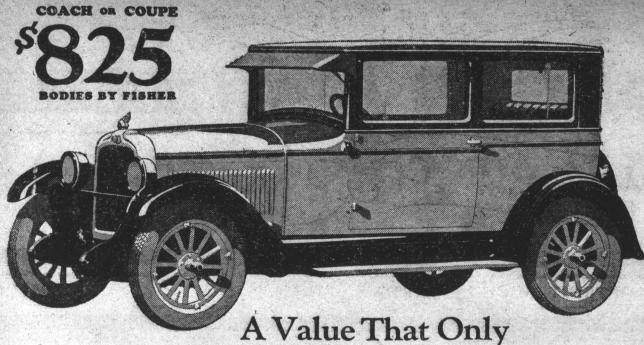


VOL. CLXVI. No. 11 Whole Number 4705 DETROIT, MICH., SATURDAY, MARCH 13, 1926

ONE YEAR \$1.00 FIVE YEARS \$3.00



Hard Luck



General Motors Could Achieve

Scoring an immediate and spectacular success, the new Pontiac Six is already one of the most discussed cars in America.

To introduce into the field of low-cost sixes, inducements to ownership other than price . . to overcome the limitations of ordinary performance, comfort, appearance and quality ... there has been brought to bear on the development of this new Six, all of General Motors' engineering skill, manufacturing experience, production facilities and purchasing power.

At its price, the new Pontiac Six, with body by Fisher, is an achievement no less important than the first six-cylinder engine. This is true, simply because it introduces elements of beauty, size, stamina, comfort and performance, entirely without precedent.

You are invited to inspect the new Pontiac Six, now being dis-played by Oakland-Pontiac dealers everywhere. Go prepared for a revelation... for only General Motors could produce such a car. and price it so low!

Oakland Six, companion to Pontiac Six, \$975 to \$1295. All prices at factory

OAKLAND MOTOR CAR COMPANY, PONTIAC, MICHIGAN

CHIEF ... OF THE . SIXES



or Lanterns. Light With Common Matches—No Torch

Can't Spill or Explode Even if Tipped

7. Cost to Use Less Than 50 Cents a Month. 8. Solidly Built of Heavily Nickeled Brass. Will Last a Life Time.

Lamp is Handsomely Designed — Equipped With Universal Shade Holder

Holder.
Lantern Has MicaGlobe
With Reflector—Can's
Blow Outin Any Wind.
Rain-Proof, Bug-Proof.
Sold by More Than
30,000 Dealers. If yours
can't supply you write can't supply you write nearest factory branch. Address Dept. MF. 21

The Coleman Lamp Company

Mention the Michigan Farmer When Writing to Advertisers

For the largest yields and best quality of all Crops Use MIER CROP PRODUCERS

News of the Week

A group of fifty Russians from Moscow are coming to the Ford factory for a course of training in the building and running of Fordson tractors. The Russian government recently bought 10,000 of these tractors.

Steve John, the king of all the gypsies, died recently in Detroit, causing considerable mourning among the gypsies. A gypsy from Brazil is said to be his successor.

It is reported that 25,000 aliens are illegally in Detroit. Efforts will be made by the bureau of immigration to deport them.

Thirteen persons, who were convicted as Esthonian spies, were executed at Leningrad for plotting against the Soviet Russian government.

The village of Kalamata, Greece, has passed an ordinance prohibiting mixed dancing. Henceforth men and women will not be allowed to dance together.

The Packard Motor Company recently received an order from the government for 150 airplane motors.

A woman wheeling a baby led 4000

A woman wheeling a baby led 4,000 textile mill strikers through Passaic, New Jersey, in a peaceful strike parade.

Donald McMillan, arctic explorer, says that the north pole flights planned this year will fail, except, possibly, that of Roald Amundsen, who will use a dirigible.

The Mexican government's expulsion of Roman Catholic clergy from the country is causing an effort to be made in congress for the withdrawal of all United States recognition of Mexico.

The recent anthracite coal strike cost the Lehigh Valley Railroad over fifteen million dollars in revenue,

Helen Wills, the eighteen-year-old American woman tennis champion, is continuing her winnings in the touraments in France. Her only defeat was by the famous French champion, Suzanne Lenglen, and that was closely contested.

A detachment of Canadian Royal Mounted Police is taking a 250-mile dog sled journey north to carry food to a band of starving Eskimos, who are commonly known as Caribou Eat-

A museum to house a collection of Jewish historical documents, art ob-jects and sacred relics, is being plan-ned for the Hebrew Union College at Cincinnati.

The German minister of defense told the German reichstag recently that the American army was the best in the world, in respect to technical and scientific equipment.

Alfred Testa, of Paterson, N. J., has a two-headed goat, recently born, which is growing normally. Each head has two ears, but there is also an extra ear between the two heads. The goat cannot walk because of the weight of its two heads. Both mouths bleat, and both swallow, but into a common throat.

The London, England, Star editorial paragraph writer recently wrote the following: "The proposal to put a wrist watch on the Statute of Liberty is a step in the right direction, but what she seems to need is an alarm clock."

Peter Manning, world's champion trotter, and Sanardo, champion pacing gelding, sold for \$50,000 recently.

The billion dollar railroads merger managed by the Van Sweringen Brothers, has been disapproved by the state commerce commission. The Pere Marquette was one of the railroads in the proposed merger.

Congressman John C. Ketcham, of Michigan, is proposing the inauguration of a "National Farmers' Day" for some time in October.

The Koch Cancer Foundation recently formed by interested physicians throughout the country, "to further the application and development of the Koch synthetic anti-toxin for non-surgical treatment of cancer." Dr. Koch is of Detroit.

The bureau of labor statistics show that living costs in Detroit were 88.2 per cent greater in 1925 than in 1913.

War department figures show that the war department has disposed of \$1,500,000,000 worth of surplus goods since the war.

The Germans are planning to build trans-ocean airplanes which will have 3,000 horsepower, and will be equipped for passenger service.

Felix Renick, of the National Institute for the Improvement of Memory, recently said that woman's memory is usually ten to fifteen per cent more accurate than man's.

DEVOTED TO MICHIGAN

VOLUME CLXVI



A Practical Journal for the Rural Family MICHIGAN SECTION THE CAPPER FARM PRESS

QUALITY RELIABILITY SERVICE

NUMBER XI

Essentials of Potato Growing

How to Get High Yields With This Crop

By Jason Woodman

N northern Indiana and southwestern Michigan are many thousands of acres of naturally drained, sandy loams admirably adapted to potato growing. I live in Van Buren county on the type of soil referred to. For many years I grew late potatoes, and when my youngest son, "who lived with me until I lived with him," succeeded to the management of the old homestead, he continued the practice. Many other farmers in our part of Michigan grow late potatoes as a leading cash crop and practice methods similar to our own. These men consider a yield of less than 200 bushels to the acre as a light crop. Two hundred and fifty bushels is regarded as a fair crop, and when they produce 300 bushels or more to the acre, they are apt to mention the fact to neighbors.

I have been asked to tell our methods of production, and I shall do so by giving a history of last year's crop on our own place. You will bear in mind that in describing the management of this particular field, I am describing practices which, with more or less variation, are being followed by many farmers in our own adjoining counties.

During the last ten years, alfalfa has taken the place in our farming that clover used to hold. We raise alfalfa in rotation, and each year's potato crop is grown on an alfalfa sod.

During the spring and early summer of 1923, fifteen tons of good manure were spread on the field that was to be planted to potatoes the year following. About July first the alfalfa was mowed down and left on the ground. Through this mulch of hay and manure came a vigorous second growth. The field was not pastured. During the mid-summer of 1923, and the fall, winter and spring that followed, the land was blanketed with a thick mat of or-

was a joy to see. About May 12, this young growth and the mass of decaying alfalfa stems and leaves and manure was plowed under eight to nine thoroughly. This completed cultivation. inches deep. This was done with a single-bottom, sixteen-inch plow, pulled by a tractor. The double disc and spring-tooth harrow completed the preparation. About two weeks before planting, 400 pounds of sulphate of potash, and the same amount of acid phosphate to the acre were drilled in with a grain drill, all the feeds sowing. The potatoes were planted the latter part of June. One week later the field was

floated with a light plank drag, which

smoothed down the ridges over the

rows and scraped out the little weeds

ganic matter. The growth of alfalfa just as they were ready to come up. that shot up on that field last spring When the plants were three or four week later they were again worked

> Between the middle of July and the tenth of September, the potatoes were thoroughly sprayed five times with Bordeaux mixture.

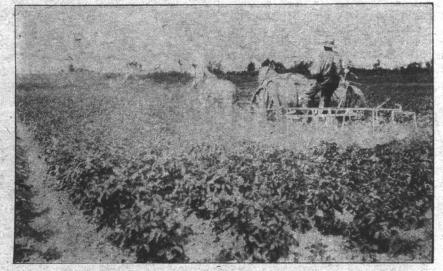
The rainfall during the growing season was not heavy, and twice the plants wilted down during periods of dry weather, but they renewed their vigorous growth when rain came. There was a heavy precipitation September 21. After that there was practically no rainfall until after the vines were killed by frost October 21. We began digging a few days later. The

crop yielded 405 crates to the acre, and weighed sixty-three pounds, net, to the crate.

The year following the potato crop we generally plant corn. We do this inches high, they were carefully cul- to clean the land of volunteer potativated with a corn cultivator, and a toes, thus putting an effectual stop to the further propagation of any potato diseases which may be present. The corn goes into the silo and the ground is harrowed and sown to wheat or rye. Alfalfa is sown the next spring. Following the grain crop, the alfalfa is mowed or pastured from two to four years. A short rotation of crops that does not include potatoes will follow, and the land again seeded to alfalfa, to be followed in from two to four years by another potato crop. We aim to grow potatoes on the land only once in ten years. This long interval gives potato diseases abundant opportunity to completely die out.

Each year's potato crop is carefully gone over several times, and all unde-sirable hills removed. This is one of the jobs that I always do myself, for seed that is as nearly possible diseasefree, is one of the essentials to the production of a heavy yield. Another thing must not be forgotten. A fat soil goes a long ways toward keeping the crop healthy. A lean soil invites all sorts of potato troubles. I do not recommend our own, or any other, particular cropping system. A farm rotation is determined by many conditions caused by differences in soils, localities, nearness to markets, and the general types of farming these factors make desirable.

The mulching of the field with manure the year before the crop is grown proven especially benefiting. Many years' experience has taught us that a ton of manure spread on a sod ten or twelve months before it is plant-(Continued on page 351).



We Sprayed these Potatoes Five Times From the Middle of July Until the Tenth of September.

Michigan Rural Agricultural Schools What a Few of Them Are Doing

By J. B. Ford

HERE is a growing appreciation and interest in the rural agricultural schools that are in operation at the present time. A few specific typical examples will help to emphasize this fact.

In the Thompsonville Rural Agricultural School District the building burned last spring. Within two weeks after this happened, the board had tentative plans ready for a new building and had been authorized at a mass meeting to submit a bond issue for a new building. This bond issue carried by a vote of ninety-one to five Last fall they moved into a fine new, semifireproof building, the total cost of which, including wiring and heating and water systems, was about \$26,000. They have a complete Smith-Hughes program of work, offer domestic science and art for the girls, and manual training for the boys. This school is on the accredited list of the University of Michigan.

School the enrollment in the four high ing balcony seats. They dedicated the school grades last year was forty-five;

the high school students who live out- boys' and girls' teams from a neighside the local school district, and as much as fourteen miles from the school, drive back and forth each day. This school is accredited and offers a fouryear Smith-Hughes course in agriculture. Last year the net income from agricultural project work completed by twelve boys, was \$2,417,76, or an average of \$201.48 per boy.

as fine a gymnas'um as can be found in any village community in the northern part of the Lower Peninsula. The cow stable has been converted into a combination manual training room and balcony. The manual arts class had a big part in laying the floor for the gymnasium, making cupboards for the In the Honor Rural Agricultural manual training equipment, and buildgymnasium in a double contest basket this year it is sixty-seven. Some of ball game early in December with

boring village. Both local teams won. Bath has had a steady growth and development, with a substantial increase in the high school enrollment from year to year. Sixteen boys completed home projects in connection with their laboratory course in agriculture last year, with a total net income of \$4,071.19. This gave an aver-Last fall twelve public spirited resi- age net income of \$254.45 per boy. One shown in all of the rural agricultural dents of the district, including the sup- of the boys in this group had a net schools. Schools of this kind receive erintendent, advanced \$100 each, or a income of \$432 from his poultry pro- from the state \$1,000 per year towards total of \$1,200, with which they pur- ject. In addition to this, he was em- maintenance, and \$400 per vehicle tochased a barn and transformed it into ployed during the summer months to wards transportation. Those that have cull farm flocks. He culled a total of met Smith-Hughes requirements re-4,500 birds for the farmers of the community. This illustrates the way in which project work and Smith-Hughes work are being recognized and appre- cultural schools have been accredited ciated by the best farmers of the community. It also shows how it tends to plete Smith-Hughes departments. As influence agricultural practices. Similar results are being manifested the communities there have been dethrough the work of the home economics department, and are being reflected in the home life.

There are forty-nine rural agricultural schools in the state at the present time in which similar constructive programs are in operation. Space will not permit a detailed discussion of all the ways in which these schools serve and bring increased educational advantages to boys and girls. Each of these schools has its outstanding community program in addition to the regular academic and vocational work. The schools mentioned above are typical of the growing interest that is being ceive an additional \$1,000 from the federal and state governments. A majority of the state subsidized rural agriby the university, and maintain coma result of the growing appreciation in veloped higher educational standards. increased efficiency, and more complete country life programs.

MICHIGAN SECTION THE CAPPER FARM PRESS



Published Weekly Established 1843 Copyright 1925 The Lawrence Publishing Co.

Editors and Proprietors 1632 Lafayette Boulevard Det te Boulevard Detroit, Michigan Telephone Randolph 1530

NEW YORK OFFICE, 120 W, 42nd St. CHICAGO OFFICE, 608 South Dearborn St. CLEVELAND OFFICE, 1011-1018 Oregon Ave., N. E. PHILADELPHIA OFFICE, 261-263 South Third St.

ARTHUR CAPPER President
MARCO MORROW Vice-President
PAUL LAWRENCE Vice-President
F. H. NANCE Secretary

WATERBURY Associate Editors. FRANK A. WILKEN Dr. C. H. Lerrigo
John R. Rood
Dr. Samuel Burrows
Frank A. Meckel
Gilbert Gusler Advisory Staff.

I. R. WATERBURYBusiness Manages

TERMS OF SUBSCRIPTION One Year, 52 issues \$1.00
Three Years, 150 issues \$2.00
Five Years, 200 issues \$2.00
All Sent Postpaid.
Canadian subscription 50c a year extra for postage.

CHANGING ADDRESS.—It is absolutely necessary that you give the name of your Old Post Office, as well as your New Post Office, in asking for a change of address.

RATES OF ADVERTISING

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

Member Audit Bureau of Circulation

Free Service to Subscriber

GENERAL:—Aid in the adjustment of unsat-isfactory business transactions. VETERINARY:—Prompt advice from expert

veterinarian.

LEGAL:—Opinions on all points, from a prominent lawyer.

HEALTH:—Practical personal advice from an experienced doctor.

FARM:—Answers to all kinds of farm questions, by competent specialists.

HOME:—Aid in the solution of all kinds of home problems.

VOLUME CLXVI

NUMBER ELEVEN

DETROIT,

MARCH 13, 1926

CURRENT COMMENT

The Dickinson Bill

UDGING from the I small number of letters we have received from subscribers giving their views on the Dickinson Farm

Relief Bill, the text of which was published in our columns two weeks ago, the rank and file of Michigan farmers are not greatly interested in it, or do not understand its provisions sufficiently well to formulate an opinion as to its merits.

Either attitude on their part is not surprising. Michigan farmers are in a different position from that of farmers in the wheat and corn belt proper. Wheat is a relatively small factor in our total crop production, while corn is not grown as a eash crop at all. In fact, live stock feeders ship into the state something like 10,000 cars of corn annually to supplement the homegrown product in their feeding operations, while Michigan dairymen are large buyers of commercial feeds. Also most of our important cash crops are not included in the proposed operation of the Dickinson bill in its present form

Then, too, it is not easy to understand the details of the plan, or to foresee how the plan would work out in actual practice, particularly the relation of the probable benefits to the cost of administration, or the tendency toward lessening the beneficial results through increased production. The plan is one among many which have been advanced to provide a solution for the surplus problem, and place farmers on the same basis as industrial producers and workers in the matter of a protected American price for their product. It will, if enacted, be in the nature of an experiment in the solution of this vexed problem, for which in all fairness, a solution must be short time get her answer. A farmer, start toward its solution, as well as or longer before he gets results. Even plicated business of farming cannot be gence and skill.—Johnson.

an official recognition of the problem, and the pressing need of its solution by the national government.

We have purposely delayed comment on the bill, in view of the fact that its author was scheduled to come to Michigan, presumably to explain his conception of its practical application. Unfortunately, however, he was unable to keep his engagement to speak at Ionia last week.

Some of the many other plans advanced for the solution of this problem are interesting, and seem practical and workable. But mid-western farm sentiment has crystallized in favor of the Dickinson plan to such an extent that it seems probable that it will be used as the basis of farm relief legislation of this nature which will be considered by congress during the present session. Hence the discussion of these other plans at this time would tend to confuse the issue, rather than advance the cause.

Well Begun is Half Done

THIS old saying may be applied to the season's farm campaign. The farmer who "takes time by the forelock" in get-

ting his season's work started will, if his plans are well made, be able to get at the various operations just when they should be given attention.

Timeliness in the performance of farm work is a very great factor in success. Timely preparation of the soil for planting will enable the making of a better seed-bed, as well as insure the timely planting of the crop. Timeliness in early cultivation insures the thorough and cheap elimination of weeds.

The timely start of harvesting, will save loss on the crop after it is grown. In fact, the proper timing of all the operations in growing farm crops not only makes for better crops, but eliminates labor and waste all alon" the

Carefully made plans along this line, which will spread the available labor over the season to the best possible advantage, are always profitable. While "The best laid schemes o' mice and men gang aft a-gley," yet with a reasonable allowance for unfavorable weather conditions, they will yield big dividends when applied to the season's work as it is laid out.

Attitude of Mind

THE other day a public agricultural worker told us of the discouragements one meets in getting farmers to act. He said

they seemed perfectly willing to listen, and even agreed, to the necessity of doing something that would be profitable to them—and then, they wouldn't do it.

The trouble is not with the farmer alone. It is rather a common trait among humans. We hate to change our habits of doing things, even after we are convinced that they should be changed. It takes effort to make changes, and it seems to be the inclination of most of us to want to use as little new effort as possible. Often we would rather work harder doing things the old way than to change.

But perhaps in the farmer, this attitude is more noticeable than in others, not because he is a farmer, but One reason is that he is his own boss. every other means of helping himself. only kind a fellow is got, he bett An industrial executive gives orders, when he believes changes are good, and others fulfill the orders because they have to. But the farmer has to give orders to himself, and then do the

Another reason may be that the results of methods in farming are often too far from the actual doing. A mechanic can do a thing in a new way, and soon see the results. A woman can make a cake a new way, and in a narrow way."

though we are convinced as to a thing, we like to demonstrate it ourselves, and it requires faith to start, and wait a half year for results.

For that reason it takes time for public men to put across those things which have been found beneficial to the farmer. But the farmer who realizes this general human inclination, and acts contrary to that inclination after he is convinced of the value of making a change, will profit well by his action.

Home Needs Attention A MAN wrote the words of the sweetest song in our language, women have interpreted it. John Howard Payne's

"Home, Sweet Home" touches our heartstrings and wakens within us an ever deepening love for that greatest of all institutions, the home.

15,118.000 farm women of our country to lift "the ever so humble" rural home to a place of vital importance in our nation's progress. In the past decade, much has been accomplished in the way of improving the farm home. But the farm buildings represent 17.3 per cent of the value of farm property. There is grave doubt in our minds, whether the farm homes have received 17.3 per cent of the money spent for improvements on the farm.

The home is an institution which influences to an immeasurable degree our character, standard of living, and future ideals. And in the farm home, perhaps more than in any other, the members spend long hours together in companionship, recreation, and study. If there is a home that needs more of modern conveniences, running water, electric lights, heating plant, a bath room, and a power plant-in all, a well arranged and equipped home-it is the rural home.

A great army of rural women has been working at this great ask of improving their homes for a great number of years. But only recently a movement to help them was organized in Chicago by the American Society of Agricultural Engineers, and assisted by the various national organizations interested in the farm home. This movement is to act merely as a helpmate, as it were, to rural people who anticipate any improvement to their home, or building a new home. With the combined efforts of a great army of about 397,000 women in our own state, the agricultural engineers, and organizations interested in rural conditions, we can hope for greater strides in rural home improvements in the future decade.

> Keep Your Head

N going about the state recently, we have come in contact. with a few leaders, not always farmers, who are out to "aid"

in the solution of farm problems. The men of whom we speak, are confining their efforts to the promotion of hobbies. They have "studied, and studied, and studied," and through their studious efforts have found a "crooked narrow way" which, if adopted, would 'eliminate farmers' difficulties.'

This short comment is being written, not in opposition to this "crooked narrow way," but because these leaders by some of these men, the farmer should adopt a policy that would do away with every form of efficiency in practical farming. These men would have them to forget the use of better seed, to neglect soil enrichment, and to reduce the method of soil preparation to the type used in the orient. The only positive thing these leaders recommend is their own little "crooked

We wish to quote from a successful found. But its passage would be a however, often has to wait six months Michigan farmer who said, "The comfundamentally changed by having it face north instead of east. look in every direction to gain all possible advantages for our craft.

Lifting Heavy Loads

D o you know how best to lift a heavy object? The medical fraternity have some ideas about the matter, and have

told us through Hygeia, that lifting. should be done in such a way as to use the muscles of the thighs, not the back and abdominal muscles. Bend the knees, they say, until the object to be lifted is on a level with the hands. Then grasp it and straighten the knees, raising the body and theobject at the same time. This method of using the leg muscles avoids putting too much strain on the back and the abdomen

There is another way to relieve the But it has taken the genius of about back muscles and, at the same time, accomplish as much, or more, in doing the heavy duties about the farm and that is through the efficient use of the head.

Snoozes

AST week I wrote about sneezes, so this week I'm goin' ta change it to snoozes.

Now, here is what some perfessor says about snoozes. "A snooze, or a nap, is a short sleep, or a lapse of consciousness, which is generally caused by auto-intoxication. The body is relaxed, and there is no reaction to noises unless they are unusual ones."
Ain't that fine? He says a fellow

is gotta be drunk to snooze. Now, I don't like no boozes, but I like my snoozes. I guess that fellow don't know what he's talkin' about. used ta snooze before there even was oughtoes. So, I guess this auto-intox-



icashun stuff is what you call the. bunk. It's just like sayin' Allium Schoenoprasum when you just mean onion.

Somebody says, "he who chooses snoozes loses." I don't believe it.

When a fellow feels like snoozin', I think it's 'cause somethin' inside o' him says, "Say, you, I got a job in here ta take care o' that pork an' bean dinner you et. Now, if you'll just be quiet and stop your fussin' around, I'll do the best I kin ta take care o' it.

Seems ta me a short snooze makes a fellow feel like doin' better work. They talk about engines, and etc., runnin' fer several days at a time, and think it's great. But our body is never still until we die. So we gotta use part o' our time by goin' in low, while we are sleepin', so repairs kin be made Seems ta me, natchur is doin' pretty well in fixin' up in eight hours o' sleep what damage 's been done in sixteen hours o' rammin' around.

Now, of course, some folkses don't do nothin', so they don't need much sleep. But when you're a farmer and got a ambitshus wife like mine, a fellow needs eight hours and some snoozes besides. I believe I'm goin' ta live longer, an' will get more fun outta livin', if I lay up fer repairs when natchur gives me the inclinashun ta. Of because of the character of his work. insist that the farmer should forget course, if sleepin' inclinashun is the According to the program mapped out ta a plumber or somethin', an' have himself looked over. There's nothin' like bein' awake when you're awake, an' asleep when you're asleep. And there ain't no use ta kick around and talk when you're asleep-you, kin do enuf o' that during the day-or half asleep when you're awake.

But anyhow, I believe that a snooze in time saves nine. I wish you happy snoozes. Snoozily yours,

HY SYCKLE.

Few things are impossible to dili-

The Apple Variety Situation

Too Many Varieties Interfere With Efficient Marketing of Michigan Apples

ICHIGAN'S apple variety problem is a perennial and neverending nightmare in any plan contemplating a balanced marketing program for that fruit in this state. Worse than that, it makes hopeless the possibility of profitable production of the premier fruit in any general way until it is satisfactorily settled. The problem has been discussed annually on every horticultural society program in Michigan for the past twenty-five years, and it isn't any nearer a solution now than it was in 1900, if we are to accept the judgment of the old-timers who discussed this same situation at the beginning of the century.

How much longer must we expect Michigan apple growers to continue sidestepping this vital problem to their own welfare, just how vital I am afraid the majority fail to realize? Possibly it can be made a little clearer by recalling what happens in big crop years, i. e., when all the important apple producing districts in the United States and Canada have produced a normal crop. That's when Michigan's 140-odd variety apple orchards suffer by comparison in competition with districts which produce a high percentage of a few standard varieties. Take a year like 1925, when this country produced 35,936,000 barrels of apples. big buyer didn't come to Michigan to buy apples that year, as most apple growers will remember. If he wanted Baldwins or Greenings he went to western New York; if Jonathans, he went to southern Illinois, Colorado, or Idaho; Delicious or Winesap, to the northwest; York or Ben Davis, to the Virginias. The truth of the matter is, no wise buyers wants to buy orchard crops containing twenty to thirty per cent of desirable standard varieties, and seventy to eighty per cent of undesirable varieties, which means increased turnover without adequate profit, in many cases no profit at all. There is little question that one of the

By F. L. Granger

Spizenburg, Rome Beauty, and Stayman, and through advertising educated the consuming public to the advantage in purchasing this ensemble, which meets practically every seasonal or culinary requirement. In Yakima and Wenatchee Valleys forty to fortyfive per cent of their total tonnages consisted of one variety, Winesap, and the six varieties named constituted ninety per cent of the total shipments.

Figures from five principal apple producing districts in Michigan show that the leading six varieties constituted only fifty-eight per cent of the total crop, and the second largest variety produced, viz., Duchess, is a summer apple whose marketing season extends over a thirty-day period only. I believe that if we had figures covering the entire production in Michigan we would find that the Duchess is the second as our apple figures indicate; in other words, we are producing more ance of the fruit to the point where

real reasons behind the increasing de- Duchess than any other variety. If mand for boxed apples, and the conse- that is the case, we Michigan producquent decline in demand for barreled ers have gotten the cart before the fruit, is that the northwest has stand- horse in our production program withardized on six high quality varieties, out any question, because Duchess is viz., Winesap, Jonathan, Delicious, a poor quality variety, which has a very limited marketing period of thirty days, whereas Baldwin, Spy, Greening, and Jonathan are comparatively high quality, with a marketing period of from four to six months. If an automobile manufacturer gauged his production to demand program along the lines the fruit grower in Michigan has apparently done, he would be bankrupt in short order.

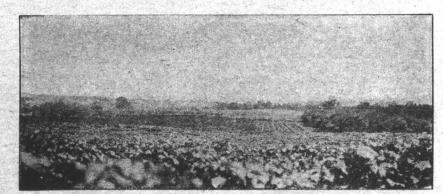
With our Michigan production scattered over so many different varieties, is it any wonder that we are having difficulty in meeting competition with the standard pack and standardized varieties from the northwest? That conglomeration of varieties eliminates any possibility of developing a sound advertising and merchandising program for Michigan apples and forces us into the position of "horse trading" our product, i. e., selling the few deleading producer instead of ranking sirable standard varieties on a definite market basis and discounting the bal-

the buyer is willing to take a chance with profit or loss on the undesirable varieties, or consigning these latter to take whatever they realize, generally

That situation needs correction-not ten years hence, but now. There is everything to be gained and nothing to be lost by immediate action. The Pacific Northwest had the same situation twelve years ago.

In twelve years the Wenatchee Valley has reduced their varieties from 117 to a point where ninety per cent of their fruit is produced in six standard varieties. Michigan ought to be in the same position in 1935, and my idea is that the seven standard varieties should be Duchess, Wealthy, Baldwin, Greening, Northern Spy, Jonathan, and McIntosh. Of course, there are some other varieties that are good, but those seven ought to be the objective of our program.

When and how are we going to start? Right now-the sooner the quicker and better. No program of such consequence to the industry should be attempted without a thorough searching investigation for all the facts and figures upon which to base our plans. The horticultural department at the Michigan State College should be authorized to make an accurate orchard survey covering the twelve commercial fruit producing counties of the state, visiting every fruit grower and securing from him a record of the number of trees of each variety of apple, peach, pear, plum, acreage of grapes and small fruits, the age of such trees or fruits, and other facts that are pertinent. That survey would probably cost \$10,000 and six months time, but when it is completed it will be worth ten times that amount to the fruit growers of the state and to the horticultural department. We will know, for instance, how many Duchess apples are being produced (Continued on page 359).



Standard Varieties Are Popular at J. P. Munson's Vinecroft.

Farm Practices in Germany

How Large Scale Farming is Carried On

HE German farmers pay much more attention to details in their farming operations than do the American farmers. Many of them, especially those who manage large farms, are also more scientific, they experiment constantly with farm machinery, methods of tillage, fertilization of the land, and improved varieties of grain, and along other lines.

