county cow testing associations for three years leading with 50% of the high 10 cows for 3 yrs. AN OPPORTUNITY TO GET A CAR LOAD OF THE BEST C. T. A. JERSEYS in MICH., COMPRISING THE 16 GRANDDAUGHTERS OF OXFORD DAISY'S FLYING FOX BY HIS SON OUT OF SEGNAL'S VARIELLA 252717, Gold Medal COW, 923.4 lbs. butter from 13,736 lbs. milk, and 11 daughters of SOPHIE'S ADORA'S MERMAN, the herd sire, ONE OF THE BEST BRED BUTTER BULLS IN THE STATE OF MICH. The average of his 6 nearest dams 750.5 lbs. butter from 11,905 lbs. milk. Write for catalog and learn more about this choice herd, as we have proof that they pay at the pail.

L. A. SEDGWICK, Owner, Parma, Mich.

L. A. SEDGWICK, Owner, Parma, Mich. J. F. RUPPERT, Auctioneer, Perry, Mich.

Write M. E. Bloss, Sales Manager, Vernon, Mich. for Catalog.



GRAIN QUOTATIONS

Tuesday, February 24,
Detroit.—No. 1 red \$1.91; No. 2 red \$1.90; No. 2 white \$1.90; No. 2 mixed \$1.90. Chicago.—July \$1.56¼ @1.56%; September \$1.43% @1.44; May \$1.87½ @

\$1.87%. Toledo.—Wheat \$1.89½@1.90½.

Detroit.—No. 3 yellow \$1.25; No. 4 yellow \$1.20; No. 5 yellow \$1.15. Chicago.—July \$1.30%; September \$1.29%; May \$1.29½@1.29¼.

Oats.

Detroit.—No. 2 white at 55c; No. 3

white 54c. Chicago.—July 54% @54%c; September 53%c; May 55%c.

Rye.

Detroit.—Cash No. 2, \$1.55.
Chicago.—July \$1.36; September at \$1.19\%; May \$1.61\%.
Toledo.—\$1.48.

Beans. Detroit.—Immediate and prompt shipment \$6.10@6.15 per cwt.
Chicago.—Navy, choice at \$6.65; red kidneys \$10.50@11.
New York.—Choice pea \$7.15@7.25; red kidneys \$10.25@10.75.

Barley.

Detroit.—Malting \$1.01; feeding 95c.

Buckwheat.

Detroit.—\$2.25@2.28.

Seeds.

Detroit.—Prime red clover cash at \$18.10; alsike \$12.80; timothy \$2.95. Hay.

Detroit.—No. 1 timothy at \$16@17; Detroit.—No. 1 timothy at \$16@17; standard and light mixed at \$15@16; No. 2 timothy at \$14@15; No. 1 clover and No. 1 clover mixed \$14@15; wheat and oat straw \$10.50@11; rye straw \$12.50@13.

Feeds.

Detroit.—Bran at \$32; standard middlings at \$33; fine middlings \$39; cracked corn \$55; coarse cornmeal at \$54; chop \$44

\$54; chop \$44.

Apples. Apples. Chicago prices on apples: Northern Spies at \$8.50@9 bbl; Baldwins \$6.50@6.75; Jonathans \$9.50 bbl; Kings at \$6.50@7; Greenings \$7.@9.50 bbl; Wageners \$5.25@5.50 bbl; Grimes \$5.50@5.75; Starks \$6@6.50; Ben Davis \$5@7.50

WHEAT

WHEAT

Wheat prices have recovered about one-fourth of the loss from the extreme high point of the season. The run of wheat to primary markets attracted by the \$2 level has subsided. Some indication of improved export business have appeared. The speculative situation is more healthy as a result of the cleaning out of weak holders. Russia is reported as a buyer, both in Canada and European markets. On the other hand, the heavy world shipments for the last several weeks have relieved the tension abroad and some reports of reselling have been current. It is too early in most sections to determine how the crop came through the winter, but nowhere is there evidence of severe winter killing. Kansas reports that wheat is greening up in splendid fashion, but the Pacific northwest has a poor outlook because of damage last fall and the dry area in Texas seems to be extending into Oklahoma.

RYE

The rye market is still governed largely by the action of wheat. No sign has appeared that the large visible supply will be moved out during the next few months, and there is rather clear evidence that importing countries are curtailing their purchases. The large export sales reported in January and early February have not yet been reflected in the clearances.

CORN

Corn prices have been stronger in the last week, chiefly because of a de-cline in the movement to primary mar-kets. Receipts at present are less than half as large as they were three weeks half as large as they were three weeks ago, and are among the smallest at this season for the last fifteen years. Demand from shippers and industries has shown but little improvement, but the lighter receipts have reduced the amount accumulating at the terminals from day to day. Export sales are out of the question, as prices are much above the world level.

OATS

The decline of about ten cents in oats prices resulted in noticeable improvement in the demand and tended to shut off the movement from the country. A little export buying has

developed. These shifts may sustain prices around the present levels, but they are hardly extensive enough to bring about a large advance.

HORSES

The horse market is quite firm as there is the best demand for farm chunks noted in several years and receipts of draft horses are not sufficient to supply the demand. Prices for farm chunks have advanced \$15@20 a head since the season opened several weeks ago, although very few are selling above \$150 as that seems to be the absolute limit with most buyers on horses weighing 1,300 to 1,450 pounds. Choice drafters are bringing \$500 to \$\$550 for well-matched teams, with a list of waiting orders to be filled at those figures. those figures.

SEEDS

Seed prices were reduced last week. Stocks of red clover seed, which consist largely of ordinary to low quality stuff, were being liquidated, and even the active consumptive demand was hardle to cheer the increased offer. unable to absorb the increased offerings at steady prices. Demand was accelerated by a few days of warm weather, but the heavy spring trade has not started in earnest as yet.

FEEDS

Feed prices declined sharply again last week. Wheat feeds have suffered the most. Production of all feeds is heavy and consumptive demand is very light for this season of the year. Tankage prices have finally weakened and prices in shipping markets were marked down to \$55 a ton.

HAY

In spite of more moderate receipts last week, the hay market was easier with prices lower. The few days of with prices lower. The few days of mild weather restricted demand and the effect of the colder weather following has not been felt as yet. An abundance of low grade hay on the market is hard to move, but better grades are scarce and more desired. The year's bumper hay crop is being pushed on the market faster than it can be absorbed.

POULTRY AND EGGS

Steadily increasing receipts of fresh

CHICAGO

Hogs.

Receipts 32,000. Market fairly active, steady to 10c higher; tops at \$11.95; all good and choice 190 to 340-lb. butchers at \$11.50@11.85; 140 to 170-lb. average, largely at \$10.75@11.20; fresh packing sows \$10.60@10.80; pigs mostly at \$10@10.50.

Cattle.

Receipts 12,000. Choice fed steers and yearlings steady, others slow and lower; most other classes are steady; shippers strong; bulls easy; vealers 25@50c up; fat matured steers \$11.25; some held higher; best yearlings at \$11.50; shippers active; bulk vealers to packers \$11@12; light kind down to \$10.50, and below; shippers at \$13.50 and better.

Sheep and Lambs.

Receipts 14,000. Fat lambs generally steady to strong; early bulk \$17.25 @17.75; tops \$17.90; best held nigher; fat sheep strong; good 118-lb. \$8.75@ \$9.25; fat lambs 25c higher; tops at \$17.25; other sales down to \$16.75.

DETROIT

Cattle. Receipts 360. Market steady, clos-

Milkers 45.00@70.00

Light butchers
Best cows

Butcher cows

Cutters

Canners
Choice bulls
Heavy bologna bulls
Stock bulls

Feeders Stockers

5.50@ 6.50 4.50@ 6.00

2.25@ 3.00 5.00@ 6.00

4.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50

5.00@ 7.00 5.00@ 6.25

5.00@

3.00@

 $5.50 \\ 4.50$

ly at \$10@10.50.

ing slow.

Live Stock Market Service

Tuesday, February 24.

50c lower.

eggs have broken prices to the lowest levels of the year. Retail prices tum-bled likewise and consumption has un-doubtedly shown some response. Stordoubtedly shown some response. Storage eggs are practically gone so that the trade is almost entirely on a fresh egg basis. With receipts increasing so rapidly, still lower prices in the immediate future are probable.

Chicago.—Eggs, miscellaneous 31½ @32c; dirties 30c; checks 29c; fresh firsts 32½ @33c; ordinary firsts 30@31c. Live poultry, hens 24c; springers 26c; roosters 18c; ducks 27c; geese 19c; turkeys 25c.

roosters 18c; ducks 27c; geese 18c, turkeys 25c.

Detroit.—Eggs, fresh candled and graded 34½@36c. Live poultry, heavy springers 28c; light springers 22@23c; heavy hens 28c; light hens 22@23c; roosters 16@17c; geese 18@20c; ducks 30@32c; turkeys 35c.

BUTTER

Fresh butter prices have had a steady advance, gaining more than two cents a pound in the past week. Sentiment in the market is gradually assuming a more confident tone. The make of fresh butter is not increasing very rapidly and receipts at the four leading markets to date are nearly two million pounds smaller than a year ago. The surplus is being steadily cut down. Foreign markets are stronger.

Prices on 92-score creamery: Chicago 40c; New York 41c; Boston 41½c; Philadelphia 42c. Detroit 37@39½c for No. I creamery in tubs.

CHEESE

The cheese market has been quiet during the past week and prices are slightly lower. Receipts of fresh cheese from Wisconsin were materially larger than in the procedure week. than in the preceding week, demand was slow, and concessions were offered in some instances in an effort to prevent accumulation

BEANS

After holding around \$6.20 per hundred pounds for choice hand-picked whites f. o. b. Michigan shipping points the bean market advanced at the close of last week to \$6.25@6.30, with \$6.40 asked for March shipment. There is some doubt as to whether the advance will hold as there seems to be only a moderate amount of buying by distributors. Both canners and whole-

Sheep and Lambs. Receipts 347. Market slow.