The outstanding things in German farming operations are the uniformities in yields of crops in a given field, and in different fields on a given farm. The yields from one farm to another do not vary as they do in America. The land is thoroughly prepared for the crops, usually it is plowed twice. Commercial fertilizers are used freely. It appears that the chief limiting factor in crop production is climate, rather than available plant food.

On entering Germany I was surprised to find extremely great variations in the size of farms, and consequently, the farm practices that are followed. Although the majority of the land is under small holdings, and is farmed very intensively, in the main by hand labor, there are many large farms that are completely equipped with modern machinery and are managed in a scientific and efficient manner.

Through the courtesy of the Berlin office of the German Potash Syndicate, I had the privilege of visiting some of By M. M. McCool

One farm that I visited, namely, the Marker farm, which lies about thirty miles from the capital city, has an interesting story. I was informed that in 1914 the present owner of this farm ideal from a textural standpoint for selling the products on the markets in

the larger farms southeast of Berlin, session of it by growing vegetables and selling them to the city people at very high prices.

The soils of this farm consist of loam, loamy sand and muck, thus being had in his possession forty acres of the production of various crops. The land and was a truck crop producer, water level lies from three to three and one half feet below the surface of the city of Berlin. At the close of the the sandy land and somewhat nearer war he was the owner of seven thou- the surface of the muck soil. It is sand acres of land, having gained pos- maintained at a constant level beneath



A Large Field of Hemp Near the Factory which Weaves Flax Into Twine. On this, the Marker Farm, Everything is Done with German Thoroughness.

the latter soil by means of pumps run by steam traction engines.

We were taken directly to the manager's office, which is situated in one part of the farm house, this is modern and well furnished in every respect-After we had been served coffee and cake, the manager took us around the farm in a carry-all drawn by a pair of splendid coach horses. This manager, as is the case with the majority of those of the larger farms, has an advanced degree from one of the German Universities.

The farm buildings are arranged in the form of a square with an open court. The house occupies one side of the square and the barns the others. The court is paved and when wagons or other implements are left in it for the night, they are arranged in orderly manner, drawn up in lines resembling a military review. Farm implements are kept under cover when not in use. I did not see any machinery that had been exposed to the elements during the winter, as is frequently done in this country. The buildings are constructed of stone and prick and the roofs are slate covered.

The repairs on all machinery are done in the well-equipped machine shop on the farm. We were shown numerous pieces of new machinery that had been sent to this farm to be tested out or to be experimented upon. It may

with a revolving drum for the uniform distribution of the fertilizing material. On this farm, as I was told is the case with many of the large farms in Germany, many experiments are conducted. I saw projects laid out where the frequency and depth of tillage operations are being investigated as well as tests with various fertilizing materials. In addition, different varieties of seed are tested, as are the time and methods of planting. The facts are, a minimum amount of guess work is done

The land is devoted to the production of a variety of crops. This farm is conducted, both on an extensive and a very intensive scale. There are fifty cows and 250 work horses on it, and there are grown each year several hundred acres of cabbage, onions, potatoes, a large field of peas for canning purposes, a thousand acres of sugar beets, several hundred acres of wheat, barley and oats, a large field of hemp, several hundred acres of alfalfa and mixed meadow. There are no cross fences on this farm, and owing to the fact that a great deal of modern machinery is used, the fields are very large. There is installed a system of railways which make it possible for the products of the soil to be transported conveniently and quickly from the fields to the

I noted five large steam traction engines, and found that they are utilized for plowing the land. This is accomplished by stationing one of these at each end of the field and attaching a steel cable to each, by means of a revolving drum, gang plows are drawn to and fro across the field. As the plows are drawn across in one direction by one of the engines, the other one is moved up, and in turn does its work.

The land, as is the general custom in Germany, is plowed about fourteen inches deep in preparation for the sugar beet crop. The first time the beets are cultivated, the weeder is drawn by oxen. These animals are used because they injure the young plants less than do horses. The weeders employed are similar to the "surface" cultivators used in parts of the corn belt in the United States, but it is interesting to note that they are eight row machines. Following this operation, the plants are weeded by hand. The most of this work is performed by Polish women who are brought into Germany to work on these large farms.

Wild mustard is very troublesome in the barley and oats in this section of Germany. On this farm, however, it was taken care of by applying 1,000 pounds per acre of finely ground muriate of potash mixed with some bone meal or basic slag to keep the soil in good physical condition.

In fitting the land for the potato crop shallow furrows are first made, the seed planted and then the earth is ridged up over the seed. Thus, when the potatoes sprout or come through the ground, they are perched up on ridges about eight inches in height. These ridges, of course, are drifted down by subsequent tillage operations.

Unlike the American farmers, the German farmers, for the most part, take good care of the liquid manure that is produced on the farms. This farm is no exception. A large c is constructed and connected to the stable by means of a conduit, where all of the liquid manure accumulates. In addition, provisions are made so that the liquid material which drains from the solid manure or the heap, is conducted to the cistern. The cistern is tightly covered so that the air cannot reach the contents; thus, the loss of nitrogen by volatilization is reduced to the minimum. When ready to be distributed, the liquid is removed by means of large pumps and hauled to the field in tanks. Some of it is applied to the vegetables produced on the lighter soils

It occurred to me that the German

new type of fertilizer distributor—one methods of caring for the solid manure it is permitted to remain in rather erable losses by volatilization takes place. In some instances the material is hauled to the field and placed in small piles where it may remain for several weeks before it is scattered and turned under.

Commercial fertilizers are used freely and on all crops. I was informed that the sugar beet crop receives 200 pounds of nitrate of soda per acre, and 400 pounds of potassium chloride. I was surprised to learn that a relatively small amount of phosphoric acid is used on this farm. Some writers believe that phosphoric acid is not as badly needed in Germany as in some countries, and frequently there is more potash applied to the land than there is phosphoric acid. It occurred to me that not only on this farm, but on many others in Germany, not enough phosphoric acid is applied to the land. The German farmers do not utilize mixed fertilizers as is done in America. The potash costs the German farmer about \$20 a ton.

On the Marker farm the potash, and phosphoric acid, when it is used, is applied in the autumn or winter, the object being to give these two materials time to become distributed and available to the plants when they begin to grow in the spring. I was informed that another method, prevalent particularly on the smaller farms in southern Germany, is to apply the phosphoric acid and potash in the autumn and winter and, in addition, to add a mixture containing nitrogen, phosphoric acid and potash in the spring-

There are no silos on this farm, at least, none that are constructed as they are in this country. The tops from the sugar beets, and the pulp that remains after the sugar is extracted are placed in alternate layers in a pit in the ground and covered with earth where they form ensilage. This mixture is utilized for stock food as we utilize corn ensilage.

SOILS TRAIN SCHEDULE.

ONCE more sounding the call to arms against the further depletion of our greatest natural resource-our soil fertility, the Michigan State Col-

as they are the liquid portion. Often Soil Fertility Train to travel through southeastern Michigan, similar to the loose heaps where it is likely consid- one which was operated in southwestern Michigan last year. This train, a veritable moving soils clinic, starts on April 5 at Jonesville, moves through southern Michigan to Monroe, back to Jackson, then through Detroit to Bay City, and completes its itinerary at Owosso on April 20.

The famous "White Car" of the New York Central Lines will be fitted up as a Laboratory Car, in which the testing of soil samples, and the diagnosing of cropping ills will be the main features, although it will contain enough additional attractions to make it very interesting for anybody. A lecture car, equipped with motion picture machines, will also be included. Dr. M. M. McCool, eminent soil doctor of the Michigan State College, will be the officiating surgeon, but he will be assisted by such able doctors as Mr. George Grantham, O. B. Price, etc. Special attention will be given to the p. m.

be cited, for example, that I saw a farmers are not as scientific in their lege is joining forces with the New testing of soil for acidity, and the propnew type of fertilizer distributor—one methods of caring for the solid manure York Central Lines by arranging a er use of fertilizers. Crops especially er use of fertilizers. Crops especially adapted to each locality will be given special discussion by experts on these particular crops. Sugar beets will be given a great deal of consideration.

The following is the schedule as announced by E. J. Leenhouts, Agricultural Agent, New York Central Lines:

tural Agent, New York Central Lines:
Jonesville, April 5, 7:30 p. m.; Hillsdale, April 6, 9:00 a. m.; Montgomery, April 6, 2:00 p. m.; Hudson, April 7, 9:00 a. m.; Adrian, April 7, 1:30 p. m.; Blissfield, April 8, 8:30 a. m.; Deerfield, April 8, 7:00 p. m.; Monroe, April 9, 1:00 p. m.; Tecumseh, April 9, 7:00 p. m.; Manchester, April 10, 9:30 a. m.; Napoleon, April 10, 1:30 p. m.; Chelsea, April 12, 8:30 a. m.; Ann Arbor, April 12, 1:30 p. m.; Ypsilanti, April 13, 9:00 a. m.; Oxford, April 14, 9:00 a. m.; Utica, April 14, 1:30 p. m.; Metamora, April 14, 7:00 p. m.; Columbiaville, April 15, 1:00 p. m.; Caro, April 16, 1:00 p. m.; Vassar, April 16, 7:30 p. m.; Millington, April 17, 8:30 a. m.; Richville, April 17, 1:00 p. m.; Bay City, April 19, 9:00 a. m.; Midland, April 19, 3:00 p. m.; Saginaw, April 20, 9:00 a. m.; Chesaning, April 20, 1:00 p. m.; Owosso, April 20, 7:00 p. m.;

State Capitol News

By Our Lansing Correspondent

PROBABLY Michigan farmers are state should continue to contribute to more directly interested in the the up-keep of non-trunk line highways. state of the two bills modifying the distribution of the revenue derived from the gas and the weight tax than in any other of the score or more measures which came before the recent special session of the Michigan legislature.

The Atwood and Kirby bills were the storm center of bitter controversy between staunch administration supporters, and those who resented what they deemed the high-handed and autocratic tendency of the state officials who have supervised the expenditure of the highway fund. In the end the Kirby bill was passed and the Atwood bill defeated, so that neither of the contending factions could claim a distinct victory.

As originally intended, the Atwood bill would have increased the appropriation from the weight tax funds for maintenance of state trunk lines, from \$2,000,000 to \$4,000,000 a year, and would have discontinued our state aid for the maintenance of the non-trunk line highways. The house felt that the

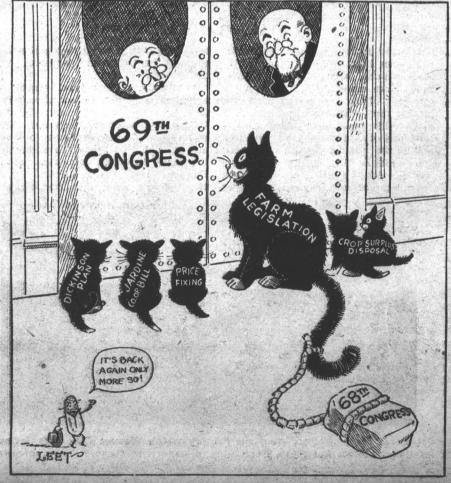
However, the senate refused to accept the house amendments, and so the proposition was referred to a conference committee. The house members stood steadfast and refused to recede from the amendment. So the bill perished by the wayside. This was probably the most severe defeat which the administration suffered during the special session.

The Kirby bill reduces the amount which the counties will receive on past due awards during 1926 from \$2,000,000 to \$1,000,000. However, the bill definitely recognizes the claims of the townships and specifies that they shall be paid in full on April 1 of this year, and of each year thereafter, until all such accumulated state awards to the townships have been settled. Another good feature of this bill is that definite dates are set for the payments to the counties. The bill provides that \$1,-000,000 shall be paid to the counties on June 1, 1926, and \$2,000,000 each year thereafter, payable \$1,000,000 on February 1, and \$1,00000 on April 1 until all such awards have been paid in full. The Kirby bill was passed by the house, sixty-seven to thirty, and by the senate, twenty-three to five, those voting against it in the upper branch of the legislature, being Senators Cummings, Horton, Quinlan, Whiteley and Young.

Throughout the discussion of this entire subject of highway finance, many representatives expressed their reluctance to take any important action until they had been furnished with satisfactory information as to how the approximately \$23,000,000 raised by the gas tax and weight tax during 1925 was expended. Although State Highway Commissioner Frank F. Rogers sent two communications to the legislature, and Secretary of States Charles J. Deland also furnished certain desired information, still many members felt that they were being kept too much in the dark and that the administration was either wilfully withholding information from them, or else did not know much about its own business.

The inforantion regarding highway finances furnished by Secretary of State Deland, showed that the receipts from the gas tax during the eleven months which it was in force during 1925, amounted to \$7,558,217.80, after paying the refunds. The cost of collecting the gas tax was \$41,317.02. The total weight tax receipts were \$13,356,466.46, of which \$6,000,000 was paid to (Continued on page 375).

Like the Proverbial Cat



Why Burn the Marsh?

This Writer Thinks it Poor Practice For the Farmer By B. East

of the warm days of late March or early April, to dry the dead grass and the ground under it, the practice of burning over waste land begins. A farmer makes no greater mistake than the burning of these worthless acres, and nothing he does is more detrimental to the wild life of his section, that, if left alone, will benefit him immeasurably during the summer months.

The swamps, marshes and swales are the final refuge of birds and animals in settled or cleared country. If a late spring storm catches the song birds after they have returned from the south, they find shelter in the thick clumps of marsh grass. Later, dozens of species build their nests and rear their young in security, in the seclusion of those same marshes. The redwing blackbird, really one of the most valuable song birds in the destruction of insects in this section, knows almost no other home. Other species, for whom the marshes are too wet, find the desired solitude in the dense, brushy swamps. Robins, chewings, thrushes, catbirds and kingbirds nest by the thousands in the swamps of this region. All of these, too say nothing of the waders and water birds, whose habitat is the wetter portion of the marshes and bogs near open water, require the cover of grass and reeds.

Beside these birds, the marshes and swamps furnish the finest of winter shelter for quail and grouse-shelter against their natural enemies, against hunters, and most important of all, against snow and cold and hunger in the bitterest weeks of winter. Autumn burning destroys this cover, turning

HE season for spring marsh fires the marsh into a bleak, snow-swept is near at hand. With the pass- barren stretch. Even the muskrats do ing of the snow, and the coming not like to occupy houses already built, after the marsh is burned.

Spring burning is even more destructive. It not only destroys cover for the birds and small animals, but in all too many cases, destroys the birds and animals themselves. The ground is seldom dry enough for marsh burning until after larks and other early spring birds have begun nesting, and hundreds of litters of young rabbits are killed by those same fires.

Why burn the marshes at all? Does it improve them any, and are they of any value to begin with? If they produce grass fit for hay, then the annual cutting should keep it short enough on those areas that are valuable. Many a good farm building has been burned by fire that began as a small burning in a half-acre pond, a half mile from the buildings, and many a farmer has lost a valuable half day's time while he fought to re-gain control of such a fire, spreading before a rising wind. If you have been burning your waste land, just out of habit, think it over this spring, and let the birds have their cover. If you have land that really must be burned, take care that the burning is done before the birds are back, which means just as soon as possible after the snow is gone.

This question of marsh fires in cleared sections is in no way related to the more serious one of brush fires in the northern part of the state, set by farmers while clearing new ground. That is a problem by itself, involving the possible loss of thousands of dollars worth of timber, human dwellings, and even human life. It all means we should use fire cautiously.



A Member Tells the Story

munity. For many years we did not try to do anything in a community way, independently of the village, near which we live. Freesoil is just three miles from M-11. The road leading to the village is a main thoroughfare, and on this road is situated the Darr School. A year ago, we formed a parent-teacher association.

Many said they would give us one year before disbanding. Others said we were so near the village we would not have a crowd. It is just seventeen months since we organized. Every family and four different churches in the district are represented in this membership.

Talent before unknown, has been brought to light. People of all ages are being brought together in a social way, hitherto unknown to the locality.

Young men in the neighborhood have taken keen pleasure in assisting in programs. Fathers of school children have been glad to assist in the onel's lady are sisters under the skin." placing and planning of a slide bought by the association.

People without any children, and people whose children have grown up and are no longer in the school, are actively interested in aiding the association, both in a financial and a social way. We know the organization has been a success in many ways. It is not due to exceptionally good officers, but to the fact that everyone in the association does his bit in the best way he knows, and at any time he has been called upon.

Men, as well as women, are put upon both program and refreshment committees with equally happy results. The be separated without damage.

E are just an average rural com- children are delighted when their parents have a share in the evening's enertainment.

> We have discovered one member who has a keen sense of humor, and who delights us with his witty little speeches; another who plays the fiddle in a way that would compare favorably with the fiddlers made famous by Henry Ford; another whose comedy acts in the little plays bring as much pleasure as Charley Chaplin ever afforded his audience; another who sings unusually well, and so on throughout the community. Through our meetings there has been discovered here and there, worth while things, previously unknown to us.

> Many nights, even with unfavorable weather, our school has been too crowded to be comfortable, and every meeting has brought a splendid attendance. Many nationalities are represented, and we have found, with Kipling, that "Katy O'Grady and the Col-

David Harum says, "A reasonable Defects in the building, and plans amount of fleas is good for the dogfor its betterment, have been discussed keeps him from brooding over being

> The Michigan Canners' Association will meet at the Michigan State College on April 13-14, according to Mark Hutchins, of Fennville, Michigan, the president.

> In damp weather, postage stamps sometimes stick together and are difficult to separate. Place them on a newspaper in a hot oven for a few moments. As soon as the stamps get hot, the glue dries, and by pressing between the fingers, the stamps may



Cletrac Power on the Farm-and More Money in the Bank

CLETRAC power on the farm means more work done at less cost—larger yields from every acre — and greater profits at the year's end. Cletrac Crawler Tractors make light work of the hardest farm tasks. Heavy plowing, discing, cultipacking, seeding and harvesting are all finished in less time - with far greater ease—and at a substantial saving in labor and money when Cletrac is on the job.

Positive Traction— No Power Wasted!

Cletrac power is usable power. The broad tracks prevent slippage—increase traction—and reduce fuel costs. The evenly distributed weight of this modern, powerful, easily-handled tractor means a pressure no heavier than a man's foot. The Cletrac never packs or hardens the ground. Turning easily within its own radius, the Cletrac works "close-up" in corners. It does excellent work on hillsides—travels sure-footedly over soft ground and wet spots—over ice, snow and slippery mud. And its operating cost is remarkably low.

Cletrac Crawler Tractors are made in two models: Cletrac "W." which pulls a two-bottom, 14 inch plow easily, and Cletrac "K," the latest model, which handles perfectly a three-bottom, 14 inch plow. Write us today for complete details and actual working views of these two labor-saving tractors that earn big dividends throughout a long lifetime of thoroughly dependable service. The coupon below will bring you full information.

The Cleveland Tractor Co. Cleveland, Ohio

The Cleveland Tractor Co. Cleveland, Ohio	
I farmacres. Please send full i	n- I I I I I I I I I I I I I I I I I I I
Name	
Address	



Potato Growers are Dusting

The Potato Plant is a factory for producing potatoes in the soil. The size, quality and yield which the potatoes make—will depend upon how well the "Potato Factory" has been erected and how long it has been correctly maintained throughout the late "tuber making" period.

Experienced growers everywhere have found that Dusting lends itself to this problem better than any other practice and

Dusting the Niagara Way

Insures that the vines are working to their maximum efficiency and capacity and so protects your investment in seed, fertilizer and cultivation. Because:

You can dust with a 4-row Niagara Duster 20 acres in 7 hours. The Niagara Duster is so light you can get "in and over" even a hillside planting during those wet cloudy times when Blight

a misside planting during those wer cloudy times when Bright comes to destroy your crop.

Niagara Dusters are always ready no mixing—no water hauling—no clogging nozzles—no hold ups.

Niagara Potato Dusts increase the output of the potato vines, prevent Blight and kill Bugs and so put sound marketable potatoes in the ground. potatoes in the ground.

It will pay you to Dust the Niagara Way Investigate now today. Ask your dealer to write us. Remember Blight and resultant rot are no longer feared by growers who dust.

Niagara SPRAYER COMPANY, Middleport, N.Y

Magara DUSTS and DUSTERS

Please Mention The Michigan Farmer When Writing Advertisers

Since organization our experience has been Non-assessable.

With one payment per year the company has built up a full legal reserve with total assets on January 1, 1926, of \$704,152.41.

This remarkable growth is due to the following reasons:

- 1. The company started at the right time, -in 1915, when traffic was light.
- 2. It started in the country districts where losses were light.
- 3. Rates were worked out and tested in a careful
- With state-wide operation, it not only equalizes the risk but brings the service to the automobile driver in any part of the State.
- The company has never borrowed a dollar but has paid its claims in full and established a full legal reserve. The company collected \$358,317.45 more in premiums in 1925 than its nearest state-wide competitor.
- 7. The company has passed the experimental stage and is able to stand the shock of serious claims. It specializes in automobile insurance and its officers. adjusters and agents have therefore had ten years of experience to aid you in serious claims.

Call on Local Agent for

Citizens' Mutual Automobile Insurance Company Howell, Michigan.

How Merchants Helped

Foster, Community Activities By C. R. Hoffer, Dept. Sociology M. S. C.

trade centers have come to my attencited in the following paragraphs. Perhaps in some cases, the way these activities were carried out, or are being carried out, could be improved upon. Yet, they represent an attempt on the part of merchants to help their communities and are a definite proof of the merchant's interest and conviction regarding the value of such work-

Several merchants hold corn or poultry shows in connection with their stores, and invite the people of the community to make exhibits. The poultry shows held by the Curtis Johnson Hardware Store, at Rush City, Minnesota, are an excellent example of this type of activity.

A rural merchant in Wisconsin has done a great deal to encourage good health in his community by sponsoring contests among children attending schools that are in the trade area of the town where his store is located. Score cards were printed and one was given to each pupil. This card allotted a certain number of points to such items as cleaning teeth, sleeping with windows open, perfect attendance at school, etc. Teachers in the various schools supervised the contest for the pupils. When any pupil attained a satisfactory score at the end of the month, during the time that the contest continued, his card was worth twenty-five cents in trade at the store. This plan worked so satisfactorily that it was taken over jointly by the commercial club, the merchants of the town, the high school, and the county superintendent of schools.

A druggist in an Iowa town having a population of about 1,000 people, has done a great deal to get the people in his community interested in reading books. (The town has no library). The merchant bought about 250 books, of the sort that would interest the average reader. The books were then sold at the retail price of two dollars per book. When anyone bought a book the merchant kept a record of the purchase. Then any time the purchaser wished to get another book he could do so by returning the volume already purchased, if it were in good condition, and by paying an additional charge of ten cents. Thus, practically the entire lot of the 250 volumes was made available at ten cents per copy to anyone who had purchased one book at the regular price.

It is, however, by cooperation with fellow merchants that a merchant can apparently accomplish most in serving his community. . The common method is for merchants to form an organization and then the organization sponsors community activities. At Long Prairie, Minnesota, the merchants have cooperated in getting a calendar which has pictures of various scenes in the community on it. Also, the merchants in this town, in cooperation with other business men, entertained the members of the boys' and girls' clubs of the county for one week. The club members stayed at the homes of the merwhile they attended the various programs which were held during the week. In this period of time the young folks from the farm became acquaintnew way. They began to think of the town people as friends.

chandise which merchants wish to in- Foster.

URING recent years a number of troduce in the community is put on instances of community service display. Entertainment, usually furgiven by merchants in the rural nished by home talent, is provided for people who come to the fair. The ex-A few of these instances are hibits are judged and suitable ribbons are given for the best exhibits. Often no money prizes are awarded. Whatever expenses there are for the fair are frequently paid by the merchants. However, the important services of the merchants consist in the initiative which they take in getting the idea started. Very seldom is a community fair successful unless the merchants support it.

There are other ways in which merchants help to promote community development, but the few activities just mentioned are suggestive of what is being done in various places along this line of endeavor.

MY MOST INTERESTING EXPERI-ENCE OF 1925.

TO have soils and crops specialists from fifteen different states gather at my farm to study sandy soil and marl digging demonstrations, was the writer's most interesting experience of the past year.

The American Society of Agronomy, corn belt section, and the American Society of Plant Physiologists were holding a joint meeting at the Michigan State College, and on July 9 the groups made a special trip to my farm as part of their convention program, Dr. C. E. Millar, associate professor of soils, and Prof. H. H. Musselman, head of the college agricultural engineering department, were in charge of the sandy soil and marl digging demonstrations.

A brief statement of the special features of my farming system, as studied by the national societies last July, may be of interest. After discovering marl on my farm in 1916, I conducted cooperative marl and fertilizer experiments with the soils department of the Michigan State College. I had been reading the books written by Dr. Cyril G. Hopkins, and in the summer of 1919 I motored to Illinois University to go over the experiment plots there with Dr. L. H. Smith.

By the fall of 1919, I was sure that I could build up my sandy soil without keeping live stock, and so I sold all my stock except work horses. By following out a system of applying marl where needed; plowing clover under for cultivated crops, which are followed by grain crops, and seeded again to clover; applying most of the straw from grain crops to the soil by means of a straw spreader; and using acid phosphate on all crops, I have been able to bring about very beneficial changes in my soil, with resultant good crops. The crops were looking so good last summer, in spite of an exceedingly dry season, that the college soils men were anxious to include an inspection of the farm in the program for the national meetings.

The experience of having these nationally known specialists at my place was one which will stand out as one of the most interesting of my life. The men showed great interest in the demonstrations, and referred to them as chants, or other persons in the town, among the best features of the meeting in Michigan.

The following states were represented among the visitors: Arizona, Illinois, Iowa, Kansas, Kentucky, Louised with the business of the town in a iana, Michigan, Ohio, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, and Wisconsin. Others at the Merchants in many towns encourage demonstrations were A. J. Pieters, agcommunity fairs. These events are ronomist on clover investigations; F. much like county fairs, except for the D. Richey, corn investigations; and W. fact that they are smaller. These fairs N. Vinal, cereal investigations, all from are held one or two days during the Washington, D. C.; Prof. J. F. Phipps, fall of the year. Agricultural products Melbourne, Australia, and A. C. Strauss, are exhibited, and occasionally mer- Ludwigshafen, Germany.-Sidney A.

ESSENTIALS OF POTATO GROW-

(Continued from page 345).
ed to potatoes will produce at least
two bushels more than would the same
ton applied just before the land is
plowed. I shall not discuss the reason
why this is true. I think, however, no
one will dispute the statement if he
has ever tried the two methods side
by side.

Use Abundance of Seed.

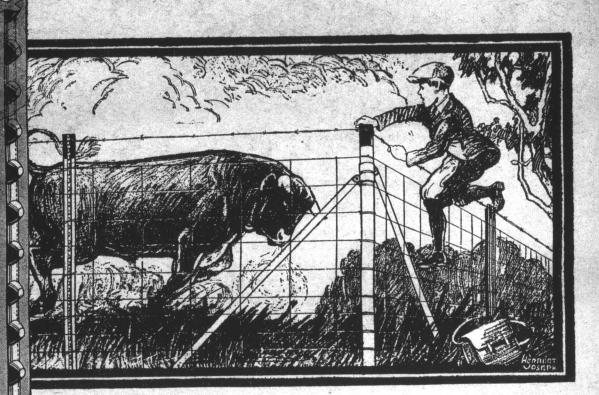
We always use an abundance of seed. The general rule we lay down is, that a piece of seed should weigh at least one and a half ounces. If the potato is large, the seed should weigh two ounces. On our medium and light sandy loams, we space our rows three feet apart and the hills from fourteen to twenty inches apart in the row, the distance depending on the texture of the soil. On our heavier, more fertile loams, the rows are often placed thirtytwo to thirty-four inches from each other, and the hills thirteen to fifteen inches apart. The amount of seed thus used will generally run from sixteen to twenty-five bushels per acre. On our own farm we use seed weighing from two to four ounces each. The rows are three feet apart, and the hills thirteen to fifteen inches apart in the row. We plant from thirty to thirtyfive bushels of this seed to the acre. This may seem extravagant. It has The whole potato from a naid us. healthy, vigorous hill, properly cared for during the winter and spring, is incomparably the best seed for late planting. No matter how unfavorably the weather is at planting time, such seed always grows and the use of it insures a perfect stand. It is well to mention the fact that whole seed for early planting is not desirable.

The amount and kind of commercial fertilizers that can be profitably used varies widely with different soil types, and with apparently similar soils in different localities. Frequently the use of commercial fertilizers is unprofitable. On a well-manured sod we have found that the further addition of nitrogen is unnecessary. Neither potash nor phosphorus produces much effect on sour sandy soils in our neighborhood, even if well-manured. But when our land has been well limed and well filled with organic matter, potash produces marked results, not only on the potato crop, but on those that follow-The effect of phosphorus is less notice-

When Spraying is Profitable

When potatoes are grown on a soil made fertile, and a good_stand is secured, spraying with Bordeaux mixture is very profitable. If the spray solution is properly made and applied in the right way, late potato tops will remain green till killed by frost and the tubers will mature. The normal ripening of potatoes takes place while the tops are still green. If they are killed by blight or hopper-burn when the tubers are half or two-thirds grown, the result is apt to be a crop of soggy potatoes, even on sandy land. Proper methods of spraying, the mixing of Bordeaux, the adjustment and operation of spraying machinery are operations one has to learn by being shown, not by being told. That is a job that belongs to your extension department.