Veal Calves.

Best\$14.50@15.00 Others\$5.00@14.00 Hogs.

Receipts 681. Market strong to 15@

Receipts 521. Market slow, closing

sale grocers are taking beans only as needed from day to day and are not booking orders ahead. Warmer weather is not far away and this affects consumption of beans materially. On the other hand, deliveries from the growers are hardly up to normal for this season of the year as many are looking for a much higher market. Stocks in the hands of elevators are moderate.

WOOL

WOOL

The wool market is showing more weakness than at any time since last summer. Merino wools in Australian sales are quoted about 15 per cent lower than in December, and are on a basis which makes imports easily possible. Domestic prices have made little or no headway upward for two months. Many interests think that wool has reached the top. Buyers of cloth since the openings on fall lines, have operated cautiously because of the weakness in wool prices, giving the mills no great encouragement to accumulate raw material. Contracting of new clip wools in the west is very quiet.

POTATOES

Eastern potato markets have declined sharply, but midwestern markets are steady. Carlot shipments are running fully 25 per cent larger than at the same time a year ago. Prices are 15 to 35 cents per 100 pounds lower than last year. Northern sacked round whites, U. S. No. 1, are quoted at \$1.15 to \$1.20 per 100 pounds in the Chicago carlot market. carlot market.

APPLES

Apple prices are steady at practically unchanged levels. Shipments from the three leading boxed apple states last week totaled 290 cars, company with 1000 cars. states last week totaled 290 cars, compared with 1,080 cars during the corresponding period a pear ago. The week's movement from the barreled apple "states, totaling 640 cars, was more nearly normal. Illinois No. 2½-inch fancy Willow Twigs are selling at \$8,08.50 at Chicago, and New York A-212-inch Baldwing bring \$6,75.07 A-21/2-inch Baldwins bring \$6.75@7.

GRAND RAPIDS

Egg prices were lower in Grand Rapids early this week, heavier receipts and weaker outside markets depressing values sharply. Poultry was higher and butter-fat climbed to 42c perpound. All greenhouse products were easier and lower. Prices quoted to farmers were: Leaf lettuce 13c lb; radishes 60c dozen bunches; rhubarb 12@15c lb; cabbage \$1 bu; carrots, parsnips, beets \$1 bu; potatoes 45@55c bu; wheat \$1.68 bu; rye \$1.15 bu; barley \$1.10 bu; buckwheat \$1.85 cwt; beans \$5.50 cwt; pork 14@15c lb; beef 10@11c lb; veal 14@15c lb; poultry, heavy fowls and springers 23@25c lb; ducks 24@25c lb; eggs 32@34c dozen; butter-fat 31@32c lb. Egg prices were lower in Grand Rap-

DETROIT CITY MARKET

Northern Spy apples were in ready demand. Potato prices tended downward. The demand for cabbage continued slow, but carrots, parsnips and other roots sold more briskly. Egg prices ranged about 5c lower, and selling was only moderate. The demand for live poultry was fairly strong, but rather light for dressed stock. There was little call for dressed veal and hogs.

hogs.

Prices were: Apples \$1@3.50 per bu; beets 65@75c bu; cabbage 65@75c bu; carrots 65@75c bu; celery 75c@\$1.25 dozen; horseradish \$3@5.50 bu; dry onions, No. 1, \$1.50 bu; potatoes, No. 1, 55@65c bu; rutabages 75c bu; squash \$2 bu; turnips \$1.50@2 bu; honey \$1.25 per 5-lb. pail; butter 50@155c lb; eggs, wholesale 45c dozen; retail 45@55c dozen; hens, wholesale 28@30c lb: retail 28@32c lb: springers. tail 45@55c dozen; nens, wnolesale 25 @30c lb; retail 28@32c lb; springers, wholesale 28@30c lb; retail 28@32c lb; ducks, wholesale 35c lb; veal 18@19c lb; hogs 16c lb; dressed poultry, hens 35@38c lb; springers 35@38c lb.

BUFFALO

Stags

Receipts 370. Market is closing steady. Heavy sold at \$12.40@12.50; medium \$12.10@12.25; light at \$12@12.40; light lights \$11@11.50; pigs at \$10.25@11; packing sows and roughs \$10.50@10.75.

· Cattle.

Receipts 1,150. The market is steady, with steers from 1,100 lbs. up at \$7@9.75; steers 1,100 lbs. down \$6@9.75; load of yearlings at \$10.50; heifers \$5.50@8; cows \$2.50@6; bulls \$4@5; asking \$10 for loads of steers. steers.

Sheep and Lambs.

Receipts 2,800. Tops \$15; culls \$15 \$17.50@17.75; culls at \$16.75 down; yearlings at \$14.50@15; wethers \$10.50 @11; ewes $$9@9.5\overline{0}$.

Calves.

Receipts 2,800. Tops \$15; culls \$15

COMING LIVE STOCK SALES.

Holsteins.