Does potato growing pay? I do not believe the average acre returns a profit. Wide observation leads me to say the man who really does make money out of the crop, plants only a small percentage of his tillable land to potatoes each year. He fits the crop into a well planned system of farming, adapted to his locality and himself. He makes that field especially fertile, remembering that the potato is a dyspeptic and will starve on land that will grow a fairly good corn crop. He has good marketing facilities and a good potato soil. He plants his regular acreage every year, no matter what happens, and, finally, he loves to play the game, and goes joyfully to



Strong Fences—Economical to Build and to Keep Up

THERE in a nutshell you have the reason for Red Top's great popularity with farmers everywhere. In the first place, Red Top gives you a strong fence line. It will stop the most ornery bull that lives.

And of equal importance—Red Top gives you an economical fence line. With the One Man Red Top Driver, one man can set from 200 to 300 posts a day. With Handy Fasteners, which are furnished free with Red Top Studded Tee posts, one man can attach fencing to Red Top posts and do a perfect job.

Then there is the long life of the Red Top post. It lasts for years and years and holds the fencing firm and taut. The sturdy anchor plate—firmly attached without weakening the post with rivet holes—roots the post in the ground.

And so you get double economy in your fencing. It costs less to build. It costs less to keep up.

The fine bright appearance of the Red Top with its pure aluminum metallic finish—baked on—gives a well kept, prosperous look to your farm.

Drop in and see the Red Top dealer the next time you are in town. He will be glad to tell you all you want to know about the Red Top—explain the Red Top guarantee to you—and give you a copy of an interesting booklet, "How to Build Fences of Long Life."

Red Top Double Strength Studded Tee Steel Fence Posts

RED TOP STEEL POST COMPANY
38-L South Dearborn Street, Chicago

Twice the Value in Plant Foodbut not Twice the Price!

It's the plant food in fertilizer that makes crops grow. Buy on the basis of plant food.

International Multiple-Strength Fertilizers contain twice as much plant food as a standard fertilizer. For example, 10 bags of Multiple-Strength 4-24-4 contain as much plant food as 20 bags of standard 2-12.2 fertilizer. You haul half as many bags from the station-haul half as many bags to the fielddrill half as much fertilizer.

"Twice the value in plant food —but not twice the price."

Ask your Dealer or Write Us about

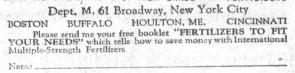
International Multiple-Strength fertilizers

Sell INTERNATIONAL MULTIPLE-STRENGTH FERTILIZERS. IT PAYS. Write us to-day

It you wish Standard Grade Fertilizers, there are none better than "International". We also make FOS-FOR-US Poultry Grit



NTERNATIONAL AGRICULTURAL CORPORATION





Pear, Cherry, Plum & Quince

Small fruit plants, grape vines, roses, shrubs, and ornamental trees of all kinds. Established a third of a century. Catalog on application

T. B. WEST & SONS, Lock Box 142, Maple Bend Nursery, PERRY, OHIO

When Writing to Advertisers Please Mention The Michigan Farmer

FRUIT PACKAGES

MANUFACTURERS OF ALL KINDS OF FRUIT
PACKAGES PACKAGES
PLANT BANDS ALL SIZES. AMERICAN PINT
AND QUART BASKETS. PROMPT SHIPMENT
Order now Write for orde

THAYER & COMPANY Dept. M.
BENTON HARBOR, MICHIGAN
POST OFFICE BOX 186

KINKADE GARDEN TRACTOR

and Power Lawnmower
A Practical, Proven Power Cultivator for Gardeners, Suburbanites,
Truckers, Florists, Nurserymen,
Fruit Growers, Country Estates
and Lawn Work, American Farm Machine Co.

MINNEAPOLIS, MINN.



w Albany Box & Basket Co., Bo: #2 New Albany, Ind.

A Complete Growing Guide for the Farmer It may



save you hundreds of dollars

Written by an expert Fruit Farmer

Every Farm Owner Should Have This Book

It contains the best list of farm fruits and shade trees, roses, shrubs and hardy plants. Arranged so you can tell at once what you So complete with cultural and sprayneed. So complete with cultural and spray-ing directions and other valuable data, you can use it as your guide and be absolutely safe. There is no other catalog like it. Send for your copy today. Prices greatly reduced this year.

GUARANTY NURSERY CO.

A FENCE QUESTION.

Can my neighbor compel me to move fences that have been standing as line fences from fifteen to forty years?— S. L.

If the fences were built, and have since been maintained as a convenience for control of live stock, without notorious adverse claim of ownership up to the fence, no length of possession will give title. But if the fence has been so maintained adversely for fifteen years, claiming ownership, title is acquired by adverse possession.-Rood.

RIGHT TO MANURE.

If I pay cash rent for a farm, and run it as a dairy farm, purchasing grain to feed to the stock, to whom does the manure belong? Have I a right to sell the manure?—C. G. J.

Though cash rent is paid, the renter is bound to farm with good husbandry. which prevents the removal of manure made on the farm from feed grown there.-Rood.

GUARDIAN'S RIGHTS.

Has a guardian authority to invest life insurance money left to a minor child, in real estate or other property? Money is in bank in guardian's name.

—R. T.

When a guardian, without order of the probate court, invests the ward's funds in land, the ward may, on attaining majority, or otherwise getting legal capacity, elect whether to accept the investment or reject it, and hold the guardian liable for the funds and interest.-Rood.

WHO GETS INSURANCE?

A. sells farm to B. B. takes five-year mortgage. Two years later B. takes out policy in storm insurance. One year afterwards, wind blows down the building. Who gets the insurance, A. or B.?—R. V.

Who is entitled to the money depends on the provisions of the insurance policy. These policies usually provide for the payment of the paramount title first, in this case probably the mortgage.—Rood.

DEEDING PROPERTY AWAY.

A mother owning a small farm, has only one son as heir. Would it be less expense for her to make a deed of the property to son, than to wait until after her death to have the property filed or probated in the son's name? Or, how should this be managed to avoid unnecessary expense? If I buy a tax title on a piece of cut-over wood land, how soon could I take possession, or commence to cut wood on that land for my own use, or market?—G. H.

It would be cheaper to make a deed

It would be cheaper to make a deed of the property than to probate an estate; but it would be a very foolish thing for the mother to deed her property to anyone, even her own child. She needs that for her own protection while she lives.

The purchaser of a tax title is not entitled to possession, or use of any of the property until six months after service of the final notice of expiration of the right to redeem.-Rood.

BRANDING OF CATTLE.

Would like to know if there is a law in Michigan prohibiting the branding of cattle? Can a brand be registered? If so, where? Where can branding If so, where? Where can irons be obtained?—C. F. M.

Comp. Laws 1915 Sec. 7350-7552, provides for adoption of brands to be registered in the office of the county clerk tion or defacement of the brand on any interest at all.-Rood.

animal is made a felony if done with intent to steal same. Brands may be obtained from any blacksmith, made to suit.-Rood.

WARRANTY OF TITLE OF GOODS SOLD.

A. bought a steel tank at sale of B. A. takes it to get it filled with gasoline. Standard oil claims the tank as property of Standard Oil Company, and takes it. Can A. recover money, and how?—J. N.

The title of the seller failing, the buyer may recover the price paid, because the law implies a warranty that the seller has title.-Rood.

PAYMENT OF DUES.

Has the treasurer in a farmers' insurance company the right to keep up the dues of its members and expect one to pay them? A. wished to drop out and the treasurer writes, saying she paid his dues and thinks he asked her to do so, if he was slow in paying. R. E. M.

It is merely a question of fact. Debtors are not liable to those who voluntarily pay the debts without request, mistake or accident. Perhaps there is a provision in the policy or by-laws of the society affecting the matter.-Rood.

REMOVAL OF HOUSE.

I sold an old house, with a verbal contract that it be moved at a certain time. The man has paid me in full. I have notified him verbally a number of times to get it off my property, but he has failed to do so Does he surrender his claim to it? What can be done about it?—W. A. R.

The purchaser could not remove the house unless the same is removed within a reasonable time, and failure to remove would amount to an abandonment of his property. Seller may remove the house, if he desires, after notice to the purchaser to do so .-Rood.

TAX EXEMPTION.

I am a Spanish war veteran, and recently purchased a home piece of new land. Am I exempt from taxes on the same?—H. C. E.

Cut-over lands, no part of which have ever been farmed, are exempt from taxation for five years, to the extent of eighty acres, if the purchaser makes his home on the lands, improves at least two acres each year, and claims exemption at the time of assessment from the supervisor (Comp. Laws 1915 Sec. 4192). Veterans of the Spanish-American war who served not less than three months, are entitled to exemption to the extent of \$1,000, on property used as home.-Rood.

COST OF CUTTING ROADSIDE WEEDS.

You say: "By Public Acts 1919, No. 83, it is the duty of the highway commissioner and the overseers of highways to cut all brush in the highway every year." Is the cost of cutting done in front of a farmer's land collected from the farmer, either directly or added to his tax.—C. B. either directly

The cost is part of the general expense of maintaining the roads, and is spread on the town at large.-Rood.

INCREASING INTEREST CHARGES.

If A. owes B. for a couple of years, Public Acts of 1883, No. 122, being has A a right to charge five per cent camp. Laws 1915 Sec. 7350-7552, pro- a month interest on it?—B. M.

The creditor cannot alter the interest rate after the contract is made. In of the county where the animals shall case of default the debt draws the be, in a book to be kept by the county agreed interest only unless that be clerk for that purpose, and the altera- usurious, in which case there is no

A Premium Egg Trade

How it Can be Built Up By R. G. Kirby

derstanding among egg producers concerning the opportunities of selling strictly fresh eggs direct to the consumer at a premium. Most of the producers wait until spring because they have no marketing troubles at other seasons. When fresh eggs are plentiful on the market and prices are low, they attempt to reach the consumers who will pay a premium for eggs. They forget that these buyers do not worry about fresh eggs as much from January first to August first, as they do from August first to January

Buyers Favor Steady Supply.

Other producers have heard that the notel and restaurant trade is a good outlet for high quality eggs. Of course, they expect a nice premium for a fine product. Then they expect to develop that market in the spring when the buyers are supplied by producers who can furnish them with quality eggs when eggs were scarce. Naturally, the buyer who needs eggs will favor the producers who can furnish fresh eggs during the fall and winter.

The only remedy is to hatch early and develop a line of customers during the fall, when those buyers are anxious to obtain strictly fresh eggs. Then they find out the quality of your product and you can hold their business, often at a satisfactory premium, when eggs are plentiful in the spring, and

low in price.

The Hotel Trade.

Selling fresh eggs to the hotel trade is not as easy as it looks. Such an institution requires a fairly uniformsupply of eggs throughout the year. Many producers do not realize the extensive requirements of one modern hotel. An egg producer with sixty dozen eggs per week during the spring, thinks it would be fine to furnish a hotel with all the eggs it needs. The hotel manager may realize that such a producer is only good for spring eggs and would rather buy of a commission man who receives eggs from many farms, and can always supply the hotel needs at a moment's notice. Egg production on many farms is so variable that it is difficult for one producer to supply the eggs needed by a hotel throughout the year. Certainly the poorest time to develop such a trade is in the spring, when the hotel is having no trouble in obtaining plenty

POULTRY POWDER FOR BREEDING.

A few days ago I received a letter which tells the discouraging experience of an egg producer. It was written on January 19 and says, "Can you suggest any way to find a market for my eggs? I do not keep any males at all, never offer a dirty, stained or washed egg for sale, gather them about three times a day, take the best of care of them, and sell them at the grocery for thirty cents per dozen."

Common Experiences.

The above experience has been duplicated hundreds of times by egg producers during the past few weeks. The marketing problems have been most difficult near the small towns where it is hard to build up a market direct it is hard to build up a market direct to the consumer. When the city prices turkey eggs and duck eggs in an inare low throughout the big market cubator —Mrs. L. S. centers, the grocers and buyers in distant communities cannot pay very profitable prices for eggs. The high-class grocery stores in the cities are not going to buy eggs at a premium from new producers when they already have contracts with producers who have been supplying them with eggs during periods of scarcity in the fall and early cessfully in incubators, and most inwinter. Often the producers with such cuabtor manufacturers furnish special contracts have a problem to profitably instructions for the hatching of duck dispose of their surplus spring produc-

Selling eggs direct to private customers for home use, depends on location. in Van Buren county.

HERE seems to be much misun- Poultrymen near large cities have less marketing worries than the producers near the small towns. A large part of the best customers are picked up in the fall and winter when they cannot obtain fresh eggs easily from the city stores. Then they are willing to drive out and buy fresh laid eggs and pay store prices or more. If the eggs give satisfaction, many of them become regular customers and continue to buy in the spring. This gives the producer a chance to obtain ten or fifteen cents premium on spring eggs to pay for the trouble of grading, boxing and making the sales. It means that somebody must be on hand to make sales at all times. Buyers do not like to drive out for fresh eggs and find that the whole family has gone to a movie. One questionable egg might ruin the reputation built up over many years of careful

Troubles of Direct Selling.

Selling eggs direct to the consumer, soon teaches the producer some of the troubles of the city dealer. Your old established customers buy regularly, do not kick on prices, and are thankful for fine quality eggs. New customers are the most apt to try and buy in small quantities at the lowest wholesale price. Such sales cannot be made. If there is no profit in the private sales, it is better to sell all the eggs at wholesale prices and save time in doing business

A brand name printed on the eartons is a help in selling eggs direct. Such boxes can be purchased in large quantities for a little more than one cent each. They make neat packages and can be boxed in advance to speed up the sales. Egg buyers are often in a hurry, and are most apt to stop where the buyer can quickly hand out their order, make change and speed them on their way.

It seems as if the bulk of the spring production of eggs on many farms cannot bring more than the wholesale market prices. If it were not for the purchases for storage, it would be still more difficult to turn spring eggs into money. Now is a good time to hatch early in order to produce eggs when they are scarce next fall. But now is a very difficult time to start in building up a private trade at a premium

STOCK.

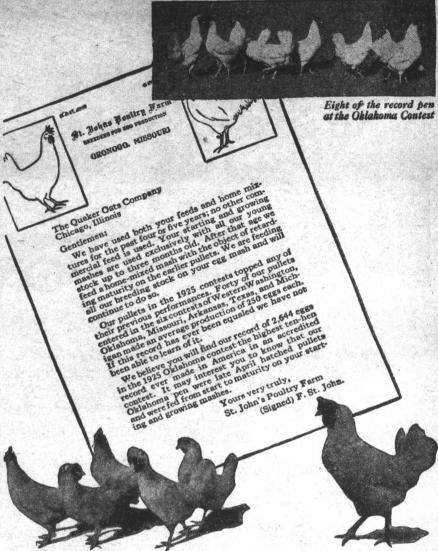
When reeding poultry powder are the eggs good for hatching?—E. M. S. The use of a poultry powder or tonic will probably have little relation to the hatchability of the eggs produc-If a flock has been heavily forced for egg production during the fall and winter, it is apt to reduce the vigor of the chicks. If breeding stock have a well ventilated house and plenty of hard grain, mash and green feed, they will be apt to lay a good per cent of fertile eggs, whether poultry powder is used or omitted from the ration

TURKEY AND DUCK EGGS.

Turkey eggs are seldom hatched artificially, although it can be done. Because of the value of the eggs it is considered safest to divide up the eggs and set them, either under hens or the mother turkeys. This divides up the risk.

Duck eggs can be hatched very suceggs with their machines.

TB. clean-up work has been started



A typical St. John's Bird

Record Breakers raised on Ful. O.PE

"From start to maturity on Ful-O-Pep Mashes," says Mr. St. John of his ten-hen pen which won the Oklahoma championship with a record production of 2,644 eggs.

Isn't that proof that Ful-O-Pep Chick Starter and Ful-O-Pep Growing Mash give birds a vigorous, profitable start in life?

Just look over this record of St. John's flocks for 1925:

western wasnington	. 0	pui	leta	45%		1,330	CRE
Oklahoma, 10 pullets		7				2,644	46
Missouri, 5 pullets						1,218	46
Arkansas, 5 pullets	10					1,253	- 66
Texas, 5 pullets .						1,221	46
Michigan, 10 pullets						2,297	. 66
Total production	0	001	0000	lavor	one '	249 31/40	1

LOT-O-DED

These records were made possible by the excellent health, laying capacity and vigor of

these Ful-O-Pep raised birds.

Remember that Ful-O-Pep Chick Starter and Ful-O-Pep Growing Mash always have been wonderfully efficient mashes.

And, now they are better feeds than ever before because there has been add- coupon now.

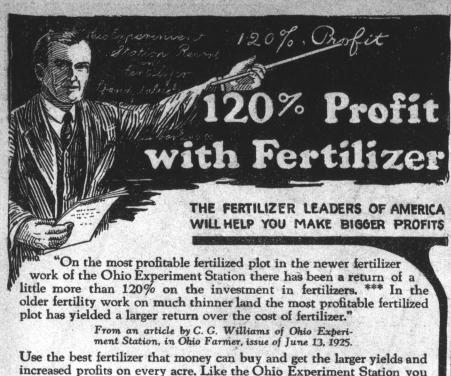
ed to them Cod Liver Meal! The meal has properties that enable chicks to reach maturity

sound of frame, well-feathered, husky and ready for work or market.

Some good dealer near you sells the Ful-O-Pep line of feeds. He can supply you. Write for the new Ful-O-Pep poultry book. Tear off and mail the

The Quaker Oals Company CHICAGO, U. S. A.

THE QUAKER OA Please send new p Meal and how to fe	TS COMPANY oultry book with sed them.	, 35 Railway la full informati	exchange Build on on Ful-O-F	ling, Chicago, U	h Cod Live
Name		-			
Address					
Dealer's Name			2		



increased profits on every acre. Like the Ohio Experiment Station you can make big profits on fertilizer. Buy your fertilizer from "THE FER-TILIZER LEADERS OF AMERICA" who have had forty years' experience in preparing the right plant food for every crop. In their fertilizer you get-

Readily Available Phosphorus— The crop making material

Nitrogen (or Ammonia)

From many sources so blended that the plant may feed on it, as needed from seed time to harvest

Soluble Organic Potash

From high grade imported potash and ground tobacco stems

"THE FERTILIZER LEADERS OF AMERICA" have followed the recommendations of your Experiment Station in making their fertilizer. They have produced the fertilizer that starts the crop off rapidly in the spring and carries it along to early and profitable maturity. Get their fertilizer from your dealer or write direct for information.











STRONG FOR RADIO

AM in receipt of a letter from one of your subscribers asking me to state my views as regards the practical value of the radio in the farm home.

I believe that I can state my position as briefly and forcibly as in any way, by saying that we have had a good home electric plant for ten years, and our radio for five years. If I had no electric lights or service other than lights, and no radio, and money enough for but one, I should not hesitate an instant, but would have the radio.-A. B. Cook, Master of Michigan State

WHY A RADIO?

WHAT would I do without a radio?" It is the life of our home. It is in our library, with a big easy chair on one side, and a davenport on the other side.

When I am very tired and wish to rest, I lie on the couch and the wonderful music from the radio soothes my tired nerves. If I have mending to do, I sit in the big easy chair. When father wishes to know what the weather will be, so he can go to market, I just listen in. I also find out the market prices when he wishes to know them. Life would be quite lonesome without our radio.—Mrs. E. H. Seeley.

WE DO LIMING NOW.

THE farmer who has more help than he can employ in the winter, and too little to carry on summer operations, will find it advantageous to get lime on the fields during cold weather. This has worked out well with us.

By doing the work at this time, we get the lime on the field so that we can get in the legume crops in good We even put lime on the wheat field where we plan to sow clover seed in April. Corn land that is going into oats or barley, and which will be prepared without plowing, are limed. We seed these fields to legumes of some kind. This liming is done in the winter, and the discing and harrowing gets the lime well mixed with the soil. It also gives the material time to dissolve a little to be ready when the legume plants are in need of United States. the lime. The practice works fine, too, where the ground has been fall-plowed.

While necessary, liming is a big job on farms that are in need of large quantities, like ours. We therefore feel we are wise in getting the work adapted to our annual program, so that it will be done before the spring work is upon us.—D. D. Peterson.

PROPER CHOKING.

THE choke is an important and necessary device, but one that is much abused. The use of the choke is seldom necessary for more than a few seconds, even in the coldest weather. The necessity to use it for more than a few seconds indicates that the carburetor needs adjusting. When one drives with the choke out, it means the collection of carbon. Carbon will not accumulate as quickly in an engine if the choke is used properly

RIM.

rim. Place them in this position on tary-treasurer

the inside of the rim at right angles to the lock. Then work the jack slowly until the rim spreads sufficiently to bring the lock into position. The jack and block may be left in position until the rim is locked.

FINDS CHECKING ACCOUNT VERY CONVENIENT.

THE reason that I have a checking account at the bank is, that I believe it to be the safest way to handle money. A check is just as good as the money, and any business man would just as soon take a personal check as the cash. I feel much safer with a check book in my pocket when I have bills to pay, or any business to do that demands the cash. By using checks instead of the cash, if you don't get a receipt for the payment of any bill, or of whatever purchase you have made, that check answers the place of a receipt. To my way of thinking, whether a person has a large or small amount of money, the most safe and sane way to handle it is by having a bank account.-Chas. Kilgore.

MOUNTING SWITCHES.

WHEN mounting a knife switch always place it so that the handle moves upwards to close the switch, and so that gravity tends to open it. If reversed, gravity will tend to close the switch when the hinges become

A SMALL PARTS TRAY.

AN old battery jar may easily be made into a useful small parts tray for holding nuts, cotter pins, washers, screws, etc. Saw off the bottom of the jar about two or three inches from the bottom, to form the main bottom of the tray. Use the upper portion of the jar for making the compartments.

300,000,000 HORSE POWER.

T is estimated that the motor-driven vehicles in the United States have power equal to that of more than three hundred million horses. It might be added that there are less than thirty million horses and mules in the

ONE CAUSE OF SKIDDING.

CAR will often skid, even with A chains, and the driver wonders why. A brake out of adjustment, not taking evenly on both wheels, is often the cause.

Hood Squeaks.—If the joint formed by the hood and body cowl is lubricated from time to time with grease, it will prevent hood squeaks.

Silas Fuller says: It's kinda tantalizin' not to be able to start a car when yer in a hurry to go some place, but it's a derned sight better than to be unable to stop it.

A movement is on foot among poultry interests of the state looking toward the erection of a poultry building at the Michigan State College for better meeting the many important prob-TO CLOSE AN OBSTINATE SPLIT lems arising with the development of this branch of farming.

S OMETIMES a split rim will be Dexter Brigham, of Decatur, one of sprung and the motorist finds it the largest producers of onions and very difficult to spring the rim back onion seeds in the United States, was into place for locking, after the tire elected president of the Muck Growrepair has been made. Here is an ers' Association at the recent annual easy method. Take the jack and a meeting. J. E. Crosby, of St. Louis, block of wood, which, when placed end is vice-president, and Prof. Paul. M. to end, will equal the diameter of the Harmer, of East Lansing, is the secre-

The grape situation is dominated now by the tremendous production in California. It is generally agreed that new plantings should not be undertaken in Michigan or other eastern states at the present time.

The ninety-six canners of Michigan produced \$20,000,000 worth of canned goods last year, which indicates that the canners are great factors in marketing farmers' products.

The Coopersville Cooperative Elevator Company showed a gain of \$29,237 in business this year over the previous

The TB. clean-up work in Ottawa county is purging the herds in the county of affected cattle.

At the request of L. Whitney Watkins, state agricultural commissioner, the state administrative board is setting aside a nominal sum for advertising Michigan cattle and dairy products.

Justin C. Cash, Michigan State College graduate, has been appointed county agricultural agent for Manistee county. He assumes the position left vacant by the resignation of Harold Vaughn.

The Oceana Canning Company, of Shelby, sold its entire pack of strawberries two days after the future prices were announced. This indicates a good demand for Michigan packed goods.

According to 1925 census, Michigan has 1,416,535 cattle. Of these, 807,800 are dairy cows and heifers two years old and over, and 72,042 are beef cows and heifers of similar age.



Farm Boys Delight to Play Volley Ball.

FOREST FLYER IN CLOVERLAND.

THE following is the tentative program of the "Forest Fire Fighting Flyer" in the Upper Peninsula. The train starts March 16 at Rudyard.

Soo Line: - March 16, Rudyard; March 16, Engadine; March 17, Manistique; March 17, Cooks; March 18, Rapid River; March 18, Gladstone.

Chicago & Northwestern: - March 19, Rock; March 19, McFarland; March 20, Escanaba; March 20, Schaffer; March 22, Foster City; March 23, Nadeau; March 23, Stephenson; March 24, Hermansville; March 24, Iron Mountain; March 29, Iron River; March 29, Watersmeet; March 30, Marenisce; March 30, Bessemer.

Chicago, Milwaukee & St. Paul:-March 25, Channing; March 25, Crystal Falls; March 26, Amasa; March 26, Sidnaw; March 27, Mass; March 27, Ontonagon.

Duluth, South Shore & Atlantic:-March 15, Trout Lake; March 15, Moran; March 31, Ironwood; March 31, Thomaston; April 1, Bergland; April 1, Bruce Crossing; April 2, Trout Creek; April 2, Covington; April 3, L'Anse; April 3, Houghton; April 5, Chassell; April 5, Alston; April 6, Michigamme; April 6, Republic; April 7, Ishpeming; April 7, Marquette; April 10, Shingleton; April 10, Seney; April 12, McMillan; April 12, Newberry; April 13, Strongs; April 13, Brimley; April 14, Soo.

Lake Superior & Ishpeming:-April 8, Skandia; April 8, Gwinn; April 9, Chatham; April 9, Munising.

E One



This Name on the Orange Label Tells You the Wear is There!

In building footwear, as in building tires, Firestone goes beyond ordinary practice. That's why farmers everywhere are demanding Firestone Footwear.

Firestone Boots are of special construction, the parts cured and welded together under pressure in live steam. They stay water-proof throughout a .

long life of hard farm service.

They are comfortable, too -as well as sturdy, smooth finished inside, with all parts stoutly reinforced at the points of strain. You get wear

as well as protection in boots bearing this trustworthy name.

The Orange Label is your protection.



Firestone-Apsley Rubber Company

HUDSON, MASS. Chicago, Ill.

Boston, Mass.

AMERICANS SHOULD PRODUCE THEIR OWN RUBBER . . .

THE MILD MELLOW CHEW

Lime and Fertilizer Spreader

Soil Tested-free

What about your soil?-your crops?
Are they hig and sturdy as they should be? Find out today with our free Limms Test Papers—positive sour soil test recommended by all soil experts. Write for them now. THE HOLDEN CO., Inc Dept 416 Peoria Illinois

crops. Guaranteed to handle lime in any form, fertilizer, phosphate, gypsum, wood ashes or crushed shells.

Cannot Cleg. Try Spreader 10 days Free.
The Holden Lime and Fertilizer Spreader will make your soil healthy and productive. Spreads twice as far as any other; 20 ft. Attaches to any wagon or truck.
No holes to bore. Spreads evenly 100 to 10,000
tbs. per acre Handle material only once, from car to field. Get literature and low prices now and ask about 10 Day Free Trial. SPREADS 20 FEET



selling good seeds to satisfied customers. Prices below all others. Extra lot free in all orders I fill. Big free catalogue has over 700 pictures of vegetables and flow your and neighbors' addresses.

R. H. SHUMWAY. Rockford, III

SENSATION. tion 75 Bushels and upward per acre are frequent with large white meaty grains weighing 44.46 lbs per measured bushel of the highest quality. Seed furnished as low as 65c per bushel in quantities. You should by all means try these costs. Send for sample and circular, Theo. Burt & Sons, Box 175 Melrose, O To make more profit with field crops on muck soils

> If your oats and other small grains tend to lodge . remove the

If your corn plants are dwarfed or produce mostly nubbins . remove

Corn planted in an old pas-ture on a Michigan Demon-stration Farm, May 20, with manure only, yielded 56.2 bushels only.

On an adjoining field, a top dressing of potash costing \$7.50 was applied 7 weeks later. The yield increased to 92.9 bushels per acre—36.7 bushels more. Potash Pays!

Top dressing often pays but it is generally better practice to apply the fertilizer at time of planting. The Michigan Ex-periment Station recommends the following for good yields on muck soils:

0-12-12 0-8-24 0-8-32 2-8-16 3-8-24 0-1-50

For more specific crop recommendations, and the rates of application, we suggest that you obtain a copy of Special Builletin 136 published by the above Station.



录》行"打" 毫

Release more profit!

CORN, oats, wheat, rye, barley, hay and other field crops have responded well . . and returned good profit on muck soils . . when the right fertilizers were applied.

By making a slight change in your fertilizer you may be able to release more profit from your muck soil . . just as many other growers

Pay special attention to the fertility of your soil now! If your muck land is low lime peat—which some growers call "acid" or "sour"—it will yield bigger returns if phosphoric acid, potash, and lime are applied.

But if your soil is high lime peat—sometimes called "non-acid" or "sweet"—it is probably lacking in potash alone and the application of potash may be all that is required for good yields. On this type of soil, some growers use phosphoric acid as well as potash.

Lodging of small grains and chaffy, starchy corn seldom occur when potash is readily available. Check up your fertilizer now . . a slight change may make a big difference in your profit.

FREE. Our Soil and Crop Service has prepared a book-let called "Muck Lands". If you would like to receive a copy, just write to the address below.