March 5—Musolff Bros., South Lyons, Mich. March 12—(Dispersal), A. R. Black & Sons, R. 7, Lansing, Mich.

Guernseys.

arch 25—Consignment sale, Saginaw Fair Grounds, Geo. J. Hicks, Man-ager, Saginaw W. S.

Jerseys. March 9—Jersey Farm, Parma, Mich. Holsteins—Brown Swiss. March 10—Village Farms, Grass Lake,

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Shiawassee County.—Wheat does not appear to be much injured by the heavy blanket of ice that covered the ground in December and lasted until the first of February. Live stock is coming through the winter in good condition. There appears to be plenty of coming through the winter in good condition. There appears to be plenty of feed, but high in price. A great number of western lands are being fed throughout the county, some young cattle are also on feed. There seems to be a fair demand for good draft horses. Light horses are a drug on the market. Milch cows are bringing from \$65 to \$125, according to the time of freshening, and the value of the animal.—D. H. N.

Tuscola County.—Not as many cattle on feed as usual. Prices are good. Farmers are looking for a better season. At this time many social affairs are taking place among the neighbors.—J. K.

DressedVeal and Hogs | FOR RENT-My farm, 170 acres. Fully equipped, 50% miles north of Fowlerville on state road. E. | S. C. REDS-heavy laying strain. Eggs 6c. postpaid. Chicks 15c. Myron Mason. Cloverdale, Mich.

We are an exclusive meat house and are equipped to handle to your advantage veal and hog shipments.

Guaranteeing best results and prompt returns. Ship direct to

M. A. Nicholson & Co.

WHOLESALE MEATS 2460 Riopelle, Detroit, Michigan

For Best Results Ship Direct to DETROIT BEEF CO., Detroit, Mich.

> DRESSED CALVES DRESSED HOGS SUCKLING PIGS LIVE POULTRY DRESSED POULTRY

Write for Free Shippers' Guide

CALVES CALVES CALVES Otto F. Bernstein 2478 Riopelle Street, Detroit, Mich.

Largest and Oldest Exclusive Veal Merchants in City.

We give your shipments our personal attention, get you BETTER PRICES and QUICKER RETURNS as we always have an outlet for veal.

Est. 1895. Ask your Bank for References.

Seed Corn and Seed Oats

My drying house is filled with Clement's Improved White Cap yellow dent and Duncan's yellow dent seed corn. Fire dried on racks, ear tested, guaranteed germination from high yielding stock. Registered and certified Worthy Oats. Developed by the Michigan Agricultural College. Heavy yielders with a stiff straw. Write for prices.

PAUL C. CLEMENT, Britten, Michigan.

FREE-NEW RED RASPBERRY-Tip Grower, Very Hardy. Send for Literature. Strawberries \$3.00 per 1,000. All Small Fruit Plants. Dept. H, Hellenga's Nursery, Three Oaks, Mich.

MILLIONS Strawberry Plants \$2.95 per 1,000. Rasp-berries, Grapes, Bulbs, Flower Seeds, Chicks. Illus-trated catalogue Free. Mayers Plant Nursery, Mer-rill, Mich.

MISCELLANEOUS

TOBACCO

HOMESPUN TOBACCO—Chewing, 5 lbs., \$1.50; Ten, \$2.50. Smoking, 5 lbs., \$1.25; Ten, \$2. Pay when received, pipe and recipe free. Farmers' Union, Paducah, Ky.

SEEDS AND NURSERY STOCK

FROST PROOF Cabbage Plants and Tomato Plants, Varieties: Early Jersey and Charleston Wakefield, Copenhagen Market, Flat Dutch and Succession. Tomato: Greater Baltimore, Earliana and Livingston Globe. Prices, Parcel Post Paid, 500, \$1.50: 1,000. \$2.50. Express collect, \$1.25, 1,000. We ship the size of plant you wish. Satisfaction guaranteed. Tifton Potato Company, Inc., Tifton, Ga.

HARDY FIELD GROWN—Chrysanthamums, sweet william, daisies and all old-fashioned or hardy perennial flowers. Iris, cannas, gladiolus, and tuberose bulbs. Spiraeas, shrubbery, climbing vines, roses, ornamental trees and hedging. Strawberry plants. Rhubarb and asparagus roots. Thousands of satisfied customers. Delivered prepaid prices. Send for catalogue, Weaver Gardens, Wichita, Kansas.

CABBAGE, ONION, TOMATO PLANTS shipped anywhere United States, \$1.25 thousand. Descriptive list sent free telling how to grow early vegetables. Agents Wanted. Carlisle Produce Co., Inc., Valdosta, Ga.

RHUBARB-MAMMOTH VICTORIA—1-yr. whole roots, 20, \$1; Giant Crimson 3-yr. divisions, \$, \$1; Asparagus Roots, 50, \$1. Delivered prepaid anywhere. Weaver Gardens, Wichita, Kans.

ALFALFA SEED—60 bushels, guaranteed hardy grown seed. \$18.00 per bushel, all clean seed and about 99½% pure. Henry Foley, Mt. Pleasant, Michigan, R. 5. Samples on request.