POTASH IMPORTING CORPORATION OF AMERICA 10 Bridge Street Dept, L-11 New York, N.Y.
SAN JOSE, CAL.
BALT. BALTIMORE

Sales Agents, H. J. Baker & Bro., 81 Fulton St., New York West of Rockies, Meyer, Wilson & Co., San Francisco, Cal.



SHIP YOUR LIVE POULTRY DRESSED POULTRY DRESSED CALVES DRESSED HOGS ROASTING PIGS TAME RABBITS

BEEF DETROIT DETROIT, MICH.

36 years in the commission business in the same location and under the same management. \$250,000.00 capital and surplus. Prompt returns. Write for free shippers guide.

Advertising that Pays

RY a Michigan Farmer Classified Ad. to sell your surplus poultry, or to get that extra help. They bring results with little cost, see rates on page 381 of this issue.

The Michigan Farmer, Detroit, Mich.

Freedfrom Rupture

By a New Invention

Test It Free A new invention, so small that it cannot be detected beneath the closest fitting clothes, has been perfected; it retains rupture safely and with comfort and heals the rupture.

rupture.

Dancers, athletes, sportsmen, society women and people who do hard, tring work have been healed in this way. It is so comfortable that regardless of the position you assume, it does not hamper the body/movement.

Constructed of sanitary, non-irritating materials and assures absolute freedom from skin irritations. Send for Free Trial Offer, sent in plain, sealed envelope. Brooks Appliance Co., 323-B, State St., Marshall, Mich.

THE CENTAUR TRACTOR



Makes Farm Work Quicker, Easier and More Profitable

HERE is a dependable, low-cost tractor that takes the drudgery out of darming and enables you to do twice as much work in a day's time. The CENTAUR is a different tractor—more flexible than any other—better fitted for all 'round use on the farm—less expensive to buy and operate—and above all, trouble-proof. This sturdy tractor will cut your planting and cultivating costs to the minimum and give you an inexpensive power unit for dozens of other jobs.

Plows 7" Deep—Backs on Own Power
The CENTAUR is a riding tractor for all jobs.
Does plowing, harrowing, discing, seeding, cultivating, hauling, feed grinding and all other belt and draw bar work. Low cost. Pully guaranteed, cet the facts about this money-making, worksaving tractor at once. Write today.

THE CENTRAL TRACTOR COMPANY

Some Long-Time Farmers

Eighty Years Old and Older

OTICING your article in the issue of February 27, asking "Who is the oldest farmer," I send you these facts. My father-in-law, Alonz Borden, was born on Section 24, T. I. N., R-6E, Green Oak, Livingston county territory of Michigan, November 13, 1836. After learning and working at the blacksmith trade and wagon making, in the spring of 1863, he returned to the farm and has owned and done much of the work himself until the fall of 1924.

Last summer, 1925, he was able to do but little, although he still owns and lives on the farm.-Robert War-

EIGHTY-FIVE AND STILL ACTIVE.

I NOTE that you are desirous to learn the name of the man who has been a farmer in Michigan for the longest term of years, and though I do not expect to be entitled to that honor, I deem it proper, and of some little interest, to tell you that I was born in Troy, Oakland county, twenty inform you that I have farmed for sev-

BEFORE MICHIGAN WAS A STATE. since 1867, the year he married. I am counting the years of farming, but he also worked on the farm when he was. a boy, as his father was crippled. Mr. John Woychowski is around eighty-two years old, and lives in Paris township, Huron county, Michigan. Should the years count from the time he is working on a farm, it would be still more years of farming .- A. M. S.

OVER EIGHTY-SPLIT WOOD THIS WINTER.

WAS born in Fabins township, September 21, 1844. I have lived and worked on a farm all my life in St. Joseph county, Michigan, and still work from five o'clock a. m., until six p. m. I milk three cows; split my own wood. In the summer time I help out by driving a team, disking and plowing. In fact, I have split forty cords of wood this winter.-D. L. Arney.

SEVENTY YEARS OF FARMING.

N answer to your contest in the Michigan Farmer, I would like to

Oldest Farmer Contest

THIS contest, which was announced February 27, has brought in a fine response. Several of the replies are being used in these columns. They will undoubtedly stimulate the sending in of records of other long-time farmers. It matters not whether one has farmed as owner or tenant, or both; the object of this contest being to determine who has farmed continuously in this state for the longest time. A prize of five dollars will be given the one who establishes that record. The farmer himself or others, may send in reports.. The contest will be held open until April 3. Address your letter to Farm Contest Editor, Michigan Farmer, Detroit, Michigan.

miles north of Detroit, on Christmas enty years continuously on section 25, Day, in eighteen hundred and forty. I lived there for twenty-seven years, then came to my present home in Clinton county, with excellent neighbors, and all my life has been given to farming the fruitful soil of Michigan. Now, at the age of eighty-five years, I enjoy doing light farm work and caring for the domestic animals. On two separate days of last summer, I drove my horses to the field; one-half mile distant, and harrowed the field of seven acres, following the harrow, on foot, and completed the job at one hour before noon, proving thereby that farm life and temperate living are essential to vigorous old age.-J. T. Daniells.

A PIONEER FARMER.

SEE in the Michigan Farmer a little article, "Who is the oldest farmand I would like to tell you about my father, B. J. Powell, of Forest Home township, Antrim county, Mich. When a very young man he took up a homestead in the wilderness of northern Michigan, built a little log cabin, and in due time brought his young bride to the lonely cabin, which did not have so much as a path past it, and where, for some time, bears, deer, and wolves could be seen right from the door. Mr. Powell has always been a real dirt farmer, and has always lived on his homestead farm. Now, at the age of eighty-one years, he is still very active, and just as much interested in igan Farmer every week. One of the main highways now goes right past his

He has raised a family of five children, and all are interested in farming and live on farms.-Mrs. F. L. C.

A LIFE TIME OF FARMING.

AM sending you the name of a farmer whom I think farmed the longest in the state. He is John Woychowski, who has farmed the same place for fifty-nine years, and is still farming it. He has owned the farm air at noon every day except Sunday.

Holland township, Ottawa county, Michigan, and always on the same farm. I was ten years old when I came here, and pitched right in, and at the age of twenty bought the farm of my father. I celebrated my eightieth birthday last September, so have done farm work for the last seventy years. I am still healthy, and quite strong.—Bouke Mulder.

PLOWED WITH OXEN.

SAW on page ten of the paper, the inquiry of "Who is the oldest farm-Our nearest neighbor is William A. Caray, age eighty-six years, and he told us he began with a yoke of oxen hitched to a plow when he was ten years old, on the farm in Charleston township, where his son lives at the present time.

Mr. Caray has lived on a farm continuously, and farmed about seventysix years.

I wonder if there are any older farmers in Michigan.-Eleanor C. Book.

RADIO PROGRAM FROM WKAR.

THE following program will be broadcast through Station WKAR, of the Michigan State College, next

March 15.-7:00-7:15 p. m., bedtime stories; 7:15-8:00 p. m., farm radio

March 16.-7:00-7:15 p. m., nature study series; 7:15-8:00 p. m., farm radio school.

March 17.-7:00-7:15 p. m., nature study series; 7:15-8:00 p. m., farm radio school; 8:00-9:00 p. m., musical

March 18.-7:00-7:15 p. m., nature study series; 7:15-8:00 p. m., farm radio school.

March 19.-7:00-7:15 p. m., nature study series; 7:15-8:00 p. m., farm radio school; 8:00-9:00 p. m., state department program.

The weather forecast is put on the

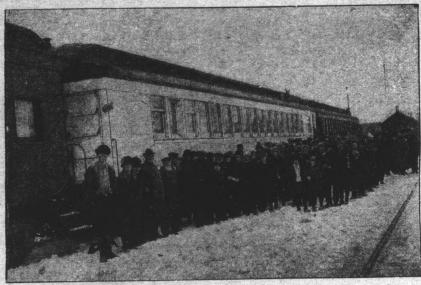
Forest Train Very Popular

Big Crowds See Exhibits and Hear Lecturers

Michigan Central Railroad, and in- area. its sixty-day tour, the Forest Fire tendance at the first fourteen stops. Fighting Flyer carried its message di-

N completing its itinerary on the generation, living in the forest fire

cidentally, the first twelve days of The following is the record of at-West Branch, 1,214; Sterling, 413;



A Portion of the Crowd that Met the Forest Train at Gaylord.

Northern Michigan. Traveling from ger, 234; Standish 538; Roscommon, Bay City to Cheboygan, this demon- 400; Lewiston, 197; Grayling, 973; stration train was greeted enthusiasti- Frederic, 503; Gaylord, 1,507; Vandercally by large crowds of people at ev- bilt, 410; Wolverine, 168; Cheboygan, ery station. "Keep Michigan Green," 1,260, making a total of 10,588. is the slogan of the train. Cooperation with the railroads are the Michigan State College, the United States Forest Service, the State Conservation Department, and the Northeastern Michigan Development Bureau.

One car was completely equipped from top to bottom with exhibits, charts, models, maps, etc., all of them relating to forest fire prevention, reforestation and land-clearing. Motion pictures and lectures were used to supplement the exhibits, a special lecturecar being provided for that purpose. The whole project represented a "call to arms" against the "red enemy" which is destroying its recreational assets, and its future prosperity by preventing the re-forestation process. Eighty-five per cent of our re-forestation work is accomplished by keeping out fires. All of it is undone if we permit the fires to continue on their rampage. Ninety-nine per cent of the fires are caused by human carelessness. Indifference to the effects of brush fires is a very significant part in this territory. With a timber famine only twenty-five years off, it be-hooves us to give serious thought to our reforestation problems, and to take drastic action against our greatest enemy. Thus Mr. R. G. Schreck, Forest Supervisor, U. S. Forest Service, sums up the message which has reached thousands of people in the northern part of the state.

Besides Mr. R. G. Schreck, the following men accompanied the train: Messrs. L. F. Livingston and N. A. Kessler, of the Michigan State College; Messrs. Edgar Cochrun, L. R. Shoenman, or M. Schaaf, of the conservation department, (one alternating with the other), and Mr. E. J. Leenhouts, of the Michigan Central Railroad. Mr. Herman Lunden, of the Conservation Commission, and Mr. T. F. Marston, also accompanied the train from time to time. The train is now operating on the D. &. M. Railroad, and will start in the Upper Peninsula on the fifteenth of March.

An interesting phase of the results ·likely to come from this train is the pledge signed by over one hundred boys and girls in the Roscommon school, whereby they give their active support to the cause of conservation. This pledge is being presented to all the schools in the territory covered, and it is hoped that these schools will soon constitute the local units of a league embracing all of the coming

rectly to over nine thousand people in Gladwin, 1,506; Pinconning, 1,265; Al-

Proved Best! FOR CYEARS

When seed men start talking alfalfa, Grimm is the standard of comparison. That's because for 69 years Grimm has proved best. **Double Protection For Buyers** This year, playabsolutely safe. Sow Blackfoot Brand Idaho Grimm — State Certified, pro-Double duced under closest supervision from sowing Protection to market by the largest and most reliable Grimm Alfalfa Seed Growers' Association. Do not confuse Blackfoot Brand Grimm with "Moonshine" or Grower affidavit Grimm. Unless seed is state certified it is not recognized as genuine by

> When you buy, insist on Blackfoot Brand in sealed bags. All reliable dealers can supply you.

the State Seed Commission of Idaho.

IDAHO GRIMM ALFALFA SEED GROWERS' ASSOCIATION

Mail Coupon to Office Nearest You

House Poultry House.

Please send me your New Jamesway Book. I am inter

ested inBuildingEquippingVenti-

lating of Cow Barn Horse Barn Hog

P. On

R. F. D. State State

BLACKFOOT, IDAHO

Build~Remodel Ventilate or Equip Allog House, Dairy Barn Horse Barn or Poultry House Until You Get Our Free Book BECAUSE Jamesway Costs Less and Saves ostly Mistakes James Manufacturing Company, If you are thinking of building, "We very much appreciate the splenremodeling or ventilating a cow or horse barn, hog or poultry house, or if you are considering the purchase or labor and time saving equipment for such builddered us. The ability you showed to adapt plans to meet results desired, were a revelation to me. Your suggestions saved me considerable money in material and time." did architectural service you have renings, by all means, fill out coupon in this advertisement and let us Island Farms, send you free, our valuable Jamesway book. H. L. Hartley, Mgr. Time Saving, Money Making This book will show you how we can save you a lot of money. Our many years' experience in planning and designing practical, convenient layouts for farm buildings has taught us how to plan buildings to save cost of material and construction-just how every door, window and general arrangement should be to make buildings convenient—in short, we save you regrets and costly mistakes.

This book also tells you all about Jamesway Equipment—Stalls, Stanchions, Drinking Cups, Litter
Carriers, etc., for the cow barn. Troughs, Waterers, etc., for hog houses.
Feeders, Nests, Incubators, Brooders for the poultry house—a complete line of every kind of labor-saving, money-making equipment for any farm building. Jamesway Equipment is better and costs less in the long run.

Mail coupon today-learn all about Jamesway complete service-How the local Jamesway man in your district will give you the benefit of his experience without obligating you. Tell us just what you are interested in — whether building, remodeling, ventilating or equipping cow barn, horse barn, hog or poultry house, and we will send you the book that tells you just what you want to know.

James Manufacturing Company Ft. Atkinson, Wis. Minneapolis, Min Elmira, N. T.

Is Your Money Earning 5% and 6%?

This company's reputation is not merely confined to the limits of Detroit and Michigan-it is known far and wide.

Investors living in 34 states of the Union, and in 10 foreign countries, are placing their money with us. A very large percentage of this money has come to us direct by mail.

When people living in distant states, and whom we have never known before, send us thousands of dollars for investment, you can be certain that some one has told them of the safety of our company, and the benefits they would derive from placing their money with us.

The company is now in its 37th year-long enough to have become established. Why not place a part of your money with this safe old institution, and make it earn 5 per cent and 6 per cent?

Ask for Booklet.

The National Toan & Anuestment Company

1248 Griswold St., Detroit, Mich.

Under State Supervision

Resources \$9,970,000

Established 1889



Reliable Fruit Trees

Fruit Trees, Berry Plants, Shrubbery and Grape Vines. Send for 1926 Catalog today. ALLEN'S NURSERIES & SEED HOUSE, Geneva, O.

hionionionionionionionionioni





Òn

Earns Its Cost in One Season

A hill of corn skipped Hawk always plants here and there—or the hill—it never here and there—or the wrong number of kernels in the hills) may easily cost you more than the price of a planter. Your soil, your fertilizer, your cultivating and harvesting cost just as much for the

short hills as they do for the full hills.

misses. The "Edge Drop" always puts the right number of kernels in each hill.

Black Hawk was the first planter to give the farmer these features and the name "Black Hawk" is still the best guarantee of a full crop.

The good old Black "Good Equipment Makes a Good Farmer Better"

The Ohio Cultivator Company, Bellevue, Ohio

Ohionionionionionionionionioni

Alfalfa in Cloverland

Farmer Are Getting Familiar With This Crop By C. E. Skiver

harvest the variety series. "The sea-College had planted a variety demonstration.

"Look at that. Nothing but hardy Grimm seed for me," he exclaimed, as he pointed to the strips of Grimm across the field. "I could not see much difference between the common strains and the Grimm the first two seasons, but these severe winters'sure thin out the plants of the weaker varieties.

"No, my soil tests about neutral and I have not used lime, except on this check over here. We hauled a couple of loads of refuse lime from the sugar beet factory at Menominee. My alfalfa land will all be limed in the future, for it certainly pays." The thick, vigorous growth on the limed strip spoke for itself.

It was rather surprising to find at Whitney Farms some seventy acres of alfalfa producing in fine shape. Some of these fields are eight years old and show no signs of killing under the hard winter freezing that is characteristic of this section. "Don't this keep you pretty busy at hay-making poor seed-beds to a finish, and we time?" we asked Mr. Harrington, the manager.

'Oh, no, we find we can make a very good quality of hay with the side delivery rake and hay loader. We rake the hay shortly after it is cut, cure it in the windrows to prevent shattering of the leaves, and take it in as we would ordinary hay, without any additional labor costs."

On the annual farm tour through Ontonagon county last August, we met conditions which were somewhat difdifferent. In this section, the heavy types of superior clay soils predominate. These lands are, in most cases, deficient in lime, and it was first thought that long hauls of so bulky a product as agricultural lime would make freight rates prohibitive. Here Noble Clark, county agricultural agent, came to the rescue and procured refuse lime from the Ontonagon Pulp Mills.

The tour made a long stop at the County Farm, where some of this product was being used, and there alfalfa reigned supreme. "What are those piles of lime doing out there, Steve?" asks an interested farmer of Mr. Labyak, the manager. "Oh, we haul this during the winter, or slack times of the year, and pile it on the fields where it can be applied the following spring. That gives it a good chance to dry and break up, making it easier to spread and work into the soil. We spread this material with an ordinary manure spreader and it goes on in fine shape."

"Does the June grass ever run your alfalfa out?"

"No, it does not bother us when we have conditions right to start with. We plan a year ahead for our alfalfa seedbed. We either use a field that grew a cultivated crop, such as sunflowers, corn, or potatoes, or we summer-fallow it to be sure the field is entirely clean to start with. Then we use hardy northern-grown Grimm seed, and the alfalfa will take care of itself pretty well. This field was badly infested with Canadian thistles four years ago, when we seeded it, and I defy you to find a thistle in it today. It is the best remedy for these pests that I know of."

"How many cuttings do you take off each year?"

"We used to cut it three times, but we found that the meadows could eas- tenth of May.

H, yes, my alfalfa is doing fine ily be injured by cutting too late in this year," said Ed Nyberg, of the fall. We like to let the plants have Stephenson, as we drove in to four or five inches top growth to go into winter with. It pays us on our son has been rather dry, but my yields next year's yield, and two cuttings is will be double that on clover mead- all we take. Often times, we find we ows." He then led us to one side can pasture our meadows a little in of the field, where the Farm Crops Ex- the fall, but we always take the cattle tension Department of Michigan State off in time to give a good growth to go into winter with."

"Yes, it drowned out there in that low place," he added as someone called his attention to a vacant hollow in one of his fields. "Alfalfa has to be exceptionally hardy to live under unfavorable drainage conditions, and we always pick the well-drained fields when we can."

In the Chippewa section, where the heavy clays are flat and low, little success has been obtained. A few stands are to be found on some of the higher fields, but here sweet clover seems to be more popular.

The carbide plant at the Soo offers an unlimited supply of waste lime of high value, and nearby farmers are taking advantage of this to get sweet clover started on the timothy-sick soils of that section.

The tireless efforts of these sturdy pioneers of alfalfa production have put the industry on the map of the Upper Peninsula. They have battled such enemies as sour soil, non-hardy seed and should all profit by their experiences. We hate to forsake our good old friend, clover, but we have visions of "Alfalfa-

ANNOUNCE CLUB LEADERS.

C OUNTY champions in Boys' and Girls' Club Work for 1925 have been announced by M. L. Wright, of Marquette, assistant state leader for the Michigan State College. The winners in the different counties are as follows: Alger county, Oivo Mattson; Chippewa, Lewie Mayer; Delta, Albin Olson; Dickinson, Gordon Johnson; Gogebic, Sinto Talo; Iron, Arne Hakala; Marquette, Neil Sihvola; Schoolcraft, Alice King; Ontonagon, Arthur Pitkanen; Houghton, Ruth Manninen; Menominee, Mary Duffrin.

Each county champion receives a scholarship to the Short Course at the Michigan State College. This scholarship is for one year, but, in case certain grades are made, it is extended for another year. In case one of these wins a state championship, a scholarship for a year in the regular course will be offered.

"During the year 4,446 boys and girls were enrolled in club work," said Mr. Wright. "This is approximately one out of every seven rural boys and girls of club age. It is a much higher average than that of the entire state. Sixty-three members won trips to the State Fair in different projects. Fourteen were awarded trips to the International Live Stock Show at Chicago, while three went to the National Dairy Show at Indianapolis."

DAY-OLD CHICKS.

THE records of the poultry demonstration farms in the Upper Peninsula show that in order to get pullets in good shape for early winter laying, the chicks should be hatched by the first part of May. This is very important. Most people in the Upper Peninsula get their chicks too late for making early maturing fall layers. The high prices of eggs is not in January and February any more, but in November and December. Order your baby chicks for early delivery, or plan on hatching your own not later than the



STARTING PLANTS EARLY IN POTS.

AST spring we had splendid success with tomato plants that we started in pots in early March. I have often planted seeds in pans and transplanted to little pots, but this time we each little two-inch pot. I have used but I much prefer the clay pots, and, they are cheaper in the long run. To on the surface, or a green scum clos-I always take a tight box or pan, and fill it with sand almost to the top and set the pots on the top of the sand, or sink them in lightly so they will set with more firmness. I keep the sand department at East Lansing. At prespretty wet, and have never had any the surface watering that causes these troubles. When the pots are filled with roots, if they cannot be set outside yet, they should be transplanted to larger pots to prevent checking them.

PLANNING THE GARDEN.

BELIEVE it is a general practice on farms to set aside a liberal garden patch and then plant it to all kinds of vegetables after the usual routine, rather than plan what is really needed and desirable. The ground planted to garden is not the most of the garden cost-labor of taking care of it is far more important. To grow things we never use is labor wasted. To grow more than we want of some things, and less of others, is bad management. Why not take all these things into consideration and then plant what will give us the most real value? I have actually seen long rows of rhubarb grown in gardens, and perhaps a stalk or two from half the clumps would be the limit of use. Just last year I saw a row of peas ripen and drop down without a single mess being gathered from them. I have often seen double as many beans grown at the main cropping season as would be used, but no succession provided for. Planting fewer and oftener would be much better. I saw a row of chard the whole length of a garden, and five or six bunches would have furnished all that was used. The whole row was hoed and taken care of by hand work and then removed to the rubbish pile the same way. A row of mustard was a close second to the chard. I have seen rows of hot peppers growingwhat for no one ever knew. One good plant would furnish enough for any family. Where we plan what we will need of each vegetable, and when to plant for succession, and stick to our plans, we have a garden that keeps vegetables for the table the whole summer, and furnishes a canning supply with a minimum waste of effort -L. C.

APPLE VARIETY SITUATION.

(Conitnued from page 347):

ought to be eliminated. We will know bearing in the next ten years, and whether there is any danger of overprepare a balanced program taking into account proposed new plantings, topworking or elimination of old varieties in sections of the state where certain varieties have proven unprofitable. know who they are talking to, and of fruit producers when they have a results?"

problem solved or one to solve. When they want to reach the cherry producers of the state relative to leaf spot or cherry work, or other disease, they will have a list of cherry producers right before them.

Orchard Survey Will Help.

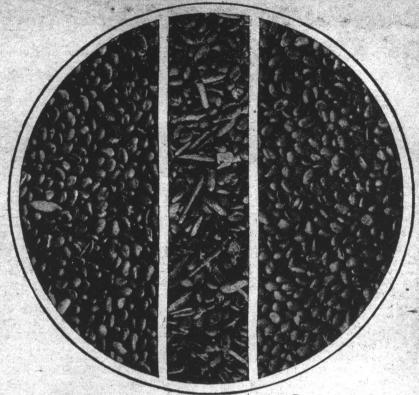
Beyond this an orchard survey, as planted a half dozen tomato seeds in suggested above, will make the horticultural department's work many times paper pots for growing these plants, more effective than is now possible. A new horticultural building has just as they last for years if taken care of, been completed at East Lansing at a cost of \$400,000 for building and equipprevent drying out, or crust forming ment. It is estimated that there are approximately 16,000 fruit growers in ing the surface so air cannot penetrate the state. I believe it safe to say that not more than ten per cent, or 1,600, of these growers are in touch with the college, or receiving any direct benefit from the activities of the horticultural ent there are about 800 fruit growers trouble with the little plants, as it is in the Michigan State Horticultural Society, and these, of course, are keeping posted as to progress and scientific development through various meetings of the society, in which the college horticultural department officials take a large part, and where most of the work of the department is outlined for the benefit of the fruit growers. However, the 15,000 growers who stay at home are not reached, nor are they directly advised of what the college is doing for them.

Creating Interest a Problem.

Thus, it is hardly to be expected that we can lift this industry to a higher plane, or more rapid progress when less than ten per cent of the industry are being informed of improved methods designed to influence their progress. The orchard survey we have suggested will put the horticultural department in direct contact with every fruit grower in the state, put his name on the department's mailing list for specific data affecting his particular branch of the industry, whether it be apples, peaches, pears, grapes, or small fruits, and put him in position to take immediate advantage of accurate and scientific data designed to make him a more competent producer in his chosen line. It will increase and improve the effectiveness of the horticultural department's work and add to its prestige among fruit growers hundred-fold.

Need Facts and Figures.

The most important result of this orchard survey, however, will be that, when all the facts and figures are compiled and tabulated, we will have a complete and clear-cut picture of the fruit industry in this state visualizing accurately what varieties of all fruits are being produced, where they are being produced, indicating what we may expect in the way of production from new plantings in the next ten years, and also indicating clearly where we must add to plantings, and where we must eliminate unprofitable or ill-timed production in order to bring the whole program to a scientific well-balanced schedule that will meet the market requirements of the future. not only to growers, marketing organnorth of Grand Rapids, and how many izations, and the college, but to can ners and nurserymen as well. Before how many Jonathans are coming into we can outline any well founded plan for advancement of horticultural interests in Michigan, we must undertake production in this variety. We can that orchard survey. Its necessity is fundamental unless we are satisfied to go along in the old haphazard, horsetrading rut we have been following for twenty-five years, while other progressive districts are pushing us out of The horticultural department will our rightful market. The question is, "How long are you going to be satiswhere to go to reach any particular set fied with horse trading practices and



Discovering Hidden Dangers

F you had the time, and the patience, to sit down and pick out of a bag of ordinary cleaned Clover seed all the undesirable matter it might still contain, how long would it take you and what would you find?

Take the left-hand section of the circle above, for example. It shows a magnified sample of White Blossom Sweet Clover seed cleaned by ordinary Even under the microscope, it looks fit for anyone to sow.

At the right is this seed after it had been re-cleaned. The strip between shows what was taken out by the re-cleaning process. The microscope reveals, besides inert matter and seeds of comparatively harmless Red Clover, Alsike and Yellow Trefoil, the following dangerous weeds: Curled Dock, Quack Grass, Buckhorn and Dragonhead.

The farmer who sows home cleaned seed never sees these until they show up in his fields. Only special re-cleaning with special machinery discovers them in the seed and digs them out before the harm is done.

FREE-How You Can Avoid These Dangers Ask your nearest "Pine Tree" dealer for a free copy of "The Harvest In

The Bag," a valuable book of plain facts about seed buying and seed testing with pictures that show what to look for and what to avoid in seeds. No matter where you buy your seeds, it will help you get the best. Worth dollars and cents to every farmer. If your dealer doesn't have it, write

The Albert Dickinson Company CHICAGO, ILL.

Minneapolis Pittsburgh DICKINSON'S Sign Good



Double your cultivating capacity

Successful farmers today cut growing costs by increasing the capacity of their equipment per man. The Planet Jr. No. 72 Twoman. The Planet Jr. No. 72 Two-Row Riding Cultivator enables one man to cultivate two rows of corn, potatoes, beans, etc. at one passage. It takes a variety of showels, sweeps and teeth for hilling, els, sweeps and teeth for hilling, hoeing, covering, weeding, furrowing, and with Planet Jr. alfalfa teeth is a splendid tool for renovating alfalfa. So light draft, a single team pulls it comparatively easily and rapidly, more than doubling the work of two men with walking cultivators.

This famous implement makes This famous implement makes

any "good farmer a better farm-er." Full details on pages 51-54 of Planet Jr. catalog—free on request.

S. L. Allen & Co., Inc.

For 54 Years Largest Manufacturers of Specialized Field and Garden Implements in the World Dept. 58,

5th and Glenwood Ave...



Does the Work of 10 Men!



Saws Wood Fast

This one-profit WITTE Log Saw uses Kerosene, Gas-Oil, Distillate or Gasoline and will cut from 10 to 25 cords of wood a day. Easy to operate and move, New device makes easy starting in any temperature. Trouble-proof. Fells trees andsaws them into blocks—runs other farm machinery, Fast money maker and big labor saver. Completely equipped with WICO Magneto, speed and power regulator, throttling governor and 2 fly wheels,

Change to Tree Saw
if 3 Minutes
Ten seconds
to clamp on
tree. Saws them down level to the
ground.

"Felled fifty 18-inch
trees in less than 5
hours."
Earl McBurney,
iowa.

FREE TRIAL—Lifetime Guarantee Sold direct from factory to you. An all-purpose or of the for any farm use. Engine can be attached to pumps, grinders, etc.

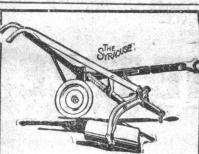
Free—Write today for my new Free
Book and Low Easy Payment
Prices. No obligation. Or if
interested, ask for our Engine, 3-in-1 Saw Rig
er Pump catalogs.

WITTE ENGINE WORKS
7196 Witte Bldg., Kansas City, Mo.
7196 Empire Bldg., Pittsburgh, Pa.

QUICK SHIPMENTS MADE FROM NEAREST OF THESE WARE-HOUSES: MINNEAPOLIS, MINN.; ATLANTA, GA.; TRENTON, N. J.; RICHMOND, VA.; TAMPA, FLA.; NEW ORLEANS, LA.; DALLAS, TEXAS; LAREDO, TEX.; DENVER, COLO.; BILLINGS, MONT.; SPOKANE, WASH.; NEW YORK, N. Y.; ALBANY, N. Y.; BANGOR, ME.