CERTIFIED Wolverine Oats. Certified Robust Beans Postal card brings particulars. A. B. Cook, Owosso, Mich.

SWEET CLOVER, Alsike, Alfalfa, etc. Inoculating Bacteria for bushel any legume, 60c postpaid. E. E. Basil, Latty, Ohio.

YELLOW DENT and white seed corn. 300 bu. tested .98. \$3.50 per 56 lbs. W. J. Ready, Carleton

ASPARAGUS—Giant, Washington, Rust Proof and Mary Washington. Best varieties. Circular price list free. J. C. Dunham, Lawton, Mich.

ASPARAGUS—Why not plant the largest, tenderest, most profitable, "The Washington"? 100 roots \$1.25; 1000 \$8.00. Prepaid. Glick Seed Farm, Lancaster, Pa.

CERTIFIED Improved Robust Beans, Wisconsin Pedigree Barley. Fritz Mantey, Fairgrove, Mich.

GRADED Yellow Dent Seed Corn, 98% Germination, \$4 for 56 lbs. E. R. Vincent, St. Johns, Mich.

REGISTERED WOLVERINE OATS—Michigan's Best. C. D. Finkbeiner. Clinton. Mich.

1923 CHOICE SEED CORN—250 bu. High test. C. W. Ettinger, R. 1, Dearborn, Mich.

WOLVERINE OATS-Robust Beans. F. DeWitt & Son, Wheeler, Mich.

PET STOCK

THE BEST COLLIE PUPS on earth. Trained stock on trial. Book on the Training and Care of Collies, fifth edition. One dollar delivered. Collie Kennels, Dundee, Michigan.

THOROUGHBRED COLLIE PUPS—Some natural Heelers, also grown Stock. Sable and White Collie at Stud. G. J. Dunnewind, R. 1, Comstock Park, Mich.

WHITE COLLIE AT STUD—Captain White A. K. C. 424701, fee \$12.00. Write for particulars. Homestead Kennels, Saranac, Mich.

GERMAN SHEPHERD (Police) pups. Ideal farm dog. Farmers' prices. On approval, express prepaid. F. Chapman & Son, Vandalia, Mich.

POULTRY AND FRESH EGGS WANTED—Will pay nighest prices for broilers, fryers, 1½, 2, 2½ lbs. each, fat hens. Strictly fresh white hennery eggs. Write for quotation. East Coast Poultry Co., 700 Alfred St., Detroit, Mich.

MARCY FARM AND HOFFMAN'S fifteen-pound strain Jersey Black Giants. Unrelated trios \$10; \$3.00 each in larger quantities. Eggs \$2.00 per fifteen. Also thoroughbred Bronze turkey eggs in season. J. G. Hiebert, Middleton, Mich.

SALE—Pure bred Buff Orpington and Jersey Glants, cockerels, \$4.00 cach. Pullets of either, \$2.00 cach. Bourbon Red Turkey eggs, in sea-Order now. S. L. Vincent, Lapeer, Mich.

JERSEY BLACK GIANTS eggs and chicks from my Super X Giants, fine large, healthy birds, circular free. A. W. Houghton, Coldwater, Mich.

COCKERELS—Holterman's Strain of Barred Plymouth Rocks, strong, healthy birds, \$3.00. Mrs. Glen Arnold, Saranac, Mich.

68 VARIETIES Fine pure-bred chickens, ducks, geese, turkeys, fowls, eggs, baby chicks. Catalog free, Ziemers Hatchery, Austin, Minn.

SINGLE COMB White Leghorn Pullets for sale. Selected Stock, \$2 each. Geo. Allan. Box 7. Redford, Mich. Phone Farmington 58-F3.

EGG CRATES—We are in position to supply you at all times with good second hand egg crates, including fillers and flats, and a one-piece cover, complete for shipping at the following rates: Carload lots F. O. B. Detroit, 16c each, less than carload lots 18c each. Wm. Spitz & Sons, 2045 Chene St., Detroit, Mich. 1871 Merwin Ave., Cleveland, O. "TANCRED" White Leghorns—Barred Rocks—State Fair Winners. Buff Orpingtons. Guineas. Fenner Bailey, Montgomery, Mich.

BUFF ORPINGTON hatching eggs from high class birds. Also Buff Duck eggs. Bert Bailey, R. 11, Holland, Mich.

FARM DITCH DIGGER—Have you ditching to do? Write C. G. Alden, 225 E. Tenth Street, Erie, Pa. S. C. R. I. RED COCKERELS—Good color. Selected stock. O. E. Hawley & Son, R. 3, Ludington, Mich. S. C. RHODE ISLAND RED cockerels, Mahood Strain, \$4. Alfred Deichmann, Pigeon, Mich.

TRACTOR STARTERS FOR FORDSONS—literature free. Climax Tractor Starter Co., Climax, Mich. BEFORE YOU BUY a gas engine, be sure to get the facts about The Edwards Farm Engine. Seld on your own terms. Write for free circulars and full information. Edwards Motor Co., 19 Main St., Springfield, Ohio. FOR BIG TYPE Toulouse Geese try M. B. Noble, Saline, Mich.