APPLE TREES - California Privit, etc. Improve your income, Plant this spring Free Catalogue. Out trees grow. MITCHELL'S NURSERY, Beverly, Ohio

Try a Michigan Farmer Liner



Less Labor, More and Better Fruit

If you grow grapes or berries, you need the labor-saving and efficient horse-drawn

John Deere-Syracuse Grape and Berry Hoe

It takes the place of a hand-hoe crew. No other tool will do a more thorough job of cultivating. Easy to guide in and out around the posts and vines. Throws soil toward or away from plants. Hoe blade gets under foliage—no danger of damaging vines. Used consistently, it prevents mildew, improves the quality and increases the quantity of fruit. Spring tooth cultivator attachment, extra.

Write today for free folder. Address John Deere, Moline, Illinois, and ask for folder OC-822.

JOHN - DEERE

My Farm Experience

Finds Happiness in Rural Life

WOULD like to tell of my little experience in Alcona county. My wife, son (now twelve years old), and myself came here in July, 1920, for a vacation. I, having followed meat cutting for ten years, was pretty well run down. We decided to stay and try a farm. We got eighty acres of wild land well in the heart of the settlement, put every dollar we had into it, and cleared a little that fall before the snow came. I got to feeling better. We went in debt for our first bill of groceries, also a team which cost \$300 with harness.

We put in seven acres of crops, including one acre of corn and one of sudan grass, the rest in oats. They didn't do much, but we got a fine catch of clover. The sudan grass made three big loads of fine hay. The corn was of the Flint variety, and made good for that kind, I guess. But I came from a corn state and wanted to raise corn, so I sent in 1924 for some Northwestern Dent. The frost got it before it ripened, but it made enough to feed my eight head of cattle until April. Last spring I sent for more; planted it on June 8, and finished cutting on October 1, our first frost here; put it in shocks ten hills square, which husked two and one-half and three baskets to the shock. Thifty-eight shocks to the acre makes a very good yield. Last year my Rosen rye threshed forty bushels per acre of as fine rye as I ever saw. This year my oats went fifty bushels per acre, which was mighty good, considering how dry it was here.

I now have thirty-five acres cleared; eight head of cows and heifers; three good horses, two that weigh over 1,600 pounds each; farm machinery, most of which I bought new; a good hip-roof barn, thirty feet to the peak, to which I am going to build twenty-four feet more length this summer; a small house and granary; and everything is paid for, except what I lacked of paying for the farm in the first place. We have had perfect health, with the exception of an appendical operation for my wife. We have forty rods of fine trout stream on one side of our place, and a fine little lake, the shore of which forms part of the north bound-

WOULD like to tell of my little exenjoy a nice mess of fresh fish once or perience in Alcona county. My twice a week from the lake during wife, son (now twelve years old), open seasons.

There is fine deer country less than two miles away, which at the present time looks more like a sheep pasture from the way it is tracked up by deer. I did my first deer hunting this fall. It was really my first opportunity. My wife was very much amused at my notion of killing a deer. The Baptist preacher and I fixed up with red strips of calico until we looked like a couple of camouflaged zebras, and took to the woods with high hopes. The deer must have had a hunch that we were coming, for every track we took went for the river swamp. About two o'clock we decided they were all in there, so we took a dive for the swamp. Just as we reached the edge, we saw a very fresh bear track crossing the road. I started the preacher down the swamp to another road, when I thought he would cross and start to track Bruin. He started for the thick cedars, and could not track him for lack of snow. We started on down the road, and pretty soon the preacher whispered, "There he is," and pulled up and shot. Old Bruin went across the road as if the devil was after him. I took a snap shot in the direction he took. He started into a cedar—then made up his mind it was too thick in that direction for speed, and came back on the road. I pulled down on him. When old Meat-in-the-pot spoke, he swopped ends. a couple of times, somersaulted, and went down. By the time I carried him about a mile to the car, he weighed a ton instead of 200 pounds. Right then I made up my mind I had all I wanted, so my buck has another year to grow bigger and fatter.

It seems to me, that anyone who would like to farm in a good, healthy country, with lots of fishing and hunting, where one can get out in the big out-of-doors without driving two of three days to do it, northeastern Michigan has very little more to be desired.

ception of an appendical operation for my wife. We have forty rods of fine trout stream on one side of our place, and a fine little lake, the shore of year, with an irrigating plant which which forms part of the north boundary of the place. Wife and I surely

serife

Somebody

Hurt?

deer country less than which at the present

TRAGEDY lurks at every crossing, round every bend in the road. Daily, hundreds who ride in autos are being maimed—or worse. 500,000 folks are riding to sure injury this year. 30,000 of them will be killed! Ghastly facts, yes. But something you MUST think about NOW

NOW.

And there are a hundred OTHER ways you may be injured ANY DAY. I farmer in 9 is sure to be struck down this year. Fate may pick YOU next. How you'll hate to pay the doctor and hired help, when you could have avoided it!

2 c A DAY INSURES YOU

Why trifle with fate when a couple of pennies a day provides an income when accidently injured. The Woodmen Accident policy is the greatest ever written for farmers. Wonderful benefits. Get full details. Act NOW. Delay is risky. Don't wait a day, Mail the coupon TODAY.

Woodmen Accident Company of Lincoln, Nebr.

	WOODMEN ACCIDENT CO Lincoln, Nebraska. Please send me details of your accident insurance policies.
H	Name.
	Decupation
P	. o
	2 7 7

Holmes, Stuwe Co., 2429 Riopelle St.
Commission Merchants,
Provisions, etc. Correspondence Solicited. Ref. Wayne County & Home Savings
Bank. Bradstreet. Deroit, Mich, Cherry 7664

FREE: Send name and get 25 Pedigreed Everbearing Strawberry plants, free, WEST PLAINS NURSERY CO., West Plains, Mo.

More Money from Your Crops

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

47 Years of Better Seeds

For nearly a half century, Isbell's have beendeveloping yield, vitality and hardiness in seeds. Ceaseless experimenting, careful selection, better growing, sorting and cleaning methods have done this. 200,000 customers

better growing, sorting and cleaning methods have done this. 200,000 customers have proved this profit-building quality—they plant isbell a seeds year after year and get bumper crops. We grow our own seed—you buy direct from us, saving money and eliminating all risk of substitution.

The 1926 Isbell's Seed
Annual tells how to select seeds, how to prepare soil, gives cultural directions, and quotes direct-fromgrower prices. The sou

S. M. ISBELL & CO., Seed Growers 210 Mechanic St. Jackson, Mich. Send your 1926 Seed Annual quoting directfrom-grower prices on Quality Seed. (81)

Address

A Little More Cooperation Needed Here, Too



WORLD EVENTS IN PICTURES



Melk copy of famous Gutenberg Bible, first book printed with movable type, brings \$106,000.



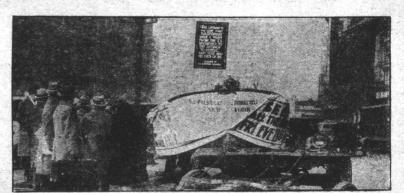
The first contract air mail service in America was inaugurated recently, in Detroit. Henry Ford is receiving the first bag of mail from Postmaster Kellogg at Ford Airport.



Irwin Lorenz, 16 years old, and 2 feet and 11 inches tall, is smallest violinist in the world.



Moving \$75,000.000 of New York City's bonds is a job which requires watchfulness and extreme caution. These messengers were further protected by sharpshooters with rifles.



One of the life boats of the S. S. President Roosevelt, used in the heroic rescue of the crew from British freighter, Antinoe, thrilled theater goers and shoppers in Times Square, New York.



Capt. George Fried, commander of S. S. President Roosevelt, received this plaque for heroism at sea, from Major General Summerall.



Thomas Yuan, son of First President of China, attends Tilton School in New Hampshire.



Ralph Miller, of Philadelphia, is raising this brown bear in his back yard, and training him as a wrestling partner.



Before an audience of 4,000, Miss Marion Talley, 19, of Kansas City, Mo., made her triumphant debut in the Metropolitan Opera House, New York. Overy 200 people from her home city were there.



Seventy persons were supposed to have lost their lives in the snow avalanche near Bingham, Utah. This picture shows an authentic model of the copper mining district.

71TH this decision made, he watched every opportunity to meet her; but she never seemed to leave the house alone. Once he saw her in conversation with the sailor, and from her manner he judged she knew him pretty well. But even that could be explained without much difficulty. All the way down Marie had been free and easy with the crew. She was a natural flirt.

Dick spent the night in a small cave he had chosen for his headquarters. It would be difficult for anyone to find him there, and more difficult to surprise him. He reasoned that the sailor would tell Blake about meeting him, and natural curiosity, if not suspicion, would urge the latter to seek him out. A complete stranger on the lonely island would be quite a curiosity.

Several times through the day Dick

Several times through the day, Dick had a feeling that someone was spying on him, watching for him, and following him. Whether it was Blake or the sailor he could not decide, but it made him more cautious.

"Til have to be constantly on my guard," he said to himself. "If Blake is up to some crime, he'd put me out of the way if he caught me. That sailor's standing in with him."

He was wide awake long before dawn, and anxious to take his dip in the ocean before anyone else on the is-

the ocean before anyone else on the island was stirring, he scrambled down the rocks to the beach. Choosing a favorable spot for a swim, he threw off his outer garments and stood ready for the plunge.

Suddenly a distant, muffled hum like the buzzing of a swarm of bees aroused his interest. He stood listening, turning his head this way and that. He cloked up and down the face of the cliff, at a loss to explain the intermittent buzzing. After a while his attention was directed to a thick grove of tall trees standing off by themselves on the highest point of the island, some the highest point of the island, some distance away from the house.

distance away from the house.

"That's a pretty big swarm of bees," he commented, "to make all that noise. I'll take a look in that grove."

Instead of plunging into the surf, he threw on his clothes and walked up the hill. There was a peculiar metallic quality in the intermittent buzzing that had more than awakened Dick's curiosity; it had excited his suspicion. Therefore instead of making directly.

curiosity; it had excited his suspicion. Therefore, instead of making directly for the grove, he made a circuitous detour which enabled him to keep out of sight of anyone on the summit of the plateau. By scaling the rocks and climbing along ledges he managed to reach the grove from the opposite side. Once within their shadows he crept from tree to tree, always following the humming as a guide. It seemed much nearer and clearer, but it was still muffled as if coming from a considerable distance.

mulified as if coming from a considerable distance.

Dawn was just beginning to streak the east with faint bars of light, but in the grove it was still dark and shadowy. In the half light, Dick stumbled along until he came to a yawning hole that stretched directly across his nathway.

He stood on the very brink of it before he realized its presence. Catching himself with a start, he stepped back and peered down. The hole was a natural fissure, or break in the rocks, four or five feet across and twice that distance in length. Its depth was prob-lematical in the dim light.

It was not, however, so much the discovery of the hole that startled Dick—for he had stumbled upon many similar breaks in the plateau and along the face of the cliff—as it was the sudden realization that the buzzing he had been following came directly from hebeen following came directly from be-neath his feet. Somewhere below, in the dark space yawning before him, the mystifying, but no longer muffled, noises were rising in sharp staccato wave vibrations.

They were wave vibrations all right. Dick recognized their cause the

In Valhalla and Out

By George Ethelbert Walsh

instant he peered over the brink. They came from a wireless plant concealed below, and it had been only their muffled character, due to the surrounding wall of rocks, that had deceived him

before.

It was impossible to see more than a foot or two below the brink, and Dick was unwilling to risk exposure by venturing too near. He sat down on a rock and listened. Familiar as he was with various wireless plants, he was unable to read the messages that the unknown one below was sending through the air.

"It's in code," he mused after a while. "Not much chance of reading it without the key."

Nevertheless, he waited and listened. He had a pretty accurate intuition of the identity of the one below. Blake had spoken of sending instructions to the yacht by wireless, and by rising

the yacht by wireless, and by rising early for a dip in the ocean, Dick had stumbled upon the hidden plant.

From that distance it was more than

bottom. Fifteen feet below the surface,

bottom. Fifteen feet below the surface, the darkness was greatly intensified.

Dick struck a match and glanced around him. Nothing at first caught his attention, and when the flame went out he scratched another match. This time he saw the wireless in one corner of the cave, partly hidden from view by green boughs that formed a rustic screen in front of it.

Crossing the intervening space, Dick began an examination of it; but without the aid of artificial light, he could get only a superficial idea of its power.

"I don't believe it has a radius of more than thirty or forty miles," he mused. "Perhaps less."

He paused to consider. "In that event," he added thoughtfully, "the yacht is laid up not very far from here—that is, unless that sailor's story is true about her being wrecked. I doubt it. It's a part of the whole mysterious plot."

He frowned at his inability to piece

He frowned at his inability to piece things together and find a solution. Re-

carried him across the cave as easily as if he were a baby. Depositing him on the floor of a smaller cave that opened into the first one, he bound him hand and foot, and then proceeded to revive him.

Dick regained consciousness under the usual process adopted for reviving the unconscious—water from a bucket poured over his head and face—until with a gasp he raised a hand and protested.

"Don't I'm coming to."

"Don't, I'm coming to."

"Reckon I didn't hurt you as much as you deserved," replied the seaman, bending over him. "All right. Sit up then, an' make yourself easy."

"I will if you'll give me a chance. This rope cuts."

"Sure! That's what I intended it should do."

Sick and dazed by the blow Dick.

Sick and dazed by the blow, Dick stared at him. There was little comfort to be gained from a study of the brutal face.

"Why'd you do that?" he asked fin-

brutal face.

"Why'd you do that?" he asked finally.

The man grinned. "Why'd you poke your nose down here?"

"Was there any law against it?" Dick asked. "I didn't see any sign prohibiting it."

"You're a cool one," retorted the other. Then, showing genuine curiosity, he asked, "How'd you get on this island? Where'd you come from? And what d'you want here?"

Dick hesitated a second before answering. Then he said frankly: "I came down on the yacht, of course. How else could I get here?"

"That, I think's a lie," was the retort. "But you can tell it to Mr. Blake. He'll be interested."

"Are you going to tell Mr. Blake?"

"Sure! He told me to spot you an' get you. He don't want anybody interfering with his plans. Reckon I'll tell him you're here, anxlous to see him. S'long."

CHAPTER VIII.

Dick did not have to wait long for the return of the seaman, accompanied by Blake. During the short interval, he made a careful survey of his surroundings, tested the rope that bound him, and vainly speculated upon his chance of escaping.

There seemed to be no outlet to the smaller cave he was in, except through the one in which the wireless was located. It was nothing more than a sort of recess or alcove, extending back from the black hole into which he had come. He groaned from the pain in his head.

When the entrance to the cave was

when the entrance to the cave was darkened by the appearance of the two men, he silenced his groans and compressed his lips firmly. The seaman led the way, and thrust an electric torch in his face.

"There he is, sir," he said. "Reckon I did a good job of it."

Mr. Blake stepped forward and thrust his face down at Dick. For a moment he was quiet, inspecting him closely. Then a grunt escaped his lips.

"Let me have that torch, McGee!" he said abruptly.

he said abruptly.

Taking it from his companion's hand and thrusting it close into Dick's face, he scrutinized the features in silence.

"We've met before," he added, frowning. "Your face is familiar."

"Then perhaps you can tell me where," replied Dick, determined not to enlighten him.

The man was busy with his thoughts, trying to summon from memory a vague impression. Suddenly his face lightened.

lightened.

"I have it!" he exclaimed. "I have it!" he exclaimed. "You're the man who fished Miss Cutler's bag from the river the day before we sailed. Aren't you? Yes, I recognize you I don't need your answer."

"I don't deny it, Mr. Blake. Glad to meet you again."

The other grunted. Then he asked the inevitable question: "How'd you

likely the sounds of the buzzing could

likely the sounds of the buzzing could not be heard up at the house. The plant was artfully concealed in the cave-like hole, and no one would be apt to stumble upon it accidentally. He raised his eyes to find the mast and aerials. They would at least have to be outside and in clear view. It was growing light rapidly, and the tops of the trees were in sharp silhouette against the sky. But there was no sign of a wireless mast.

no sign of a wireless mast.

A little puzzled, Dick continued to search with his eyes until they suddenly came to a focus on a point middenly came to a focus on a point mid-way between two giant trees. A mo-ment later a smile parted his lips. It was all as plain as day. The aerials were stretched from tree to tree, but in such a way that they seemed to blend with the foliage. One would hardly suspect their presence without careful scrutiny, even if on the lookout for them.

for them.

He nodded his head. "Clever," he murmured. "Blake knows his busi-

Suddenly he was interrupted from his reveries by the sharp clink of a stone below. The wireless had ceased humming, and someone was climbing out of the hole. Dick had just time to dodge back and hide behind a big a free.

A few moments later, Mr. Blake emerged from the cave, and after a few hasty glances around in the dim light, he made a hurried exit from the cave. Dick watched him until he disappeared around the back of the house. "I were I'll take a look below", be-

"I guess I'll take a look below," he murmured. "Don't think Blake will come back in the day time. Got a clear coast for investigation."

There were no steps leading down to the crevice, that is, none of man's making; but nature had provided an easy descent, and as the rocks were well worn in places Dick had no difficulty in descending. It required a lit-tle skill in the dim light to find his way around when he reached solid

calling Alice Cutler's confession that Mr. Blake had resumed all responsibility for the yacht's sudden leaving, he became more puzzled than before.

"I wonder what excuse Blake gave her," he argued with himself. "He must have given a good one, or she would have been suspicious of him. I'll have to find out what he told her." He hesitated between two courses. He felt quite sure Miss Cutler could help him to solve the puzzle, but she distrusted him, and would perhaps resent his inquiries. Marie, her maid, knew more about the mystery than her mistress; but she was in love with Blake, and quite naturally she would not betray him.

"I guess I'll have to go it alone," he added finally, aloud. "But I'll watch this wireless and try to intercept some of Blake's messages. If I can get hold of his code, it will be easy."

He began rummaging around in the dark. There were several old boxes and packing cases stowed in one corner, and Dick began going through their contents. He was using less caution than the circumstances warranted, rattling the papers as he hauled them out for examination.

ed, rattling the papers as them out for examination. as he hauled

The noises he made deafened him to a light step creeping up behind him, and he was totally unconscious of another in the cave until a quick spring behind startled him. He whirled around just in time to meet the blow of a

club directly on his forehead.

He had a glimpse of the ugly face of the sailor he had picked up out of the sea, and heard him snarl: "Let that teach you, me son, to keep your nose out of other people's busi-

After that came a shower of brilliant stars and complete oblivion for a time. He crumpled down in a heap at the foot of his assailant, and lay there

as still as death.

Grinning down at his victim for a few moments, the seaman then picked him up in a pair of strong arms and

Activities of Al Acre—At Least Al Knows Where the Blankets Were

Frank R. Leet



He swung around, and faced the seaman. "Keep him here, McGee, and watch him. If Miss Cutler should attemble upon him, let me know."

He walked back into the main cave, followed by McGee.

"Are you going to let me starve," called Dick. "That's hardly fair, Mr. Blake. There's a law against slow murder."

Without answering him. Blake spate.

murder."

Without answering him, Blake spoke again to the seaman:

"Give him enough food and water to keep him alive, McGee. But don't overfeed him. You understand?"

"Sure!" grinned the other. "I don't let him starve—not quite."

When they disappeared up the rude steps provided by nature, Dick's heart skipped a few beats. The prospect was not promising. His imprisonment in the dark hole would not be pleasant. The pain in his head, and the strain of the rope that bound him, were bad enough; but Blake intended to increase his torture by half starving him.

him.

He knew better than Blake that Miss

He knew better than Blake that Miss Cutler would make no rigid search for him. He wasn't sure but she would be glad of his disappearance.

"A nice pickle I've got myself into," he muttered. "They'll leave me here until they're through with their scheme, and then likely as not sail away without me. I'll be worse off than Robinson Crusoe."

The agony he was suffering made him restless. Unable to sit up quietly and endure the pain, he began rolling his body around, turning over and over until he reached the nearest wall. So far as he could see, it offered no way of escape, even if he could free himself

He rolled slowly and painfully to the opposite wall. It was the same as the other, with no break in it. Then back to the farthest corner of his prison he made his agonizing way. Here, too, the wall of the cave met the bottom and shelved upward gradually to meet the roof.

the wall of the cave met the bottom and shelved upward gradually to meet the roof.

He groaned in despair, and lay quiet, ready to faint from the excruciating torture of his wound. In this limp attitude, he remained for some time, fighting back the weakness that swept across him in waves.

It was cold and damp down there, and for some time Dick was unconscious of any change in the atmosphere of the place; but gradually it came to him that a very faint sea air was blowing upon his forehead whenever his head was placed in a certain position. He sniffed at it, and moved his head back. The salty odor of the air lost its strength.

Returning his head to its former position, he sniffed again. There was an unmistakable drawt of sea air fanning his face, very faint and indefinite, but enough to arouse his curiosity.

"Where does it come from?" he muttered.

He followed his nose until he came

"Where does it come from?" he muttered.

He followed his nose until he came to a point where the draft was the strongest. By thrusting his face directly in it, and using his tongue in place of his hands, he made a discovery that thrilled him.

The salt air was coming through an aperture in the rocks no bigger than his fist. By holding his face close to it, he could get the strong salty flavor.

"This opens into one of the sea caves under the cliff," he muttered.

But an aperture the size of a man's fist offered little consolation. He could not crawl through it. But the very fact that it was there, a narrow entrance to one of the sea caves, aroused his spirits.

ed his spirits.
"I might enlarge it," he added, after a long pause, "if I had the use of my hands."

hands."

It was a forlorn hope, but Dick realized that his position was desperate, and he had to take advantage of any chance. McGee, watching outside, would not visit him often. Secure in the thought that his prisoner could not escape except through the main entrance, his vigilance would naturally relax

relax.

Dick had to free his hands to make the experiment of enlarging the hole!

Unfortunately, McGee's training had taught him to tie a knot that was not

"Came down on the yacht," replied Dick, smiling.
Blake frowned. "You weren't a member of the crew," he asserted.
"No," smiled Dick, "I didn't have to work my passage."
"Stowaway?"
"Well, not exactly—call it an uninvited guest."
"Sudden suspicion entered the other's face. "Did Miss Cutler know you were aboard?"
Dick laughed and shrugged his shoulders. "Ask her," he replied impudently.
An uneasy expression came into Blake's eyes, and for a few moments he was quiet. Then, quite coolly, having made up his mind, he said, "No, I won't ask her. I'll leave you here for her to find. If she knows you're on the island, she'll hunt for you."
He swung around, and faced the seaman. "Keep him here, McGee and watch him. If Miss Cutler should tumble upon him, let me know."
He walked back into the main cave, followed by McGee.
"Are you going to let me starve,"

easily loosened. A sailor's knot is about the most difficult to unfasten, and the harder Dick strained the tighter the rope seemed to draw.

"T can't do it that way," he muttered aseaman, and I know sailors' knots."
He lay back and breathed hard, but his mind was working actively. If he was to free himself it had to be through some trick. He looked around for a sharp rock which might serve to saw the rope in half, but most of them seemed to have their edges worn smooth and round.

Again he despaired, and dropped back exhausted with the pain of his efforts. He thought of his box of matches. If he could get at them he might burn the rope.

He began wriggling his hands around to reach his pocket, but without avail. Then another idea occurred to him.

The nanother lide was unitaried the tight-er the rope seemed to draw.

"T can't do it that way," he muttered aseaman, and I know sailors' knots."

To can't do it that way," he muttered aseaman, and I know sailors' knots."

To can't do it that way," he muttered at the rope is a seaman, and I know sailors' knots."

To can't do it that way," he muttered after a long, futile struggle. "McGee's a seaman, and I know sailors' knots."

He began this experiment as soon as it occurred to him. He rolled his body up to the side of the nearest wall,

The Farmers' Spring Song By L. MacLeod

Till the soil and feed the nation, Hear the call of new creation, Endless little occupation.

March is blowing, spring's behind. In a little, you will find Countless jobs and with your tasks, Help your neighbor when he asks. Is there a potato heap? Get to town and sell it cheap. Always something else to do; Nothing ever waits for you-

Fighting weeds and fighting weather. All things come at you together. Run for this and rush for that; Mealtime over, there's your hat. End of week, oh farmer man. Rest a little, if you can.

and then began shifting his position until he had his feet elevated far above his head. Almost standing on his head, with his shoulders on the bottom of the cave, he began a process of shimmying that would have been the envy of the most successful exponent of that art.

For a long time pothing happened.

that art.

For a long time nothing happened. Then he felt the box work up toward the mouth of his pocket. He renewed his efforts, performing the most ridiculous antics; but it stuck, and for many minutes he could not move it farther. He was almost on the point of despair when the box suddenly slipped out and fell lightly to the floor. With an exclamation of delight, Dick began eagerly searching for the box with his mouth.

He picked it up finally, and tried to

mouth.

He picked it up finally, and tried to open it with his lips and teeth, but this was a feat beyond him. Half in anger at his failure, he crunched the wooden box with his teeth and spilled the matches out.

With another grunt of satisfaction he fished around on the floor until he had a match in his lips. Holding it firmly with his teeth, he tried to scratch it against the chemically treated strip. But here again he met with difficulty.

The light box constantly eluded him.

difficulty.

The light box constantly eluded him. It would not remain stationary long enough for him to scratch the head of the match against it. Again and again he essayed to light one.

Dripping with cold perspiration, and desperate at his failure, he tried every trick he could think of, and only gave it up when exhausted. With a groan he dropped down.

Now what all his skill had failed in accomplishing, accident performed for him. In dropping his body back, he landed plump on the box and completely crushed in the sides that his teeth had started.

Dick never knew how it occurred:

Dick never knew how it occurred; but one match in the heap must have been so placed that his body forced the impregnated head against the rough surface of the hov

impregnated head against the rough surface of the box.

There was a flash and glare, and the whole pile of matches were ignited. The box itself took fire, forming a good-sized blaze. Startled at first, Dick stared at the fire, and then realizing that his opportunity was quickly passing, he thrust his two hands over the flame until the rope began smoking. It was a frightful ordeal, for the flames made no exception to his wrists, burning them as well as the rope. He

burning them as well as the rope. He had to grit his teeth to hold back a cry of pain, but with all the stoicism he could command, he waited sitently and patiently until box and matches were consumed.

By that time the rope was burning. He waited as long as he could, watching the flames eat their way through strand after strand. Then, with a mighty effort he jerked his hands

The rope parted near the middle, freeing him so he could tackle the rest of his bonds with both hands. Extinguishing the fire, he began feverishly to unfasten the rope that still held his legs.

Once free and on his feet, he began exercising his limbs to restore the circulation. Then he flung himself down near the small aperture in the wall, and began tearing at the rocks.

At first he made no perceptible progress, but a piece of rock the size of his fist finally yielded to his efforts. A little examination showed him that the wall was cracked and broken in many places, and that by taking advantage of these he could make better progress.

Half an hour of hard work made him.

Half an hour of hard work made him jubilant. The aperture was big enough to admit a man's thigh. Renewing his efforts, he enlarged it a little more. Thrusting a hand into the hole, he found that beyond the mouth it was deeper and wider.

It was nearly an hour later before he had the hole large enough to admit his body. He crawled through eagerly and tremblingly. The sea air reached his nostrils now with a strong salty flavor.

nis nostriis now with a strong salty flavor.

Dick was sure that the other end opened into a sea cave. The thought of concealing his method of escape came to him. So far as possible he had to cover up his trail.

Returning to the cave he gathered up the other end of the rope and thrust them into the opening. Then crawling in feet first, he gathered the loose rocks up and walled up the opening as deftly as possible.

He shuddered a little when the last ray of light was excluded. He felt like a man walled up in a living tomb. If there was no way of exit at the other end, and if McGee should discover his method of escape and seal up the entrance, he would indeed be imprisoned in a living tomb, without chance of escape.

The horror of such a finish sickened

escape.
The horror of such a finish sickened him, and for a moment he hesitated. He started to tear down the wall he had constructed, but his panic lasted only a minute.

had constructed, but his panic lasted only a minute.

"I must'nt get cold feet," he reasoned with himself. "There must be an outlet on the other end."

Buoyed up by this conclusion, he began wriggling backward. He wished now that he had entered head-first, but in that position he could not have covered his retreat.

"Besides," he thought, "if I have to come back and give myself up, I'll need my hands to break through into the cave again. It's ten to one I'll have to do it."

This lack of confidence in his scheme was in direct contradiction to his former conclusion, but his mind was so harrowed by fear and uncertainty that he was hardly responsible for his thoughts.

CHAPTER IX.

CHAPTER IX.

Wriggling backward through the narrow hole had many disadvantages, as well as dangers. It was like feeling one's way through the dark with the feet, blindly stumbling along in fear and trepidation. If the passageway ended abruptly at the brink of a precipice, it was an even chance that the CHAPTER IX.

ended abruptly at the brink of a precipice, it was an even chance that the body would be carried over it before the mind sensed the danger.

Nevertheless, Dick made slow but sure progress, kicking his heels upward and sideways to feel his way, and when he finally came to a broader place he made an attempt to turn around so he could crawl headfirst. It was a narrow squeeze, and for a time it was doubtful if he could do it. Like a squirrel curling up to sleep, he

time it was doubtful if he could do it. Like a squirrel curling up to sleep, he doubled his body until his head was between his knees, and then slowly squirmed and twisted until his position was reversed.

After that the going was easier. He could feel his way with his hands and could use his eyes to some extent. It was as black as midnight in the hole, but the eyes, grown accustomed to it, seemed to penetrate the gloom.

The salt air that drifted through the passageway urged him onward. It was

passageway urged him onward. It was growing stronger every moment, and Dick's spirits rose accordingly. The salt air could not get into the passageway unless there was some opening to

way unless there was some opening to the sea side.
Fifteen minutes later, when he caught a faint glimmer of light ahead, he knew that the worst of his troubles were over. Where there was light, there was freedom. He crawled more rapidly after that, keeping his eyes focused on the gradually increasing speck of daylight.

(Continued next week).

It is reported that King Alfonso, of Spain, will fly from his country to Argentine upon his contemplated trip to South America.



DEPENDABILITY

The greatest thing about a Ford is the way it keeps going, even under the worst conditions. The dependability of Champions which have been standard Ford equipment for 14 years—is an integral part of Ford dependability.

> A new set of dependable Champion Spark Plugs every 10,000 miles will restore power, speed and acceleration and actually save their cost in less oil and gas used



Toledo. Ohio



For silent operation

OUALITY of performance depends very much on the tubes. And the silent operation of a tube depends very much on the filament.

Probably one of the greatest developments in radio was the X-L filament evolved for RCA Radiotrons. A tube that needs much heat-much current-for its operation, tends to be noisy. But a Radiotron UV-201-A or UV-199, with its X-L filament, needs little current and operates silently.

To be sure of the last word in research and in careful manufacture, for finest performance, be careful to get genuine RCA Radiotrons.

RADIO CORPORATION OF AMERICA Chicago

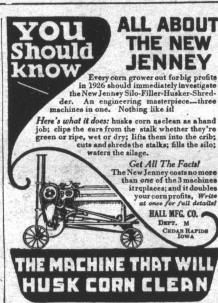


RADIOTRON UV-199 is the standard tube for

dry battery sets. RADIOTRON UX-199 is exactly like it, but has the new standard base.

CA Radiotron





On valves, fittings, plumbing fixtures, water systems, softeners, and heaters

saves you money in the end

SOLD BY

RESPONSIBLE DEALERS EVERYWHERE

Last Words

Our Weekly Sermon-By N. A. McCune

fourteenth chapter of John are, "Let not your heart be troubled." That is another version of an oft-recurring note in the Bible—fear not—be not dismayed—casting all your care upon Him-behold, God is my salvation, I will trust and not be afraid-Him. All this points to that fact that we humans are much given to fear. We get up in fear, go through the day fearing, eat our dinner at night fearing something done that day may come back to plague us, go to bed wondering if some of the awful events we have been thinking of will ever come to pass. Of course, it is not as pronounced as that, most of the time. But the miserable line that fear makes is there, like the trail of a garter snake across the road. Some new religions have been born of late to conquer fear. As a matter of fact, they do not conquer

it nearly as well as the old-fashioned gospel, but many people think they do. But it needs no argument to prove that the conquest of fear is a much needed conquest. "Let not your

heart be troubled." Everybody there that night was troubled, except the Master. For some unknown reason He was calm and confident. When we say that if a man has God he has everything, and if he has everything but God he has nothing, it sounds well, and we mean it. But someway it does not come from the inner depths of most of us. If it did, we would not worry as we do. Things would not trouble us. Having God, we would be content, knowing that all other necessities would be added to us. We can hardly qualify under Paul's simple creed—"Having food and raiment let us therewith be content."

BUT how explain Christ's calm? What did He have that the twelve men did not have? Simply this, absolute confidence in God. How came He by it? Much the same way that mortals have come by it (for some have). Do we not remember the times that the gospel writers tell us, He was up before day and off somewhere to some lonely place, to pray? That was not form, nor the force of habit. It was purpose. He was cultivating the presence of His Father. This confidence is a gift, but it is also an ac-

"Let not your heart be troubled." John Wesley, the founder of Methodism, was so unhappy as to marry a widow whose main function in life seemed to be to make life miserable for her husband. She was perhaps unbalanced at times. But she failed not to grasp every opportunity to besmirch the reputation of her husband. She opened his letters, garbled them, and published what she had prepared. One day she was fixing up some such delightful mess when Wesley heard of it. Next day he was to leave for an extended preaching tour. His brother urged him to remain and counteract what his wife was doing. Said Wesley, "When I dedicated my life to God, I dedicated everything, reputation included. I shall go as I have planned." Most people would have difficulty in arriving at such a state of trust as this. But in justice to us ordinary men it ought to be added that most men would have more sense than to marry such a virago.

There is no doubt that many people make hard work of the trusting attitude. They cannot seem to do it. At least, they do not do it. Doubts as thick and as pestiferous as mosquitoes

HE first words of this matchless crowd about them. It is intellectual difficulties a part of the time. But when "I am the way" has been sounded in our ears by the peerless Teacher, it ought not to seem so hard. The case of George J. Romanes is to the point. Romanes was a friend of Darwin and he made the mistake of conthough He slay me, yet will I trust cluding that evolution explained everything. The universe was a vast machine, slowly changing, and God was unnecessary. But it left him lonely and desolate. Romanes said, "I am not ashamed to confess that, with the virtual negation of God, the universe to me lost its soul of loveliness. When I think, as think I must, of the appalling contrast between the glory of the hallowed creed that once was mine, and the lonely mystery of existence as I now find it, at such times I shall never feel it impossible to avoid the sharpest pang of which my nature is susceptible." He had lost the Way. But it is pleasant to record that he found it again.

> PHILIP was one of those present. He was not satisfied with the words of Jesus. Said he, "Show us the Father and it sufficeth us." He had forgotten one thing. He had forgotten that if you have a friend, you believe in that friend. What he says, you are willing to rely on. Jesus is the Friend. Can you not trust Him, Philip? Has He not been such a long time with you, teaching, working, healing, that you do not know Him yet? To be near Him is to be near the Father. To know Him is to know the Father-

People have often wondered whether God is like Christ. So many things take place that look the other way. Is God in an earthquake? Does God have anything to do with tyhpoid or paralysis? What sort of God is He? To reduce it to its simplest terms, does God care? Is He like the One who called Him His Father? Christ replies in the affirmative. He says that God is like Him. If you know Christ you know God. Do not worry, He says, do inquire anxiously. God is like Me. If you see Me you have seen Him.

CHRIST did not believe in leaving Christians behind Him, who were weak or discouraged. He promised them power! "He that believeth on Me, the works that I do, shall he do also, and greater." And it was to be done in the spirit of love. His commandments, He said, were summed up

It has been well said that the churches have safeguarded everything but love. They have taken pains ot have every point of doctrine correct. Articles of religion have been written on the future life, on punishment for sin, on hell, heaven, good works. Libraries have been written on the interpreta-tion of the atonement, that it means to be forgiven. But little appears in these that teaches love. "If ye love Me, keep My commandments:"

To many people love seems highly dangerous and explosive. Better go easy on love, they say. If it is argued that less national defense would be preferable, that is dangerous, we are he prepared to kill. If told. You must we talk about getting the churches together, some uneasy brother arises to remark that we must be careful about that, we may lose some vital doctrine; it may be all right to talk church unity, so long as we do not practice it. Meanwhile, He has not revised His words, "A new commandment I give unto you, that ye love one another.

SUNDAY SCHOOL LESSON FOR MARCH 14.

SUBJECT:—Last words of Jesus with His disciples. John 14:1-7. GOLDEN TEXT:—I am the way, and the truth, and the life. John 14:6.

Brickbats and Bouquets

An Open Forum for Our Readers

ROADSIDE STANDS

R OADSIDE stands should be governed by the people, by the law of the When a man with a half-ton state. truck can clean up more cash than a man can with eight or eighteen acres of garden truck. By picking it up from some other place and dumping it at every gas station, and every place where one can get in the shade. And then, when the season is over, he can beat it to a city job until next season, and leave the farmer to eat snowballs during the winter, and compete with that kind of game again next season. We should have protection of some kind. If Mr. Halstead, of Cass county, should happen to bump into that kind of a game, I am sure, he would look at the game from another slant.

Suppose you think you need a new car, and you wish to turn the old bus in. The first thing the licensed salesman will do is lift up the hood and check the model. Then he takes a small book out of his pocket to consult, and tells you how much it is worth on the new car. You feel that he is reliable, because he is licensed to sell, and would lose his license if dishonest.

If we are all under a state license, we have a way to stop dishonest competition that now hurts our roadside stand business.-O. A. Harris.

ROADSIDE MARKET LICENSING.

CERTAINLY was surprised when I read your article of February 6 regarding roadside markets. To think that the editor of a farm paper would even suggest that the men of his cult were so dishonest and disreputable that they could not be trusted to sell the products of their own farms on their own farms, or even help-out a neighbor by selling some for him without getting a license and being state inspected. What are we coming to? Get this license law and you will see more empty-farm houses and less land being worked.

Why should the roadside market be licensed any more than the city grocery, meat market, or any other business place?

There are some men who do not do business as they should in all lines of business, but is the farmer or gardener so much worse than all the rest that he has to be discriminated against and be put under a license system, along with the old-time rotten saloon? If I find a man dishonest in his business, too high-priced, or handles poor food, I pass him by, and that is the way to treat a roadside marketer who does not treat his customers as

As for the inspection idea, it is only another scheme to make another political sap sucker who can have the very disagreeable job of visiting a lot of fruit orchards, melon patches, and vineyards, and filling himself up, or purchasing at a low price a nice lot use. And the farmer can go down into his pocket for a little more taxes to pay for the man's valuable visit.

It would seem as though anyone would know that the best inspectors of a roadside market would be its custom- if we so chose, why, shouldn't we? ers, and they eventually would settle his matter with him.

to sell my goods at a price between include this in what we consider esthe city wholesale and retail price, sential living expenses? I don't mean with the exception of eggs, which we a college course, I am aspiring only guarantee strictly fresh. Sometimes to high school for my daughter, unless my needs, and I drive over to another eleven isn't footing many bills indestreet where a man makes a specialty pendently. What constitutes a living, of melons and sells them by his road- and what may we legitimately attain side, as well as trucking them away. for our families?—Mrs. E. M. Ander-I buy a quantity and sell them at my son.

market at the same price he retails them at. Thus I help him, myself, and the traveling public. Must I be licensed for doing this?-J. B. Buck-

In most cases the roadside stand has no steady customers, but there are new "suckers" coming along all the time. Dishonest men who are not farmers buy job lots of produce, set up stands and sell to this ever-changing trade. It is to protect the farmers and the public from these, that licensing is suggested. Already the roadside stand business in many places is feeling the effect of this dishonest competition, for the public quits buying if it cannot buy with assurance. Meat markets and other food stores are required to take out licenses in practically every town and city.—Eds.

WHAT IS A LIVING?

THE question arose last Sunday during Sunday School class, and one young man definitely maintained that the modern disregard for religious work is due to indifference; not at all to the heavy burden of making a living. Perhaps it may be wealth we are chasing so assiduously-surely few of us would be satisfied with just enough necessities to maintain life, but the more thought I give the matter, the more firmly convinced I become that the question of what constitutes a living presents a vital problem. Obviously, wealth is, in a measure, a comparative commodity-a product, perhaps, of the mind or the imagination. By way of an illustration, I have a little friend in the Dutch West Indies who is a destitute little lace maker. with little to eat and less to wear, but there is positively no use telling that child that we are poor people. Of course, we are rich; we have a house, a few acres of land (I have five acres), a team, and a cow-

The natives of India must have a living, else they would not be alive, but every picture I ever saw of them looks like an illustration of famine conditions, and all descriptions of life there tell us that the people have barely enough to maintain life. They never know in a life time what it is not to be hungry, and they learn the opium habit in childhood to eliminate the suffering from hunger. Should we be satisfied with such a standard? Did God intend His followers to expect no more. In that case, we surely have wandered afar, but somehow the supposition sounds unthinkable. The question is, where in the world to draw the line? Very probably, it is wrong to try to live beyond one's means because others do, but the farmer must farm somewhat as his neighbors do, or he cannot compete successfully with them. No doubt less money would be required if he were to use a sickle and a flail with which to harvest his grain, and drive an ox team instead of horses or a car, but would he be ahead in the end by practicing these methods? Some people seem to be very certain that he would, but I am frankly skep-

I do see people buying in the stores in small towns in a way that looks extravagant to me-but again the term of stuff to take home for his family becomes comparative, the same thing would be very economical for wealthy people, and by what right for one to enjoy a luxury that is forbidden to another? Neither my farm neighbors nor I buy like that, but

One of the expensive things most of us think we need today is an education I am a roadside marketer and aim for our children; is it right for us to my own melon patch does not supply she foots her own bills, but a child of



Young People Can Do Better in Canada

O the settler who has a family, Canada is the country of the future. It has been rightly termed "The New Homeland".

Young people in Canada will find good neighbors, good laws justly enforced, a healthful climate, and ample facilities and opportunities for sport and recreation.

The telephone, the rural mail delivery, the motor car and the radio keep young people in constant touch with activities in the larger centres of Canada and the United States.

What Canada Offers

There are millions of acres of fertile land awaiting settlement. Most of this land is close to railroads, and convenient to schools, churches and markets.

Canada offers golden opportunities for all kinds of farming. You can buy for \$15 to \$20 an acre the most productive virgin soil in North America.

In 1925 Canada produced 416,849,700 bushels of wheat from 21,957,530 acres, or an average of 19 bushels per acre. Excellent crops of corn and other cereals were also harvested.

Canadian Government Land Settlement Officials will meet and assist settlers to locate on suitable land. This service is given without cost or obligation.

Come to Canada. A welcome awaits you. No matter what type of farming you are interested in, Canada offers advantages. It will cost you only the postage stamp on your letter to obtain full information about farm opportunities in Canada. The Canadian Government's Land Settlement service of directing and locating settlers on suitable land is available to you without cost. Write today for particulars. 578.



"Canada must control the world market in selling fundamental natural resources, in which she is so rich. I expect to see the day when the United States will not export any wheat, and that day will bring to Canada her great opportunity."—Roger W. Babson, U.S. statistician and economist.

Clip this advertisement from "Michigan Farmer" and send it, along with a letter describing the kind of farm you would like to get in Canada, to:

J. M. MacLACHLAN, Canadian Government Agent (D-34) 10 Jefferson Ave. E., Detroit, Mich.



Make a Start with BETTER SEED POTATOES

Six bags of State Certified Seed are enough for one acre. The extra yield will pay for the seed, to say nothing of the improvement in appearance and quality. White Rurals, Russet Rurals, (Late Petoskey), and Irish Cobblers. They sell best all the time. Only \$5 with order, balance on delivery. Write a postal for prices.

MICHIGAN POTATO GROWERS' EXCHANGE CADILLAC, MICHIGAN

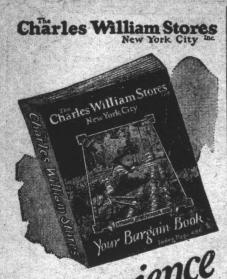


S-I-M-O-N-S : S-W-E-E-P-S

Harrow and Cultivator Attachments Fit any make of spring tooth harrow or cultivator will destroy 100 per cent of weed growth. Send direct and save agent's commission. Write for free descriptive folder and prices to

THE SIMONS MFG. CO. PEWAMO, MICHIGAN.





Gnvenience Z000,000 Families find it at The Charles William Stores

Twant when you want it ... O be able to find what you that is convenience.

To be able to find what you want at the price you can afford to pay . that is convenience.

To be able to find what you want and to know that it will be shipped promptly ... that is convenience.

And to be able to know that satisfaction is guaranteed in every one of these particulars . . . that, too, is convenience.

And "Convenience" is what The Charles William Stores offer you just as 2,000,000 families now enjoy it.

Ask our customers-there are many in your neighborhood. Then turn to your catalog today and see for yourself. If you haven't a catalog, use the coupon below NOW! A copy will then be mailed FREE and postpaid. Act TODAY!

THE CHARLES WILLIAM STORES, INC. New York City

they a	of our orders are detailed the same day or received—	
	and practically all of the balance on the following day— 24-HOUR-SERVICE	

TH	E CHA	RLES	WILLIA	M	STORES,	Inc.
989	Stores	Buildi	ng, New	You	rk City.	

Please send me FREE	a copy of your new
catalog for Spring and	Summer.

catalog for Spring and Summer.	
Name	
Address	
Town	
State	

YES NO

is Easy to Buy by Mail and Save Money



A Peek Into the Bride's Hope Chest

To Meet Conditions in Her New Home, the "Green Trunk" Should be Well Planned

HAKESPEARE wrote: "In the lassie. Have plenty of these. A few after year in the same place. Well to thoughts of love." He might well have written, "young lady's." But, perchance, the famous scholar born on Stratford-on-Avon, was not versed in the peculiarities of the soprano sex.

Measured in heart beats, June seems a long way off to the prospective bride. But she is a wise virgin, indeed, if she has her hope chest well planned and under way by now. The big interrogations which will loom superlatively in her mind will be: "What type of things?" and "How many of each?"

She will, of course, have a supply of dainty lingerie, handkerchiefs, hosiery, dresses and aprons of both serviceable and pretty, but practical kinds. Her wardrobe should coincide with her social needs, her community—and not least-her pocketbook.

If the young bride is to live in the



Like Priscilla on Her Snow-white Steer-But this One is Not Snow-white. The Rider is Edna Woodman. (A Prize Picture).

city after the nuptial, she can plan her hope chest accordingly. If she is to remain a country lassie, she will need simple, substantial pieces, rather than elaborately decorated ones. She will have little need for flimsy knickknacks, tea sets, and the like.

The household linens, including table linen, bed linen, dresser scarfs, towels, etc., may be unique-show individualism, and yet be serviceable.

No bride can have too many bath towels, dish towels and wash cloths. The quality of each should be paramount, instead of quantity. Linen wears better than cotton-washes and irons beautifully. It does not take on the washed-out appearance so charac- stand waiting on their womenfolk. teristic of cotton. The initial cost of linen is more, but in the end, it is the economical "buy."

A dozen dish towels are a safe number: two dozen are better. Some of these may even be made of sugar or flour sacks, neatly hemmed. For the farm, nothing takes the place of the en with use. No chest is really complete without a half dozen linen glass towels for drying china and glassware. Five yards of this toweling will make perky teapots or bluebirds.

spring, a young man's fancy turns nice guest towels, too, must not be forgotten. Four to six bath towels will ing is all the cultivation they need. be necessary. Select the big, doubleloop ones.

> least four pairs each of sheets and care as potatoes.-Mrs. F. B. pillow slips. If I were limited to three pairs, I would make two pairs plain, or nearly so. The pillow cases could have hemstitched hems-or monograms in white, or simple crocheted

The standard mattresses are sixteen inches long-hence, the sheets should be about ninety inches long. This is important as it assures ample amount for the tucking-in process. A sheet made too short is wrinkly and uncomfortable. Select a firm quality of double-width sheeting or bleached muslin with little or no starch.

Two bedspreads is the minimum number. One of these may be of unbleached muslin, with the popular cross-stitch or applique work, intact. Be sure to use color-fast floss. The other spread could be of the crinkled dimity type. These are easy to launder, dainty-appearing, and very practical for every day. The heavy type of spreads, once so popular, are rapidly becoming obsolete.

Dresser scarfs, buffet scarfs and doilies—here the bride-to-be may lavish needlework to her heart's content. Unbleached scarfs with basket or crossstitch designs, or applique work are lovely. Colored linen ones are also very popular

Two pairs of pillows (with featherproof ticking), will be needed. The blanket and comforter problem is often solved by gifts. Two pairs of double blankets and four to six comforters will not prove amiss. If a dear old grandmother has given one of her patchwork quilts-how fortunate!

At least one good linen tablecloth with napkins to match, will be needed. The bluebird cloths for every day are both serviceable and pretty. The size of these to be determined by the table.

It is usually unwise to make curtains. They will depend on the size and number of windows in the bride's future rendezvous. Unless familiar with the data, it is better to postpone their making.

Pan holders, dust caps, a clothespin apron, rubber apron and laundry bag have their corners in the hope chest. The bride's lifetime accumulation of silver, china, glassware, pictures, etc., should be congregated. She will cherish these more than ever in a home of her "very own,"

The hope chest should be ready a month before the wedding, to eradicate last minute worries. Be ready, indeed. 'Tis said men simply can't

GLADIOLUS DO WELL IN CHIP MANURE.

THE best and most beautiful "glads" I ever grew were planted on ground well fertilized with fine chip manure. We were cleaning our chip unbleached linen ones. They will whit- yard, and, as the soil looked so rich, we wheeled a few barrow loads of it out and spread it on our gladiola bed. We then worked it well and planted the bulbs in the usual way, but spread six towels, thirty inches long. Some a thin layer of the chip manure over of these may be embroidered with the completed bed. The foliage and the flowers were extra vigorous, and Unbleached linen hand towels are many people remarked about them. the appropriate kind for the sun-kist Gladiolus should never be planted year or fruit juice, and bake.

drained ground, and an occasional hoe-

Dahlias are also easily grown and the chip manure is very good for them The hope chest should contain at too. They require almost the same

HINTS FOR EVERY DAY.

Saturday-Letter macaroni that can be purchased in the box, dyed with vegetable dyes, will attractively spell out names for children's birthday cakes.

Sunday-A pair of old-fashioned lanterns taken from the discarded family surrey will make effective porch lamps for either side of the door. They may be wired for electricity, or if that convenience is not available, used with the original oil burners. If the frames are of copper or brass, they need only to be polished. If they are not, give them a good coat of paint the same color as the house.

Monday-When your raincoat becomes soiled, do not wash it with soap, as this injures the rubber. A solution of one pound of alum to three gallons of water will do the cleaning easily.

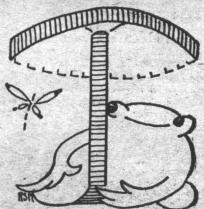
Tuesday-If by accident, boiled eggs become mixed with raw ones, they may be separated by spinning with the finger. A raw egg will not spin, while a cooked one will whirl like a top.

Wednesday-For a hurry-up sandwich filler, mash together oiled sardines and hard boiled eggs.

Thursday-When grapes are expensive or out of season, a delicious grape jelly can be made by using three parts apple juice and one part bottled grape juice with the usual amount of sugar.

Friday-When shredded cocoanut becomes dry, put in a small sieve and steam. Cool before using.

TELL-TALE 'NITIALS.



If your letter's tidy T, Neat and orderly you'll be: Rid up rubbish, (beg ye r pardon) Like a hop toad, clears a garden!

These initials are designed to things for children, on pockets, romper yokes, napkins, pillow cases or any other place for which the size would be correct. They may be transferred directly from this design through carbon and embroidered as the stitches indicate in the patterns.

SCALLOPED APPLES.

Line a baking dish with buttered crumbs and a sprinkle of brown sugar. Put in a layer of sliced apples, then one of crumbs, and continue until the dish is filled, leaving buttered crumbs and sugar on top. Add a little water

New Clothes From Old

Add Style to Your Old Straight Dress by Putting in a Flare

these new spring frocks that Madame much in contrast to the ones she designed last spring.

But those straight-lined, left-over frocks that were only partly worn out structed the silhouette of your last last year have many possibilities this season's frock, if the sleeves are not



the remodeling dressmaker that one can make full dresses straight, but you can't make straight dresses full. But this year Madam Fashion has overcome this age-old dressmaker's maximum with unusual designs and com-

The extraordinary thing about the threads. With a little careful study of new flare is that it may be of contrasting material. So, even though you did not have any material left over when you made your dress last season, with the abundance of lovely materials to be found in the stores this spring, one can always find some material in harmonious contrast to it.

To add a flare to a straight dress, make a pattern of paper like the dress. Then slash the pattern in two or three places up to the knee Spread these slashes apart the desired width and cut a three-cornered pattern like the inset gore. Always be careful in cutting a circular section to have the grain of the cloth run straight up and down. If the up and down thread is straight there will be no danger of the dress pulling out of shape.

The dress designs 301 and 304 can easily be fashioned from one of last season's straight dresses. If the material is figured, make the flare, sleeves and collar of a plain silk, in the pre-

FLARE there must be. The sil- dominating color of the figured mate-A FLARE there must be. The sir dominating course wish to make houette this spring demands it, and rial. If the dress you wish to make over is plain, match it up with some Fashion has ushered in to us, are figured material and do not be afraid of the size of the design. Fashion says the larger, the better.

No matter how well you have reconof a new cut, the whole dress is wrong. It is quite an established rule with Elbow sleeves are hopelessly out of date, but they may be replaced by the long sleeves of georgette, as shown in Fig. 1. This style of sleeve can be bought ready-made, but it is usually more satisfactory to make them at home. A band may be embroidered near the bottom in silk that will harmonize with the whole gown. This adds an individual touch to the whole effect, and is easily done-

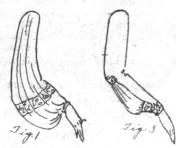


Illustration two is of a gown of grey taffeta, having sleeves trimmed with motifs of a darker shade of grey velvet, appliqued to the material with silver thread in long and short stitch. The same design is carried out on the

Taffeta is in high favor this spring. but is combined with grosgrain or velvet so that it does not seem like a carry-over from past seasons. Fig. 3 is of a long, tight-fitting sleeve of a dark brown frock. It has an inset of orange georgette. The tight cuffs and the band at the top of the inset are embroidered in orange and silver



the material you have at hand, you will be surprised with what fashionable creations you can reconstruct from last season's wardrobe -M C

Tempt Lagging Appetites

W HEN mother has been busy with mix with the cornstarch mixture, and cook five minutes. Pour over beaten and supper must be gotten ready in a hurry, try this tasty dish.

Dried Beef Scramble.

dried beef, cut 1 cup tomato pulp 2 tb. fat 1 cup grated chees

3 eggs, beaten Dash paprika, mustard 8 slices hot buttered toast Melt fat, add beef, and other ingredi-

ents, cook slowly, stirring until slightly thickened. Serve on the buttered toast. Try this butterscotch filling for a change for Sunday's cake.

Butterscotch Filling.

2 tb. cornstarch
½ cup cold milk
1 cup scalding milk:

Mix cornstarch and cold milk to a smooth paste. Cook with hot milk in a double boiler for fifteen minutes. Cool: butter and sugar until smooth,

yolks and stir until thick. Spread at once.

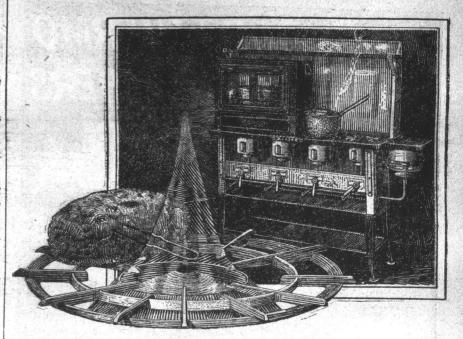
For cold spring days, chowder just hits the spot. You will find it simple to make and easy to serve.

Vegetable Chowder.

medium enions stalk celery sprig parsley medium potatoes medium carrots medium tomatoes 2 qts. boiling water

1 tb. salt
1-3 tsp. pepper
1-8 tsp. celery salt
3 slices salt pork or
bacon, diced
4 crackers rolled

Prepare and cut vegetables small. Pour on the boiling water, add seasoning, and cook two hours. Pan-fry bacon (or pork) three minutes, add to the chowder, together with the rolled crackers, and cook fifteen minutes.



A hairpin tells the story

THIS unusual test demonstrates conclusively the I intense heat of the Nesco burner.

A hairpin inserted in a potato and placed over a Nesco burner glows red hot in an instant. It is this intense heat, so necessary for perfect cooking results that has won the endorsement of thousands of women and made Nesco nationally known as the Gas Cooking Oil Stove. For though it burns kerosene, Nesco cooks with gas.

It lights like an ordinary oil stove but quickly develops that intensely hot blue gas flame that strikes and spreads directly against the base of the cooking utensil. A clean flame. No smoke. No soot. No smell. Economical, too. A Nesco burner will cook 24 hours on a single gallon of fuel.

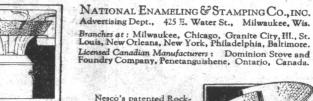
And with its better cooking results Nesco brings to farm homes the beauty, cleanliness and work-reducing features of a city gas range.



The intense heat of a gas stove burner is due to the flame striking and spread-ing under the entire base of cooking utensils.

Go to your dealer and see it. Note its graceful colonial lines, its pleasing colors, its smooth, easily cleaned surfaces, its extra shelf room. Have him demonstrate the burner-over a million of which are in use; the patented, long lasting Rockweave Wick that requires no cutting and cleans

Then have him send a Nesco to your kitchen and see for yourself how this new day gas cooking oil stove solves your every cooking problem.



Advertising Dept., 425 E. Water St., Milwaukee, Wis. Branches at: Milwaukee, Chicago, Granite City, Ill., St. Louis, New Orleans, New York, Philadelphia, Baltimore. Licensed Canadian Manufacturers: Dominion Stove and Foundry Company, Penetanguishene, Ontario, Canada.

Nesco's patented Rock-weave Wick of wire woven asbestos. Non-burning. No trimming. Flexible. Long lasting.



OIL COOK STOVE With the Blue Gas Contact Flame

National Enameling & Stamping Co., Inc., 425 East Water St., Milwaukee, Wis.







Kalamazoo FOR MECHANICS' HANDS



RUB-NO-MORE WASHING POWDER

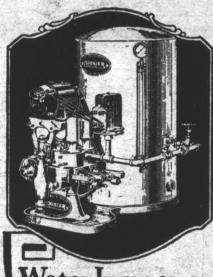
Don't Pay for 4 Months

So that you may see and use the one cream separator with the single bearing suspended self-balancing bowl, we will send an imported Belgium Melotte Cream Separator, any model, direct to your farm and you don't pay us for it for 4 months. You may have a 30 Day Free Trial to convince yourself.