BABY CHICKS

"ILLINOIS ACCREDITED" pure-bred chicks. State-inspected breeding stock. Barred Rocks, Single Comb Reds, \$15-100. White Wyandottes, Buff Orpingtons, White Rocks, \$16-100. Postpaid, 100% live delivery. Hatch every Monday, order from ad. Member Inter-national and Illinois Chick Association. Earlyille Hatchery, 30 Ottawa St., Earlyille, Illinois.

BABY CHICKS from America's pioneer hatchery have pleased over 25,000 customers. 22nd season. We hatch twenty popular varieties. Guaranteed safe delivery by prepaid parcel post. Write for 40-page catalog and free premium offer. Miller Hatcheries, Box 759, Lancaster, Mo.

BABY CHICKS—Silver L. and White Wyandottes, Barred Rocks, R. I. Reds, Anconas, White and Brown Leghorns from culled and strong laying strains. Sold from day-old to eight weeks old. Fifteenth year. Write Shepard Poultry Farm, Litchfield, Mich.

BABY CHICKS—250 to 300 egg strain. White English Leghorns, my own flock. Years of careful breeding has made them money-makers for my customers, Order early as my supply is limited. Durand Hatchery, Fenton Mich., Box 404.

STURDY CHICKS—Produced from selected pure bred-to-lay and exhibition personally inspected flocks. Rea-sonable prices. Catalog free, White Leghorns, Barred Rocks, Reds, White Wyandottes. Sunnybrook Poultry Farm, Hillsdale, Mich.

OAKLAND HILLS QUALITY CHICKS—Strong, vigorous, true to breed, profitable. English Leghorns, Reds, Rocks, White Wyandottes, etc. Safe delivery suaranteed. Circular free, Oakland Hills Poultry Farm, Farmington, Mich.

INCREASE YOUR PROFITS with chicks from these flocks. \$108.78 was market value of eggs laid in December by one of our flocks of 125 pullets. Quality chicks at low prices. Boocher's Hatchery, Burr Oak, Mich.

BABY CHICKS—Pedigree Sired Eng. W. Leg. Chix. delivered 100% alive at your door at our low prices of \$12.50 per 100; 860 per 500; \$110 per 1000. Circular free, Model Poultry Farm, R. 4, Zeeland, Mich.

BABY CHICKS—S. C. W. Leghorns (Hollywood Strain). Barred Rocks (Parks Strain). Send for cat-alogue. Snowflake Poultry Farm. Route 5. Middle-ville, Mich.

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BABY CHICKS—Tancred, Barron White Leghorns and Shepherd Anconas, High grade stock, Chicks in-sured for one week, Catalog free, M. D. Wyngarden, Zeeland, Mich.

BABY CHIČKS from flocks blood-tested for Bacillary White Diarrhea. All flocks tested—second test on Rocks and Reds. All popular varieties. Ask for Catalogue. Pierce Hatchery, Jerome. Michigan.

WHITE WYANDOTTE Hatching Eggs for sale. Regal Dorcas Strain. Winners at State and National Shows. Send for Catalogue. George B. Haskell & Son. Williamston. Michigan.

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BABY CHICKS at living prices. Fourteen popular varieties. High egg production and standard qualities combined. Michigan State Fair Winners. * Write for prices. Litchfield Hatchery, Litchfield, Mich.

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BABY CHICKS AND EGGS—Superior Ringlet Barred Rocks, Rose Comb Rhode Island Reds, White Leghorns, Wyndham's Ideal Hatchery, Tiffin, Ohio. Circular. QUALITY CHICKS—12c up. From strong, healthy flocks. Rocks, Reds, Leghorns, Anconas. Mating list free. Shady Lawn Hatchery, R. 2, Zeeland, Mich.

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TURKEYS

TURKEY EGGS—Mammoth Bronze, Bourbon Red. Narragansett and White Holland. You should place your order early. Write Walter Bros., Powhatan Point, Ohio.

Point, Onio.

MAMMOTH BRONZE TURKEYS—First prize winners
Michigan State Fair last three years. Walnut Hill
Farm, Milrord, Michigan.

GIANT BRONZE TURKEYS—Goldbank Strain.
Choice heavy birds. Satisfaction guaranteed. Mrs.
Perry Stebbins, Saranac, Mich.

AGENTS WANTED

BIG MONEY Selling New Household Cleaning Set, Washes and dries windows, Sweeps, scrubs, mops, All complete only \$2.95. Over half profit. Write Harper Brush Works, 173 3rd St., Fairfield, Iowa. WE PAY \$200 monthly salary, furnish car and expenses to introduce our guaranteed poultry and stock powders. Bigler Company X 683, Springfield, Ill.

HELP WANTED

WANTED—man with small family. Must understand machinery and all stock. Good yearly terms. Chance for advancement. Farm close to University, and one hour from Detroit. C. E. Vreeland, 1713 David Whitney Bldg., Detroit, Michigan.