Write for FREE BOOK!

MELOTTE H. B. BABSON, U. S. Mor. Chica





ater Insurance

An ample water supply is assured and insured by the Hoosier Water Selvice. When you want it, where you want it, regardless of source of supply or power, the Hoosier gives you fresh, running water for every purpose. And the Hoosier hisures that same faultiess service—city water convenience—for

And the Moosler hisures that same faultiess service—city water convenience—for years to come. Protected inside and out by the famous GALVAZINK Coating, it guards your water supply and is practically everlasting.

FLINT & WALLING MFG. CO.

Bept. C Kendeliville, ind.

Free Book/
In "How To Have Running Water" you will find the solution of your water problems. Shows all types of Hoosier installations—and there is one for every purpose and couldition. Write for your FREE; copy today.

GALVAZINK STAR WINDMILLS



Partnership Garden Successfull

Mrs. Merton Hurley

And in planning for that future garden, we meditate upon the success or failure of the garden of the previous year.

We often hear that "there is no reason why a farmer cannot raise everything he wants to eat. No reason for his having to buy his winter supply of vegetables." I set about to prove this to my own satisfaction a year ago.

Our garden in previous years has never amounted to much. The time of planting comes when the farmer is busiest. It always took a considerable amount of arguing to get my husband to leave the regular farm work long enough to get the garden started. After being started, it was often sadly neglected.

Two years ago, the idea of a partnership garden was suggested to me, and I decided to talk it over with my nearest neighbor, Mrs. F., who lives just across the driveway from me. When approached, she heartily agreed with the idea.

To begin with, we decided our gardens, heretofore, had not been well planned. Usually the seed was put into the ground with no thought whether the tomato vines would run over the carrot row, or the cucumber over the onions and radishes. As to the weather, we must trust to the Great Giver to make that right.

To have an efficient garden, we decided we must do some replanting of radishes, lettuce, and the like. Radishes and lettuce, well planted in only half the space allotted to them. After two weeks, the rest of the space was filled with more seed, and by the time the first had been used, the third sowing was planted where the first had

This part of the garden proved most successful, and both families enjoyed all the radishes and lettuce they could use. At the other end of the row of lettuce, onion seeds were planted, which we thought would be sufficient for both families for both summer and winter use. But here we made our first faulty planting-not enough seeds were sown.

In the next row spinach and the summer supply of beets were planted, two rows of peas came next, and one of string beans. After the first planting of peas had matured, the winter supply of beets was sown. But, owing to faulty seed and the negligence on the farmerettes' part, the winter supply did not mature.

Parsnips failed to make much of a showing, but a goodly supply of carrots was grown. Tomatoes were in abundance, as were green and red peppers. The cucumber crop was not a total failure, but there was not enough left for pickling.

The sweet corn was planted in another garden, and was all one could ask for. A second planting was also enjoyed. As for the cabbage, there were a few early heads left to be put away for winter use. Squash, mellons, and pumpkins did not fully mature.

Owing to the extreme dry weather, gardens did not get a very gardens did not get a very early start as to give a continuous surface.

last summer, and when they did get By using this simple, commonsense a start, grew slowly. This my partner and I overcame by putting into play, our husbands' power sprayer. With the use of little outside help, we sprinkled the garden several times during the extreme dry weather.

And now, as for my conclusion of this partnership garden idea. First, one must have a well-planned garden, Mrs. E. G. use the right kind of seeds, and plot the garden so as to have sufficient amount of space for each vegetable planted. The latter was the one great fault in our garden planting.

The men were called in to cultivate next question, the garden once a week, but Mrs. F. "Hum," said Betty, "a buttonhole, I and myself, two farmerettes, did all s'pose."-Progressive Grocer.

With the coming of spring, every- the rest of the work. We are very one thinks first of the garden. proud of our labors and this year we are planning to overcome the defficiencies of the last two years, and prove that it is possible to raise the farm family's full supply of vegetables right in the farm garden.

FASHION REVUE READY.

WHAT woman is there that does not enjoy the fashion show, and perhaps a few of the men might be included. To have a revue of the spring fashions before her when she is planning her spring wardrobe, is of great help to the woman who does her own sewing.

Our new catalog, illustrating all the attractive spring and summer styles, is now ready. Besides the newest



things in dresses for madam and miss, there is a good variety for the kiddies. And then, too, six full pages of needlework designs. Of course, a pattern is obtainable for each style and embroidery design shown at the low price of thirteen cents. The price of the book will be saved many times over on the patterns you will need. That you may get the full benefit of the new ideas it contains, we suggest that right new you send thirteen cents for your copy. Address your requests to the Pattern

Lafayette Blvd., Detroit, Michigan. NEAT SHELVES.

Department, Michigan Farmer, 1632

MANY housewives use newspapers for covering their pantry shelves, as these cost nothing extra and may be replaced at will. In addition to this. printers' ink has the reputation of being disliked by insect pests.

There is a right way and a wrong way of putting the papers on the shelves to save labor and to make their appearance neat and satisfactory. To scallop or cut the over-lapping edge in points, is not desirable. It is difficult to do it evenly, and the scalleps and points tear off.

I take several thicknesses of clean. fresh paper, and fold these so that there is a firm, even double-edge right along the outer edge of the shelf. Do not lay one paper on another where they must be lapped, but rather, slip one folded paper inside the other so

method, I only needed to change the papers on my pantry shelves once in six weeks, in place of once in three weeks. It takes three hours each time to do it. Thus, in a year, I save at least twenty-four hours of unnecessary work, or three entire working days, which are used to better advantage.-

"Betty," asked the teacher, "What is it that goes about mooing?"
"A cow," answered Betty.

"What goes about butting?" was the



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

HOW TO MAKE VINEGAR PIE.

I would like very much to know how to make vinegar pie.—Mrs. H. S. To make vinegar pie use the follow-

ing recipe: One cup of water, one cup of sugar, piece of butter the size of an egg, half cup of flour, three tablespoonfuls of vinegar, pinch of salt, a little nutmeg. Stir all together and boil. When it becomes thick, pour into a crust which should be previously baked, and cover with meringue. Bake in moderate oven to set the meringue.

TO MAKE JAVELLE WATER.

Please tell me how to make that solution that will remove ink and other stains from white clothes.—Mrs. W.

Javelle water is very effective in removing ink stains, as well as others. To make this, use:

1/2 lb. chloride of lime 2 qts. cold water lb. washing-soda

Dissolve chloride of lime in cold water; let settle and pour the clear liquid into the soda; let settle. Pour off the clear liquid, bottle, and put away in dark place.

Use, mixed with equal parts or more of water, and do not let the garments stay in over a half hour. Rinse thoroughly in several waters, and lastly in diluted ammonia water.

FLANK STEAK EN CASSEROLE.

I would like a recipe for serving flank steak so that it is fit for company. I ate it once, cooked with tomatoes, and it was very fine.—Mrs. G. F.

Flank steak en casserole is fit for a king if served this way.

1 flank steak
1 cup buttered crumbs
1 cup strained tomatoes
1 tsp. onion juice
2 cups hot water

Score the steak on both sides and rub in the seasonings. Mix bread crumbs and tomatoes and spread over one side of the steak Roll and skewer. Sear in the frying pan. Pour on the water, cover closely and bake for one hour. Lift steak to platter and thick-Put soda in granite pan; add boiling en drippings to make gravy, and pour water and stir until dissolved; let cool it over the steak just before serving.



Adventures of Tilly and Billy

Where the March Wind Blew

Outside the March Wind was saying, "Woo-oo-o -- 0000 -- 00-o."

"What is the March Wind trying to tell us?" asked Billy of Captain Blue Coat. Captain Blue Coat was really a tin soldier, and Billy called him Captain because he was the biggest of the three tin soldiers that Uncle Jim had given him for Christmas.

"I think it is saying, "Come with me, "What are you singing come with me," said Captain Blue ed Private Peter Pringle. Coat. Probably the Captain just imagined that was what the March Wind was saying, because he wanted to get out and march.

"Perhaps we can find out where the March Wind is blowing," said Billy.



"Right About Face, Forward March,"
Said the Captain.

"Perhaps," answered Captain Blue

"Right about face, forward march," commanded the Captain.

Peter Pringle marked time, and away they all marched.

Over hill and dale they marched, right, left, right, left, with the March wind saying, "Woo-oo-o-ooo," and blowing them along.

They marched and marched and Mrs. Smith?" marched until at last the March Wind blew them down into a little sheltered she can read. She can't see." dell between two hills. Here everything was still and the March Wind's, "Woo-oo-oo," could be heard only twice where my hat was and it was faintly as he went blowing high in the right on my head all the time."

BILLY BOUNCE had grown tired air .. bove their heads. But perched on of playing with his tin soldiers. a stump right in the center of the dell was something that surprised Billy very much, and even the tin soldiers, too. Sir Robin Redbreast sat there on a stump, carolling his Spring Song.

"Welcome, Sir Robin Redbreast, but I thought you were in the Southland," said Billy.

"I came back yesterday," carolled Sir Robin.

"What are you singing about?" ask-

"My secret," answered Robin Redbreast.

"Tell us your secret," chorused Billy and all his tin soldiers.
"I will show you if you will come

with me," sang Sir Robin.

"There is my secret," he said, as he cocked his little eye toward something on the ground in the far corner of the dell.

Then Billy and his tin soldiers saw what made the Robin Redbreast sing so happily. For there, peeping its snow-white head up through the cold ground, was the first crocus of spring.

"Oh, oh, oh, oh!" they all cried, for they were very much surprised to learn this wonderful secret from Sir Robin Redbreast. Then they thanked Robin Redbreast very much for his song and his secret.

"Now we must be hurrying home," said Billy.

"Right about face, forward march." commanded Captain Blue Coat.

"We have found the two alarm Lieutenant Long Legs and Private clocks of spring," said Billy, as they all marched toward home. "Spring will be here soon."

HER ERROR.

Aunty: "Did you take the note to

Tommy: "Yes, but I don't think

Aunty: "Why?"

Tommy: "Because, she asked me





ONE MILLION"GOOD LUCK" SHALKY LEADING BREEDS . LOWEST PRICES !

Big Beautiful Colored art Book Free, Thousands of pleased customers again testify this year to the Quality of our Inspected "GOOD LUCK" Chicks. Don't fail to get our ART BOOK, showing our birds in their natural colors. All leading varieties, 100% Live Delivery Guaranteed. Postpaid prices on 25 50 100 500 1000 Wh., Buff and S. C. and R. C. Br. Leghgrus, Anconas. \$4.00 \$7.00 \$13 \$60 \$118 Bar, and Wh. Rocks, S. C. and R. C. Reds, Blk, Minorcas 4.50 \$0.01 57 2 138 Wh. Wysndottes, Buff and Wh. Orpingtons, Buff Rocks... 4.75 8.50 15 77 144 Mixed Chicks, \$10 per 100 straight. Heavy Mixed, \$13 per 100 straight. Also QUALITY and SPECIAL QUALITY "GOOD LUCK" CHICKS, Bank Reference, Member I.B.C.A.

Order your ART BOOK today. It will be a treat for you. NEUHAUSER HATCHERIES, Dept. 62, Napoleon, Ohio.



CARL POULTRY FARMS

EARLY MATURING BABY CHICKS STOCK ALL BLOOD TESTED

Our careful selection and breeding has made our stock especially early in maturing. Egg production bred right into our birds. Official records. Egg production at an early age means more money for you. Every bird that produces hatching eggs for us is BLOOD TESTED FOR WHITE DIARRIFEA. This is our second year of blood testing. Our chicks are safe chicks and you can feel sure when you buy that you are getting your money's worth. Let us send our circular with photos of official high record birds. Fair prices—White Leghorns, Barred Rocks, R. I. Reds, White Wyandottes.

MILAN HATCHERY, BOX 4, MILAN, MICH.

INSURED CHICKS

BARRED ROCKS
WHITE ROCKS
RHODE ISLAND REDS
WHITE WYANDOTTES
ORPINGTONS
MINORCAS ANCONAS WHITE, BROWN, BUFF LEGHORNS

INSURED FOR 30 DAYS -- THESE LIVE -- GROW -- PRODUCE Each breed on separate farm under special breeder. Egg records actually made on customers' own grounds. Advantage to new customers so that you may become acquainted with this stock.

Chicks Delivered to You Guaranteed 100 per cent Perfect.
Hatching Eggs—All Breeds; also Turkeys, Geese, Ducks.
Let us send you these Chicks or Eggs this year. Full descriptive Circular with reports from customer's own farms.

STATE FARMS ASSOCIATION, Kalamazoo, Michigan Active member international Baby Chick Association.



KNOX



Buy Our State Accred OOK Buy Our State Accred ited CHICKS. Big Dis-count on Early Orders

Inspector left only big profitable breeders in our flocks. 15 best varieties ever produced, 9c and up. We have some pedigreed cockerels in our flocks. Some winning 1st and 2nd prize in production class. Also trapnesting the Tancred pullets. So our chicks should be as good as money can buy. Hatching eggs. Get free circular with big discount before buying elsewhere.

BECKMANN HATCHERY, 26 E. Lyon, Grand Rapids, Mich.



Downs Strain White Leghorns have been bred for egg production for nineteen years. They are great winter layers. Many of Michigan's Largest egg farms purchase their chicks from us each year. One reports 64% production in November from 775 pullets. Our flocks, hatchery and chicks are all accredited by Mich. State Poultry Improvement Assn., and Mich. State College. Write for our free catalog today. Prices reasonable.

W. A. Downs Poultry Farm, R. F. D. 1, Washington, Mich

WHITE LEGHORNS





BARRON -- TANCRED W. LEGHORNS EXCLUSIVELY. STATE ACCREDITED FLOCKS AND HATCHERY. Some Males from with records up to 295 eggs per year. Contest record flocks. Pedigreed Tancred Males. really choice, vigorous Chicks of this breeding, give us your order this season. Chick selected, strong, vigorous and healthy hens are mated to produce our Chicks. If you get Catalog and full price details before buying elsewhere.

STAR HATCHERY. L. Tinholt, Prop.

BOX 0, HOLLAND, MICHIC

HOLLAND, MICHIGAN

Buy Only Michigan State Accredited Chicks @ A Michigan Accredited Chick Is The Best Chick An Accredited Chick Is A Better Chick

Every Michigan State Accredited Hatchery has had all its flocks individually inspected by the Michigan State College. All male birds have been individually leg-banded with a State sealed and numbered leg band. Parent stock of all Accredited Chicks is pure-bred and free from all major standard disqualifications, All breeders approved are frue to type and color of parent stock. All with low victality or disease have been removed.



"Michigan State Accredited" in the advertising of Michigan Accredited Hatcheries is your guarantee of the truthfulness and reliability of the advertising has been approved by the Michigan State Poultry Improvement Association, and by the Michigan State College.

For a list of MICHIGAN STATE ACCREDITED HATCHERIES and further information, write: J. A. HANNAH, Secretary,, Mich. State College, East Lansing, Michigan,

WASHTENAW Baby Chicks Michigan Accredited

We have not only selected our breeding stock and mated our birds for best results, but we have ioined the Michigan Accredited Association. An inspector from the Agricultural College approves every bird. This work is for your protection and gives you the most up-to-date in baby chicks. Write for literature and price list. Our chicks cost no more and you can feel safe. 100% live delivery. Write today.

Get Our Illustrated Literature

We have prepared a big, illustrated circular which tells all about our chicks. It is worth your while to get it if you expect to buy chicks this year.

PRICES: Our prices are reasonable. Our chicks are good. Write today, WASHTENAW HATCHERY, 2501 Geddes Read, ANN ARBOR, MICH.



d prices on 25 50 100

1 Hocks & Brown Leghorns. 34.00 \$7.00 \$13 \$1

2 Hocks & S. C. R. I. Reds 4.75 8.00 15 Chickens—\$10 per hundred. Free catalog, 100% Live Delivery predown books your order. Our Chicke are Michigan State Accredited.

HUNDERMAN BROS., R. R. No. 3, Box 50, ZEELAND, MICHIGAN



DUNDEE PURE BRED

State Accredited. Blood tested for White Diarrhea for the past two years. Three Leading Breeds, B.P. Rocks, R.I. Reds and English White Leghorns. Write for catalogue and price list. 100% live delivery guaranteed.

> DUNDEE HATCHERY DUNDEE, MICHIGAN. BOX A.,

It will pay you to investigate one of Michigan's oldest and best hatcheries. Eighteen Fears' experience. Every chick hatched from selected, rugged free-range breeders. Officially, passed by inspectors from Michigan State College. Absolute satisfaction the hands of old customers necessitated increasing our capacity. White Leghorns, Large Type English, Special Mated American; Barred Rocks; Anconas; S. C. R. I. Reds, Buy your Michigan State Accredited chicks of an old, reliable concern, with an established reputation for square dealing. 100% live delivery, prepaid. Get our valuable free Catalog before placing your order. VAN APPLEDORN BROS. HOLLAND HATCHERY & POULTRY FARM, R. 7-C, HOLLAND, MICH.



Michigan accredited chicks from flocks which have stood careful inspection. Our Write Leghorn Cock Bird won 1st at Eastern Michigan Poultry Show, 1936, in both production and exhibition classes. We won 1st in pullet class. Catalog free. Prices (post paid) on 5.0 25 50 100 500 1000 S. C. White Leghorns. \$4.00 \$7.50 \$14.00 \$7.50 \$130 Bar. Rocks, R. I. Reds, Anconas & Bl. Minorcas 4.25 & 0.0 15.00 72.50 140 Write Rocks, White & S. L. Wyandottes. 4.56 8.60 15.00 77.50 150 Assorted Chicks, \$12.00 per 100.

DEAN EGG FARM & HATCHERY, BOX C, BIRMINGHAM, MICH.



ENGLISH TYPE

WHITE LEGHORNS

The Big, Deep Bodied Hens With Large Combs That Produce The Large White Eggs. Your success with poultry depends on your foundation stock. Start right. Our new 1926 FREE Catalog tells how and what to do to raise chicks profitably. Send for your copy before you buy any chicks

OTTAWA HATCHERY ROUTE 10, BOX 42-M HOLLAND, MICH.

PLAY SAFE Buy only from ACCREDITED FARMS. Our flocks are spected and Culled by authorized Inspectors and approved M. S. P. I. A. Chicks from heavy-laying strains only. HILLCROFT FARM is not simp Hatchery, but a Breeding Farm, and when Botter Chicks are to be hatched, we will hatch it 100% Live Delivery Guaranteed.

Postpaid prices 25 50 100 100 100% Live Delivery Guaranteed.

Postpaid prices 25 50 100 100 100% Strains Barred Rocks, S. C. Reds 450 87.50 \$14 Laying Strains Waite Rocks & Wyandottes 50 00 100 17 Order right from this ad, in full confidence, Bank Reference or Dum Mercantills Agency. Send at once "TRUTHFUL" CATALOG.

Bank Reference or Dun Mercantille Agency. Send at once for HILLCROFT FARM, Dept. 31, COOPERSVILLE, MICHIGAN,



WHITE LEGHORNS—2 grades. Best grade chicks from males from hens with known trapnest records of 245, 208, 200, 195, 200, 230, 194, 199, 195, 193, 205, 220, 201, 202, 214, 221, 211. Males sire is from 307 egg dam with five generations—both grades—accredited by and 25% Hollywood strains, All males and females of over 250 eggs, 75% TancredMichigan State College. We won 1st 3rd and 4th hens and Best Dislpay in Utility class at Muskegon in 1926. Order Now. Information cheerfully furnished.

PROGRESSIVE POULTRY FARMS P. VER HAGE, MANAGER



PURE BRED BLOOD TESTED

State Accredited and Blood Tested. All males are banded with State seal. Every chick is examined separately before being shipped, 100% of cellvery guaranteed. Two leading breeds, BARRED PLYMOUTH ROCKS & C. WHITE LEGHORNS. WITH for our catalogue and prices.

> THE SILER HATCHERY DUNDEE, MICHIGAN.



ACCREDITED CHICKS AND EGGS

White Leghorns-Anconas. Chicks hatched from free range. Mich. State Accredited flocks. Send for our catalog and prices on chicks and eggs. We guarantee 100% Live Delivery and insure chicks for one week. Satisfaction guaranteed. Write today.

M. D. WYNGARDEN ROUTE 4, - BOX 1, - ZEELAND, MICH.



GIVE BABY CHICKS A CHANCE.

THIS spring, in an effort to get a nice lot of early hatched pullets on the job by fall, I bought baby chicks before I was ready to take care of them. There was no brooder set up, so I tried the old cluck, keeping biddy and her adopted chicks in a comfortable shed which had a wooden floor.

My experience was not as satisfac tory as it was in the past with a good brooder, or even with naturally hatched chicks reared by the old hen. In the past I was always prepared to do the work right, no matter what the system. In this case the chicks got time during the day. chilled, intestinal disturbances resulted, and I had heavy losses.

It made me resolve not to invest good money in another hatching of baby chicks until I had a brooder in-



"King Richard III," Prize Winner at New York Show.

stalled in good working order in a comfortable shed or brooder house. That extremely ornate conditions are not necessary was proved by a neighbor who raises hundreds of chicks every year in the basement of his house, lacking other quarters, but he has everything in good running order, the proper kinds of feeds available, and the skill to take care of the chicks.

If you don't want to raise chicks on a large scale, clucks will do all right, provided proper conditions are observed. I have a neighbor who buys the baby chicks to give to a few old faithful hens to raise, and has the best of luck. All she does is to put them into the old-fashioned outdoor coop, right on the ground, in a protected place. cold, and early in spring some nesting is necessary. However, hovers for brooder houses are so inexpensive now, and easy to operate, that nearly every farmer will find it profitable to arrange to raise his chicks according to the most modern methods.—W. A. F.

SUNSHINE FOR HENS IN WINTER.

PLENTY of sunshine in the poultry tial factor for the best egg producmeasure, fooled the hen into working light that will give Miss Pullet a sunbath like the old-fashioned sunshine. Laying hens, winter or summer, enjoy bathing in the sunshine, and keep healthier and lay better when afforded such

It is much more difficult during the winter to supply sunshine in the poul-

that the majority of poultry houses on the farm could be much improved by putting in more windows having exposure to the east, south and west.

When I built my poultry house two years ago, I put plenty of windows on the south and ends, so that I would have abundance of light in my hen house. These windows are two sash high, and about four feet apart. I like the two-sash windows because they throw the light well back into the house and make every foot sufficiently light for the hen to scratch for their feed. Then, too, the sunlight comes into the house for a longer period of

There is no light that will take the place of sunlight for laying hens during the winter. My dusting boxes are located where the sunshine will come in contact with them for several hours during the day so that the hens may take a sunbath whenever there is sunshine. Hens, to keep in good health and lay well during the winter, must be provided with summer conditions as far as possible. Dark gloomy hen houses are productive of disease that not only causes loss, but decidedly curtails egg production. Laying hens enjoy sunshine and in order to withstand heavy feeding for egg. flow, must be provided with conditions that will promote health and contentment.- L. C. R.

It has been found lately that the violet rays in sunlight are essential, and that glass excludes these rays. So plenty of windows in a house will not accomplish the purpose of giving full benefit from supplies and rest the accomplish the purpose of giving full benefit from sunshine and may get the houses over warm during the day, which will be in contrast to the cold of the night. The use of cod liver oil in the ration will furnish deficiencies due to the lack of the violet ray, or the glass cloth can be used, as it lets the violet ray through.—Eds.

THIN-SHELLED EGGS.

We would like advice as to a flock of Buff Rock chickens, mostly all pullets. They don't seem to hold up in their laying. They will lay two dozen eggs a day for a while, and then drop back to only a dozen a day. The feed we are giving them is a ration of ground cornmeal, middlings, oats, and meat scraps, equal parts. This feed is kept before them all the time, and ground cornmeal, middlings, oats, and meat scraps, equal parts. This feed is kept before them all the time, and we feed them wheat every morning, and sometimes wheat and oats and corn in the evening. The shells on the eggs have been so thin that lots of the eggs have been broken, and we keep oyster shells before them all the time. Until February 17 there were seventeen roosters with the flock. Would that make any difference with the laying?—Mrs. E. H.

When hens have a balanced ration and oyster shells, and still produce Of course, the ground must not be too soft-shelled eggs, it pays to include two per cent ground limestone in the laying mash. This is a low cost product which will usually encourage the production of firm shells on the eggs. Sometimes a hen will lay soft-shelled eggs in spite of the best of feed, and such a bird is a cull which should be marketed. Hens that are heavy with fat are more apt to lay soft-shelled eggs than the birds of normal weight.

The number of Buff Rock hens in house during the winter is an es- the flock is not stated, but the presence of ser male birds in a tion. Artificial lights have, in no small small flock might help to curtail egg production because of fighting and gentwelve to fourteen hours per day, but eral disturbance in the flock. About there has not yet been discovered a one rooster to ten or twelve hens is a satisfactory ration in mating Buff Rocks. In a free range flock the ration can be larger, and still produce a large proportion of fertile eggs. Much depends on the individuality of the male birds.

Dean Shaw, of the Michigan State try house than in summer, on account College, recently stated that, in his of the short days, and the few hours opinion, the bottom in farm values in daily the sun shines at an angle that this state has been reached, and from the rays may be brought into the poul- this time on there will be a gradual try house. However, it is safe to say improvement in agricultural prices.

White Diarrhea

Remarkable Experience of Mrs. C. M. Bradshaw in Preventing White Diarrhea

The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Bradshaw tell of her experience in her own words:

"Dear Sir: I see reports of so many losing their little chicks with White Diarrhea, so thought I would tell my experience. I used to lose a great many from this cause, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 500, Waterloo, Iowa, for their Walko White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail.—Mrs. C. M. Bradshaw, Beaconsfield, Iowa'

Cause of White Diarrhea

White Diarrhea (Coccidiosis) is caused by a protozoal organism of microscopic size which multiplies with great rapidity in the intestines of diseased birds and enormous numbers are discharged with the droppings. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time, that saves nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect your entire flock, Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shenandoah, Iowa, "My first incubator chicks, when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko White Diarrhea Remedy entirely at our risk — postage prepaid—so you can see for yourself what a wonder-working remedy it is for White Diarrhea in baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble even stop your losses and double, treble even quadruple your profits. Send 50cfor package of Walko (or \$1.00 for extra large box)—give it in all drinking water and watch results. You'll find you won't lose one chick where you lost dozens before. It's a positive fact. You run no risk. We guarantee to refund your money promptly if you don't find it the greatest little chick saver you ever used. The Leavitt & Johnson National Bank, the oldest and strongest bank in Waterloo, lowa, stands back of our guarantee. Walker Remedy Co., Dept 500 Waterloo, Iowa.





GOSLINGS DIE.

What causes young goslings to have leg weakness and die? Geese and gander were not any relation, and geese had plenty of gravel. Is leg weakness in goslings catching?—Mrs. W. S.

Goslings may have leg weakness and die because of the presence of worms. Lack of proper range, exposure to hot sun, or a lack of mineral matter in the ration may cause weakness.

One remedy for worms consists of a mixture of one-four pounds of sulphur, one-fourth pound of epsom salts, and two ounces of powdered copperas in twenty-five pounds of mash. The goslings can be given one feed each day of the mash containing the medicine.

A little meat scrap in the ration helps to provide the bone and mineral matter which the goslings need for a sturdy growth. A shady grassy range is necessary to promote growth and keep down digestive disorders. On such a range they find plenty of fresh green feed and insect life, and usually they are easy to raise.

HEN CHOKES.

I have a pullet about ready to lay. She seems to have something in her throat that chokes her. She coughs every few minutes and seems to be getting worse. She eats all right. Can you tell me what this is, and if it is contagious to other chickens? Can you tell me, also, what makes a hen crow like a rooster. I have never been able to see, but I think it is this same pullet.—E. P.

Examine the throat as deeply as possible and see if a mass of canker is forming about the entrance to the windpipe. This can be loosened and picked out, and may save the bird. Also look for bits of foreign material, like a piece of straw or an oat hull, which may be lodged in the throat or in the roof of the mouth. Clogging of the nostrils from colds, causes sneezand I never lost a single chick from White Diarrhea, Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier." trils with tissue paper to open them as much as possible, and then inject commercial disinfectant or potassium permanganate with a medicine dropper or small syringe. Colds and all kinds of bronchial infections and spread among the flock and all sick birds should be isolated.

When a pullet appears to crow and looks like a male bird, she should be culled from the flock. Such birds are rather rare. They are beef type culls which may never lay an egg-

TESTING FOR WHITE DIARRHOEA.

from hens were much weaker than those from the incubator, except a few early ones that were perfectly healthy.

—B. H. H.

Address the Veterinary Division, Michigan State College, East Lansing, for information concerning the testing of flocks for white diarrhoea.

FLOCK INSPECTION.

Kindly advise me if my chickens have to be inspected by the state college before I can sell eggs for hatching purposes.—S. L. H.

It is not necessary to have your birds inspected by the state college before you can sell eggs for hatching purposes. There are no state laws at present governing the sale of hatching eggs or baby chicks. Many of the hatcheries have had, and will have, their flocks inspected so they can sell Michigan Accredited Chicks. By addressing Mr. J. A. Hannah, Secretary Michigan State Poultry Improvement Association, you can obtain information concerning the inspecting of

The inspection of flocks, and the testing for white diarrheoa, is for the protection of the buyer of chicks. At present it would be impossible to test all the poultry in Michigan, and so there are no laws which compel inspection, and the matter is left entirely up to the individual poultryman.