WANTED—Married man, farming, real farmer wanted. Eighty-five dollars per month. House, fuel, etc. Permanent position. Geo. W. Campbell, R. 1, Dearborn, Mich.

SITUATIONS WANTED

WANTED—By married man, 29, position as Farm Superintendent, thoroughly experienced. Fruit or Dairy. Excellent references. Box 71, Mich. Farmer.

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Brings Any Size American, GEPARATOR Guaranteed, New, Low Easy-Pay-PlanFull year to pay. Unmatched for skimming, easy turning and cleaning. Old SEPARATORS Taken in EXCHANGE Shipped from stock nearest you Write for free catalog and low prices. AMERICAN SEPARATOR CO. AMERICAN SEPARATOR CO. Box 24-A Bainbridge, N. T.

FURS Lake Land Fur Exchange, Salem Mich. We have special outlets for Muskrats. Write for price list. Will call for lots of over \$500.

Goncord Grape vines 1 yr. No. 1 \$25 per plants and Shrubbery. Send for free catalogue. FEATHER'S NURSERIES, Baroda, Mich.

Ardenteenie Stock Farm Dispersal MARCH 12, 1925 - LANSING, MICH. 36 Registered Holsteins

Under State and Federal Supervision This includes Michigan's Grand Champion bull of 1922, Capital Cream Jupiter Hengerveld, and his daughter, undefeated junior heifer calf in Mich., 1924, together with 14 of her sisters from dams with good records and carrying 75% of the same blood lines as Detroit Creamery's 30,000-lb., cow, Martha Vindetta De Kol 3rd, the third highest milk producing cow in the state. 10 of these heifers are bred for fall freshening to a son of College Butter Boy, a bull, of excellent type and winner of 7 firsts and 5 champions in Mich., 1924. Sale starts at 1:00. Write for catalog.

A. R. BLACK & SONS, Lansing, Mich.

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CALIFORNIA STATE LAND BOARD has a number of desirable irrigated farms of twenty and forty acres in San Joaquin Valley for sale to bona fide farmers on 36½ years' time. Complete irrigation system. Price per acre varies according to location. Five per cent of purchase price payable when deal is made; remainder in semi-annual installments extending over period of 36½ years, with 5 per cent interest annually. Your opportunity to acquire a farm in winterless California. All deciduous fruits profitably grown; affalfa is a paying crop. Ideal conditions for stock and poultry. Good schools and unsurpassed roads. Fruitrassociations market your crops, relieving you of marketing problems. You can farm all year in California. Splendid opportunities here for the man of moderate means. State Board's pamphlet, also Santa Fe illustrated folder describing San Joaquin Valley, mailed free on request. C. L. Seagraves, General Colonization Agent. Santa Fe Rr., 912 Railway Exchange, Chicago, Ill.

FOR SALE—120 acres, clay loam, all improved, good buildings, one mile from school and church, \$5,500, easy terms. 80 acres, all improved. New buildings, clay loam, \$5,000, easy terms. 80 acres, 40 acres improved, good house and fair barn, one and one-fourth miles from school, \$3,200, easy terms. First State Savings Bank, Gladwin, Michigan.

FLORIDA—Let me tell you how to get a farm in Suwannee River Loop—general farming, poultry, dairying, papershell pecans, Satsuma oranges, J. B. Clark, Land Commissioner, Box 4, Live Oak, Florida.

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Special Notice

All advertising discontinuance orders of change of copy included for the Classified Department must reach this effice ten days in advance of publication date.

One Four One Four One Four Special Spe

WRITE FOR LIST of Ohio farms, stating size and kind wanted. Ohio Farm Sales Co., Box 244, Bellefontaine, Ohio.

FOR SALE—Three Ogemaw County Farms, 120 acres, 80 cleared, 40 timber, improvements. Price \$3,060, 80 acres, 40 cleared, 40 timber, house. Price \$1,060, 160 acres pasture and brush. Price \$1,060. Home seekers' opportunity. Ontonagon Co., Upper Peninsula, 12,000 acres hardwood cut over, clay loam, first crop will prove this to be the best land in Michigan. Price \$10.00 per acre. Own your farm and be independent. Write today. West Branch Land Co., West Branch, Michigan.

IMPROVED FARMS, Plantations and Ranches taken under foreclosure. We own and operate approximately 50,000 acres in tracts of 50 to 2,400 acres distributed over 14 different states, will sell regardless of cost, and very easy terms. Send for list. Boyer Land Co., 304-5 International Life Bldg., St. Louis, Mo.

FARM FOR SALE—224 Acres in Carrol County, Ohio. Two sets fine buildings. Fine location and markets. Brick house with heater. Buildings worth price. A bargain at \$15,000. Write John S. McClester, Mechanicstown, Ohio.

A 120-ACRE FARM located in Allegan County, land and buildings in fair condition. Any reasonable offer will not be refused. Reason for selling, house burned down. No money to re-build. For further informa-tion write Joseph Alflen, Moline, Mich.

80-ACRE FARM FOR SALE by owner, level clay loam, tile drained. Modern buildings, on improved road 8 miles from Lansing, Mich. Joseph J. Martin, R. 4, Yale, Mich.

WANT TO BUY A FARM? Send for Michigan Resort and Farm Service Guide, it's free, Many excellent resort and farm bargains listed in each number. U. G. Reynolds, Gladwin, Mich. FOR SALE CHEAP—a small Fruit Farm, well located and fertile, 1,400 trees, nearly all bearing, also a lot of Raspberry, Gooseberry and Currant bushes. H. J. Heard, Croswell, Mich.

WILL SELL OR TRADE for farfin, my five story modern equipped Elevator, and fine modern residence. Address J. E. Skeoch, Coral, Mich.

86-ACRE FARM—Stock, crop, implements. Robinson Township, Ottawa Co., Edward Kuhlman, R. 3, Box 57, Grand Haven, Mich.

Write for our free list of good farms. DeCoudres, Bloomingdale. Mich.

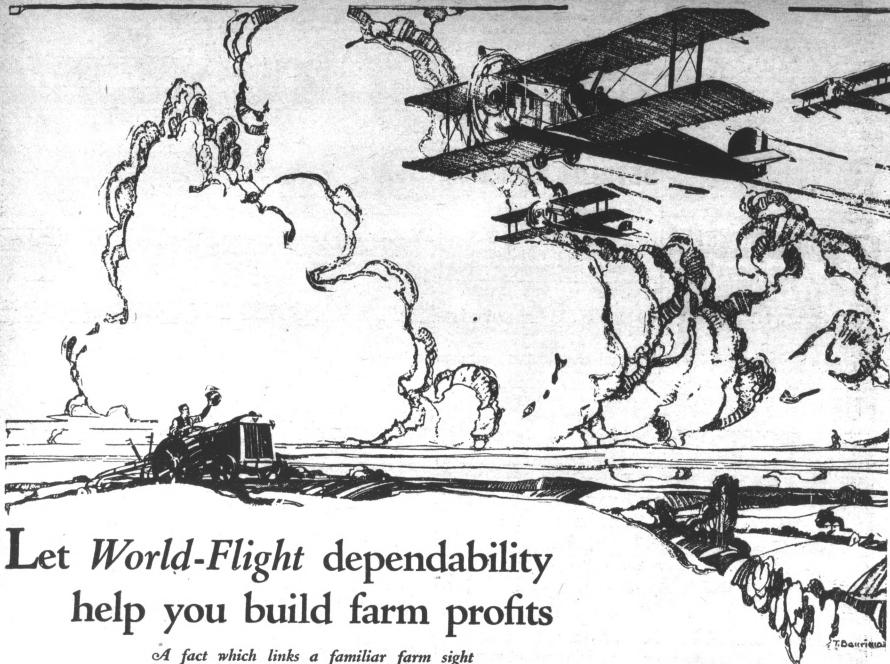
GOLDEN WYANDOTTES and Silver Hamburgs, vigorous cockerels, \$2 to \$3 each. Earl Warner, Otsego, Michigan.

RHODE ISLAND REDS R. C.—Large fancy cockerels at \$3 each. Burt Sisson, Imlay City, Mich.

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A fact which links a familiar farm sight with this great American aviation achievement

THE MEN who planned the record-breaking World-Flight of the U. S. Army aviators knew the importance of correct lubrication.

With danger lurking in every mile, with new obstacles to be overcome daily, with unexpected conditions developing hourly, the first and foremost requirement was dependability.

Only with correct lubrication could smooth, powerful, safe operation be assured.

Every farmer will be interested to know that the Army engineers who selected the oil to meet this supreme test, selected the very oil which today lubricates thousands of farm tractors. They specified Gargoyle Mobiloil "B", the identical oil which so many farmers use daily to assure the most economical operation of their tractors.

During the warm weather months when

your tractor must work without interruption, this same Gargoyle Mobiloil "B" gives most economical lubrication to the Avery, the Holt, the Oil Pull and many other makes of trac-

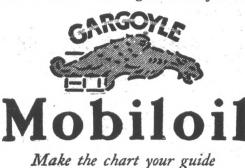
tors, while Mobiloil "BB", which is an oil of exactly the same high quality and character, but a little lighter in body, means profitable operation to the Fordson, the Cletrac, the Wallis and others.

Airplane engines and tractor engines work constantly under full capacity. They perform heavy-duty, heat-developing service, and the use of unsuitable oil is sure to result in premature breakdowns and wasteful fuel and oil consumption.

To use the grade of Mobiloil recommended for your tractor, your car or your truck, is to secure the same dependability of engine performance that was demanded in the historymaking feats of the United States Army Fliers.

Near your farm there is a dealer who will be glad to tell you exactly which grades of Mo-

biloil are best suited to your work. On his walls, he has the Gargoyle Mobiloil Chart of Recommendations which specifies the correct grade of Mobiloil for every make and model of motor.



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