PRODUCTION SINCE 1910 All breeders accredited by Michigan State College and Michigan Poultry Improvement Association. Don't buy any chicks until you have our new 1926 catalog explaining our matings in detail and how you can have greatest success with poultry.

Write for copy, it's FREE.

WOLVERINE HATCHERY & FARMS

H. P. WIERSMA, Owner

ZEELAND, MICHIGAN.



Five of our hens laid 270 eggs at the 1925 Michigan International Egg Laying Contest. Ten birds 1924 contest averaged 232 eggs. We also hatch Brown Leghorns, and Anconas. Discount NOW on early orders. FREE Catalog gives full particulars and tells why leading egg farmers choose Wyngarden Strain Chicks. Send for copy at once.

Wyngarden Farms & Hatchery, Box M, Zeeland, Mich. To Choose



FROM

Diligent Chicks Did It & Will Do It For You

High in quality, low in price. Never before did I get so many eggs in winter time, writes one customer. Our stock culled by the very best experts. Do not pay fancy prices for chicks that are not better. Ten years of honest dealing behind us. Pullets after May first.

	500	100	50	25
S. C. White Leghorns	\$57.50	\$12.00	\$6.25	\$3.25
Barred Plymouth Rocks	72.50	15.00	7.75	4.00
S. C. Rhode Island Reds	72.50	15.00	7.75	4.00
S. C. Mottled Anconas	62.50	13.00	6.75	3.50
Mixed Chicks	42.50	9.00	4.75	2.50
DILIGENT HATCHERY & POULTRY FARM, H	arm J.	Knoll.	R. No	. 11.
HOLLAND, MICHIGAN,				

Michigan State Accredited Chicks 10c and Up Michigan State Accredited Chicas 10c and 5 Toncred, Barron and Hollywood Strains of S. C. White Leghorns from 260-290-egg foundation stock. Anconas, Sheppard's Strain direct. Extra selected Dark Brown Leghorn and Barred Rocks. All flocks milk fed. Every breeder passed by inspectors under supervision of Michigan State College. All chicks Newtown hatched. When you order Town Line chicks you get the advantage of a "Personal Service" few hatcheries can duplicate. Our Free Catalog Describes our egg contest records and show winnings. Write for it today, J, H. GEERUNGS, Owner, POULTRY



S. C. White Leghorns Barred Rocks Rhode Island Reds

Michigan State Accredited Better chicks at low cost.

Strong, healthy, free range stock. Tancred and Tom Barron White Leghorns. S.C.R.I. Reds. Parks' Barred Rocks. Best blood lines in the country.

You will make greater profits this year with B-F Chicks. Write for low price and free catalog today.

Brummer - Fredrickson Poultry Farm Box 20, HOLLAND, MICH.

HARDY NORTHERN CHICKS

Prepaid 100% live delivery. 50	100	500
White and Brown Leghorns \$7.00	\$13.00	\$62.50
Barred Plymouth Rocks 8.00	15.00	72.50
R. I. Reds 8.50	16.00	77.50
White Wyandottes 9.00	17.00	82.50
S. C. Anconas 8.00	15.00	72.50
High class stock from carefully culled	flocks.	Prompt
deliveries when you want them. Send	for fold	ler and
prices of other breeds. Our 17th	year s	hipping
chicks. You cannot go wrong with	our sto	ock.
RANSOM FARMS, Box I, GE	NEVA,	OHIO.

Barred Rocks & Reds

Chicks from blood tested pure standard bred. Choice selected flocks. Second year of blood test for Bacillary White Diarrhea. All flocks culled and mated for egg production. Write for prices.

Krueper Poultry Farm & Hatchery MILAN, MICHIGAN.

CERTIFIED CHICKS

From Mich. State Accredited Stock. Egg Line Business Bred White Leghorns Unly. Our business is breeding better Baby Chicks. As a result, two of our flocks are Michigan State CERTIFIED. Our Super-Mating contains direct blood lines of 304 and 306-egg champions. Males are from hens with 200 to 292-egg records. Many sires closely related to Tancred's 330-egg hen. FREE Catalog tells all. Write for copy.

R. F. D. 4, Box M, Hudsonville, Michigan



CHIX S. C. W. Leghorns Only

Tancred-English strain, Chicky hatched from our flocks from flocks produced by us but now owned by neighbors, mated with our best pedigreed males. As good as the best and better than the rest. Better than 200 average at Michigan Contest last year. Send for descriptive catalog before buying.

S. Harkema and Son, Holland, Mich.

Pure-Bred Baby Chicks

MICH. STATE ACCREDITED

White Leghoras, Anconas, Barred Rocks. Descriptive chrcular gives full information about our high egg bred lines. Tells why we can sell direct to you at jobers prices.

MICHIGAN Holland, Poultry Farm



MICH. STATE CERTIFIED CHICKS

From Pedigreed, Blood-tested, Trapnested S. C. White Leghorns. Every bird in our flock is Michigan State CERTIFIED, a step higher in the scale of good-chicks than Accredited Stock. Write at once for your copy of the "Story of Sunrise Farm." Describes in detail our better flocks and chicks, and how you can make a big success with poultry. Copy FREE.

Route 10 W. S. HANNAH & SON SUNRISE FARM Box M.



Pure-Bred Leghorn Chicks, Pullets State Accredited. Before buying elsewhere, get our free catalog and price list. SHADYLAWN HATCHERY, R. 2-M, Zeeland, Mich.

Leading Varieties

Michigan State Accredited Chicks and Pullets, purebred, circular free. Liberal discount on early orders.

Member of the I. B. C. A. FAIRVIEW HATCHERY

& FARMS, Dept. M. R. 2, Zeeland, Mich.

BLOOD TESTED BABY CHICKS that have been carefully culled and selected for quality and heavy laying. Flocks mated with high-class male birds. B. P. Rocks, R. I. Reds and White Legans. Write for prices. 100% live delivery guaranteed. CARLETON HATCHERY, Carleton, Michigan.



Some Merry Circle Letters

With Opinions on Various Subjects

Dear Uncle Frank:

The idea, if the boys and girls can't think of anything else to write, but tomfoolery, why write at all? No, I do not agree with Guilford Rothfuss. He's too strong—girls will not be boys. Did you ever see a girl yet who tried to make people believe she was a boy Guilford's last name ends in fuss, and he sure believes in making a fuss.

N. H. W., whoever he is, used some sense. Everything has a reason—certainly. I'd like to see Guilford going around with a girl with long hair in braids, shiny nose, and skirts to her

braids, shiny nose, and skirts to her ankles. Wouldn't everyone give him the ha, ha?
Well, I must close as I've said my share.—Bobby.

Now we have "pipers" for girls, and fussers" for boys. Guilford is all

stir and kindle our minds a wee bit—
to set us to thinking; in other words,
an educational subject. What say?
Come quick! let's dispose of that old
bobbed hair and knicker question. Our
opinions of dress, etc., is a private
matter, and not a public one by any
means.—Ella Somers.

You are good in your criticisms, but you offer no constructive suggestions. Why didn't you start an educational discussion? I would be more than pleased to have one started that would go across.

Dear Uncle Frank:
The other day I was talking about my cousins, then I remembered, I have hundreds of cousins and a lot of sisters, because I am a Girl Scout, too.

M. C.s here suggested that we write to the Michigan Farmer, and maybe we will. So don't be surprised if you get a lot of letters from Decatur. I think it would be fun to have another correspondence scramble, and then maybe all the children of the freshman English class here would write, and in that way get some correspondence that way get some correspondence with other Michigan girls and boys.

I must close and leave room for somebody else. I hope this will slip by Mr. Waste Basket.—Your niece and cousin, "A Little Nurse."

One does increase the number of his relations when he becomes a M. C. doesn't he? Yes, this club is for work as well as for play. Perhaps we can work out a school scramble. Thanks for your suggestion.

WHAT IS BEAUTY?

My Dear Uncle Frank:

Here I come again. I wonder if everyone has forgotten me. I guess I have been sleeping, but the last two issues of the Michigan Farmer has awakened me.

I like "Peter's" set of rules, and hope she lives up to them.

There is a grand lesson in the poem, "Bonnie Blue Eyes" sent in. But as for her letter, she's got the wrong idea of "beauty." A girl with a pretty face might be called beautiful, but I think handsome is a better word. A mother's face bearing lines of care for her loved ones, bears more beauty. in my opinion, than a young lady's nandsome face.

Then another form of beauty is in God's great out-of-doors. Every bird that sings teaches us of beauty. Each flower that blooms, and each leaf that flutters, calls for us to notice their beauty. Every star that twinkles is to me a speck of golden beauty. Of course, there are many ways to define beauty, but I think handsome suits best a "pretty" face.

Mrs. E. B. Cole, I am certain I don't know if you are discouraging us or not. I was just about ready to get angry, then I read the letter from a "Busy Farm Mother," and felt good again. If more people would be kind and helpful, even with words, it would set a better example for this new generation. Thanks, dear "Busy Mother."

Mrs. Cole, I am a Golden Circler and am not ashamed, either. Moreover, I don't think we need leave the M. C. department.

The Michigan Farmer is getting better every day.—With best wishes, I am, "Wildflower."

Speaks From Farm Experience

H ON. THEODORE E. BURTON, of Ohio, long prominent in both houses of congress, is a man who has won the respect of men in all parties by his courageous warfare against the so-called pork-barrel" extravagance in national appropriations. He has won a high place among the distinguished men of America by the exercise of the qualities he here recommends—namely, "Industry, perseverance, reading good books." He is a great student.

From my own boyhood, I knew much of the hardship and arduous labor of the farmer, but after all, his happiness and prosperity are more thoroughly assured than that of any other element of our population. His life is cast in the most wholesome of all theaters. In all the great branches of industry, in the fields of finance, and in the activities of the profession, the sons of farmers have enjoyed the greatest pre-eminence. Nor is this surprising, for they are free from the distractions and the unwholesome surroundings which often make life but a travesty.

From my own experience as a farmer boy, I urge them to be faithful in their work, and to spend their spare time in studying scientific methods of farming and in reading good books which discuss the problems of the day so that, in their manhood they may be qualified to discharge their highest obligations as patriotic American citizens. For to them the country looks for its highest standards.-Theodore E. Burton.

right though, at least he knows how to do things well enough to win prizes.

Dear Uncle Frank:

Dear Uncle Frank:

I received your M. C. button and membership card. I wish to thank you for-them both. As for the rules that go with it, I haven't broken any. I won't mention any particular things I have done, because I haven't had it long enough to do much, only pay attention to my school husiness and home work.

I think that most of the mothers'

I think that most of the mothers' letters were nice. I like to hear them

BOS Quality Glass A CHICKS

From Michigan Accredited and State-inspected stock; S. C. English White and Brown Leghorns 12c; Sheppard's Anconas 13c; Barred Rocks and R. I. Reds 14c; Assorted Chicks 10c. No money down with order. Pay full amount ten days before chicks are shipped. Also C. O. D. Bank references. 100% live delivery. Catalogue free.

THE BOS HATCHERY, R. 2-M, Zeeland, Mich.

MICH. STATE CEPTIFIED CHICKS

letters were nice. I like to hear them say they read our letters and enjoy them. I won't criticise anything they have said, for I don't think it is right to criticise your elders.

As for discussions of what the boys and girls have been, I don't like very well, although I did send a letter in myself. I would much rather discuss about what we wish to be when we grow up, and why.

I am planning on being a school teacher or a nurse. Why, I can't exactly tell, but they seem to appeal to me most of all.

me most of all.

I will close now, and not take up any more of your time.—Marie Looker,

That's just the way to be-so busy that you haven't time When one's mind is filled with wholesome things the other kind cannot enter. I believe that it is good to tell about ambitions.

Dear Friends:

The parents' letters interested me greatly, especially the one written by "Only a Michigan Mother," (which induced me to write). Her suggestions, in my estimation, were just wonderful! It certainly is tiresome to continually read of bobbed hair and knicker problems. It's so simple. What do we care what others think of this problem? Personally, I believe this argument renders no benefit whatever to any of us. Why not choose a worth while subject? A subject that would

I am not going to write about bobbed hair and knickers, because I think they are both all right. Let's talk about books, or something that will teach us. This club is not alone for play, but for work.

My chief ambition is being a nurse. I hate to see people sick, I guess mostly because I have always been sick, but I like to take care of sick people, and make them well.

Today for English, we had to write to some unknown person in the freshman class of another state, and I wrote to Sweetwater, Texas. Some of the

From the Crippled Children

Crippled Children's Home, the place for which we are raising our new Radio Fund. A few of the letters are given below; others will be published later. If you wish to write to any of the children, address them in care of the home, as above, at Farmington, Michigan. I am sure they would be glad to get letters from Merry Circlers and others.—Uncle Frank.

Dear Friends of the Merry Circle:

teen years old now.

My home is in Pontiac, but I was born in Tacoma, Washington. I have a mother, father, four sisters, and one brother. I have been in hospitals in Scattle, Washington; Sunny Side School, Coldwater, Michigan; Okawanna Camp, Port Huron, Michigan; and the Children's Hospital, Detroit, Michigan. At present I am at the Convalescent Home, Farmington, Michigan, and I think it is a lovely place.

Dear Friends of the Merry Circle:
I have enjoyed the Michigan Farmer for a long time. My home is on a farm near Lansing. But I have been at the Children's Convalescent Home for one month.—Violet Lenon.

Dear Friends of the Merry Circle:
Hearing about you in the Michigan
Farmer Magazine, I decided I would
write you something of my life. I
think your work is wonderful to make
so many children happy, and I think
the "Merry Circlers" is just the name
for you

for you.

Most of my life has been spent in a hospital. At six months of age, I was

HE other day I received a nice stricken with infantile paralysis, and bunch of letters from boys and girls who are at the Michigan pled Children's Convalescent te, the place for which we are raisteen years old now.

think it is a lovely place.

In the mornings, we have school from nine to half past eleven, and the afternoons from half past twelve to three. I have the regular seventh grade subjects, with plenty of handwork, consisting of dressing ornament dolls, weaving rugs, making bead mats, scrap books, flowers from paper, and sewing quilt blocks.

In English we have written stories for the Hospital School Journal. We shall be glad to receive letters from the girl and boy readers of the Michigan Farmer, and we want to thank the unknown friend who is sending this magazine to us.—Robina Johnson.

today.

PURE DRIED BUTTERMILK

Fresh from the churn. Speeds up egg production and promotes rapid, healthy growth of baby chicks, birds, young calves and pigs. We can ship one sack or a carload.

For sample and prices write-

Swift & Company Feed Department Chicago





For Poultry Houses, Scratch Sheds, Hog Pens, Hot Beds, etc.

Admits the hacklesing, vitamin-producing Ultra-Violet Rays which glass shuts out! Reduces tendency to rickets and weak legs, increases egg production! Unbreakable, transparent, weather-proof, light in weight. Easy to install anywhere with shears, hammer and tacks, Better than glass, not only for poultry houses, but also for hop pens, coldframes, hotheds and all outbuildings. MADE ON STRONG WIRE MESH-not coated cith! VITREX is different, durable and time-tried. Used successfully the world over for many years. Send 55 with coupon for trial roll 3.-ft. wide containing 36 so, ft., or write for sample. Agents wanted—write for proposition. J. D. HAGE & CO., Dept. Vitrex D-36, 80 Wall St. N. Y. C.

J. D. HAGE & Co. D 80 Wall St., New Yo Enclosed is (check) trial roll of VITREX.	Please ship prepaid to:
Name	
Address	通信证法法国国际公司的

Mixed Sentence Contest

FOR this contest I have mixed up a sentence which you will find in this issue. Please straighten it out and then find the correct sentence, telling in which article you found it. Here is a hint. You will find it in the forward part of the paper.

The mixed up sentence follows: Eh how hesocos nozesos soles.

Please put your name and address in the upper left-hand corner of your paper, with M. C. after your name if you are a Merry Circler. Write nothing else on the paper, but put your letters on separate sheets.

All the correct contest papers will be mixed together and ten lucky ones pulled out. The first two will receive handy school pencil boxes; the next three, popular Webster dictionaries. and the next five, handsome pocket pencils. All who have correct answers and are not Merry Circlers, will receive M. C. cards and buttons.

Send your contest papers to Uncle Frank, the Michigan Farmer, Detroit, Michigan, before March 19, as the contest closes then.

HOW UNCLE FRANK SHOULD ACT.

I BELIEVE that he should try to make the "Merry Circle Corner" as interesting as possible—which he does. I believe he should have more writing contests, for instance, discourses on fleas, angleworms, bedbugs, etc.—they're the only kind I can ever win. I wish he would make the contests a little harder, so that the judging would depend on the merit of the papers, instead of on chance, as so many of the contests do. By this I mean we should have more drawing mean we should have more drawing contests, and poetry contests, instead of Read-and-winners, ad contests, and

of 'Read-and-winners, ad contests, and such.

And now I'm going to get personal. Uncle Frank, I don't know anything about your table manners, but I'll give you a few hints: The best way to eat peas is to mix them up with your potatoes—then you can be assured that they won't roll off your knife; goggles are always proper for eating grape-fruit; and ear-muffs are essential to the consumption of watermelons. I mean the real juicy ones. Spaghetti is meant to be consumed by inches—if you know what I mean. If you don't, just watch a chicken eating an angleworm sometimes. Ulp! Personally, I never eat spaghetti. It gives me the jim-jams. But I love to watch others struggle with it.

Another thing: if your soup is hot, you should never blow on it. That is exceedingly bad form. Just take off your hat, or your napkin, and fan it gently—never vigorously—and when it shows signs of recovery, then, and not until then, you may start to guzzle it.

But the best way for Uncle Frank

shows signs of recovery, then, and not until then, you may start to guzzle it. But the best way for Uncle Frank to act in this case, would be to take one hasty glance at this crazy epistle, and gently, but firmly chew it up. And now, that's that, Sister Shoemaker, will you please pass the apple-sauce?—Guilford Rothfuss

JOKE CONTEST WINNERS.

THE results of this contest showed that those interested in this department are also interested in jokes. And why shouldn't they be, a joke makes a person laugh, and laughter is always good for one.

Pencil Boxes.
Carson Nelson, R. 1, Filion, Mich.
June E. Bolzman, Vassar, Mich.
Dictionaries.
Ruth Swartz, R. 2, Howard City,

Marcella Cox, R. 1, Rockwood, Mich.
Annie Baranis, Vassar, Mich.
Pencils.
Alice Hinken, Jenison, Mich.
Dale Berger, Jenison, Mich.
Jennie A. Kok, R. 3, Zeeland, Mich.
Melvina Strong, Manchester, Mich.
Lauretta Fraser, Gregory, Mich.

THE MERRY CIRCLE FUND.

E have received contributions to the Merry Circle Fund, March 1 to 6 inclusive, from the fol-1 to 6 inclusive, from the following, who are helping to get a radio for the crippled children: Elaine Stryker, Eathel Fay Sharp, Florence Lilkowski, Sherwin V. Hungerink, Doris Bluemly, Alice Aldrich, Mrs. Leland Reid, Maurice C. Willman, Rose Van Houton, Geneva Kohlenberger, Martha Kommes, Lauretta Fraser, Sylvia Mortensen, Ruth Swartz, Alton Lischke, Herbert Hauck, Beth Amos, Mary L. Doan, Susie Lauerman, and Evelyn Bowen.

VAL EGG BRED LEGHORNS CHICKS FROM CONTEST WINNING BLOOD LINES

HIGH OF the HEN WINNING PEN MICH. EDO-LAYING CONTRY

Our White Leghorns won the 1933 Michigan Egg Contest, 1000 birds entered. Cotest average 170 eggs per bird. Our pen averaged 241 per bird. Fifty sisters of these cotest winners averaged 200 eggs per bird at home. Brothers and sons of these birds het hem matings from which I will hatch this year. The Michigan Contest had the high average egg production of any contest in the country where 1000 birds or more are entered. OUR CHICKS ARE MICHIGAN STATE ACCREDITED

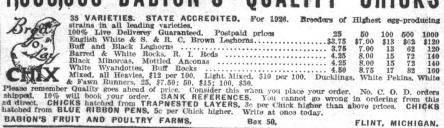
When you buy Michigan Accredited Chicks you get chicks from Breeders that have been passed by inspectors from the Michigan State College. In spite of increased demands for our chicks we have neither increased our capacity now prices.

"75% of our business is from old outsomers." Even though we are constantly improving our stock we are glad to pass this bettered quality on to our old customers, who have come to depend on us for their yearly supply of profitable chicks. Write for Free Circular that tells how you can get started with chicks from these winning blood lines at moderate prices. Youtoo can join the list of satisfied users of this Royal Strain. Her official record is 286 eggs. If eggs laid before being sent to con-test were added, it would make a total of 315 eggs in 14 months.

ROYAL HATCHERY & FARM, S. P. Wiersma, Prop. R.-2 BOX M. ZEELAND, MICHIGAN,

OHIO ACCREDITED CHICKS **Immediate** Shipment Order

1,000,000 BABION'S



BABION'S FRUIT AND POULTRY FARMS, FLINT, MICHIGAN. Bex 50,

UPERIOR BRED CHICKS Superior Chicks gave \$5.00 worth of eggs per hen per year to Prof. Holden, of Whitehall, Mich. They are ready to do the same for you, because they are bred for high egg production. One of the most modern breeding plants and hatcheries in Mich. Get your chicks from a strain that has Proven under Practical Farm Tests that it is Profitable.

Every breeder passed by inspectors from Mich. State College. The Michigan Accreditation plan is one of the strictest plans of accreditation in the U.S. Our big free catalog describes our breeding methods. World famous blood lines blended. Tells how we give service equal to any, and better than many. Get our free catalog. It will help you make money. SUPERIOR FARMS, INC. BOX 359 - ZEELAND, MICH.

Reliable Chicks Make Reliable Layers



New Washington, Ohio





BRED-TO-LAY CHICKS MICHIGAN STATE ACCREDITED

Member International Baby Chick Association S.C. White and Brown Leghorns, Anconas, Black Minorcas, and Barred Rocks. Order quick for early deliveries. 1926 Catalog Now Ready. Write for FREE Copy.

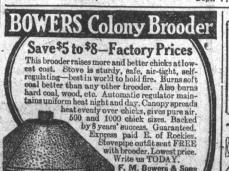
WE GUARANTEE 100% SAFE ARRIVAL IN GOOD HEALTH AMERICAN CHICK FARM, BOX M. ZEELAND, MICH.

BUY EGG-BRED ACCREDITED CHICKS

OF PROVEN STRAIN FROM A PROVEN BREEDER

Producer of Egg Contest and Chicago Winners in EGG BASKET BUFF and PROFIT-PAYER WHITE LEGHORNS. Pure Tancred, Tom Barron, Ferris Strains. Chicks and ergs sired by blood of Heasley's Pride, official record 293 eggs. Contest Pen of 11 averaged 240 eggs. Old customers getting this blood and getting results. Rush orders for present discount.

DR. L. E. HEASLEY, Dept. F. GRAND RAPIDS, MICHIGAN. GRAND RAPIDS, MICHIGAN.



F. M. Bowers & Son 1423 W. Wash. St. Indianapolis, Ind.

CHICKS and PULLETS

Pure-bred Tom Barron Strain English White Leg-forns only. Bred for high egg production. Every chick from Inspected, Tested, high egg produc-tion Flocks. Descriptive circular gives full infor-mation and tells how to be successful with poultry.

ENGLISH WHITE LEGHORN FARMS





Come to Pensacola

Our Last Frontier

THE rich virgin soil on the uplands of West Florida is our last frontier of fertile acres. Here, land which will yield a wide diversity of products is obtainable at reasonable prices.

Natural decisions 56 inches of

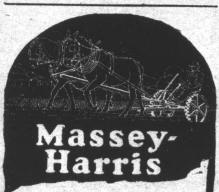
Natural drainage—56 inches of rainfall—a 300-day growing season—plenty of sunshine—nights cooled by Gulf breezes—mild winters—all-the-year-around green forage. These conditions are especially favorable to dairying and poultry-raising. Satsuma oranges, grapes, blue berries, pecans and truck crops yield abundantly and find a ready market.

You need take nothing on faith. The productiveness of the soil and the comfortable profits which it yields has been demonstrated. And, too, there are good schools—low taxes—pure water—a climate of perpetual springtime.

For reliable information and booklets write H.L. Morrow, Secretary, Pensacola Chamber of Commerce, Pensacola, Fla.



GRAPE PLANTS at reduced prices. Fruit trees. Small fruit plants, Shrubbery, Evergreens and Roses, CATALOGUE FREE, W. A. FEATHER & SONS, BARODA, MICH.



Mowers Are Clean Cutters

If you wish to do your cutting with only one horse, you'll find the Massey-Harris No. 11 Mower exactly fitted to your needs. It is light of draft yet cuts all kinds of hay as clean as any large machine.

Nos. 20 and 21 for Large Farms

If you use a team or a Fordson, then you need one of these larger Mowers. They are strongly built for hard service by an organization that has been making Mowers practically ever since scythes went out of fashion.

These Mowers are splendidly balanced and are free from side draft. Special construction permits the Cutter bar to follow rough ground readily. The cutting begins the instant the wheels start. Special Fordson Hitch for tractor work.



See the Massey-Harris dealer during Better Farm Equipment Week," March 15-20.

Write for our large Catalog—today

Massey-Harris Harvester Co.

Builders of Warrented Farm Machinery Since 1850 Dept. F Batavia, New York

Paral Health

CRIPPLED CHILDREN.

A CRIPPLED child, bent almost double with his deformity, selling newspapers on one of our street corners, is a picture that long haunted the memory of my boyhood.

We see such sights no more. Yet there are such children, no longer exposed on street corners, but shut up to waste away in some remote farmhouse. Do you know of such? If so, please let it be known, that such cases may be cared for, and in many instances skillful surgery will give enough restoration of function to turn the cripple into a useful citizen.

I think it was members of Scottish Rite bodies who began this work at Atlanta, Georgia. I visited their hospital a short time ago and saw some in which it compares unfavorably with whole wheat flour is, that it loses some elements in the milling processes. These may be made up by eating other foods. A diet of exclusive white flour would be unhealthful, but it is a healthful food when eaten as a part of a well-balanced ration.

TROUBLE WITH PILES.

I am seldom able to do a full day's work lately. About all that I know to be wrong is piles. Would that do it?
—S. B. S.

It is possible that the piles may be the cause of the trouble that you are having. You do not tell me how bad the piles are, but since you are having so much trouble it is quite likely that you will have to have them removed by operation. A good doctor can often



After All, One of Our Greatest Concerns is that He will Grow in Wisdom and Stature.

of the marvels they have wrought in salvaging little human wrecks and turning them into hardy youngsters able to play and work. They have a long waiting list, and one of their few rules of exclusion is that no child whose parents are reasonably able to pay for treatment can be admitted while destitute children are waiting. So this is one case where the poverty stricken are given the advantage.

The Nobles of the Mystic Shrine took up this work in 1920, voting to assess each member \$2.00 a year during their entire lives to erect and maintain the "Shriners' Hospitals for Crippled Children."

The first unit was dedicated in Minneapolis-St. Paul in March, 1923. It has a capacity of sixty beds. At Shreveport, La., in the same year a unit was opened with fifty beds. The San Francisco unit was opened also in 1923. Other units have been opened at Portland, Oregon, with fifty beds; at St. Louis, Missouri, with 100 beds; at Springfield, Mass., with fifty beds, and at Philadelphia, Pa., with fifty beds. Chicago, Illinois, is to dedicate a unit in 1926.

Six hundred beds are now provided, and this means about 2,400 crippled children a year, since the average time per child is three months. No difference is made because of religious belief. Protestants, Catholics and Jews are admitted side by side. It is a splendid work, and one in which you may have a small share simply by spreading the news to those in need.

OTHER FOODS NEEDED WITH WHITE FLOUR.

Do you consider that graham flour is as unhealthy for food as white flour? Graham is not exactly the same as whole wheat flour, as I understand it. Is it unhealthy?—B. G.

No. The fact is, that white flour is not unhealthful, either. The only way

manage this operation in his office without sending you to a hospital. He would inject each pile tumor with a local anesthetic so that there would not be much pain. Such an operation would not keep you long from your work. I recommend that you have it done.

NERVOUS BREAKDOWN.

What are the symptoms of a nervous breakdown? I have feelings I can't describe. The bowels do not act just right, sometimes loose, sometimes constipated. Could it be tuberculosis of the bowels?—B. B. L.

I cannot describe nervous breakdown in the brief space allowed, but my experience is that persons who most fear it are seldom attacked. It comes more to the busy men and women who drive at top speed and never stop to think of the outcome. I see no reason to think of tuberculosis of the bowels. If you can manage, take a good vacation with change of scene and people, and a good deal of absolute rest.

BULLET IN LUNG.

A., while showing B. how rifle works (B. asking him to), shot B. through the lung. Some way or other the bullet tore in two. The doctor told A. that one half of the bullet was taken out and the other half stayed in the lung. A third party, upon talking about this, told A. it was not true. He argued with A that the doctor lied about the other half of the bullet being left in the lung. He said the man could not live over one month in the condition the doctor said (B) was. It is over a month now, since the accident happened. Please settle this argument.—E. S. C.

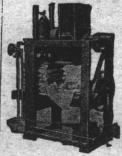
The possibilities of the tissues of the body for encapsulating a foreign body, and getting along with it, have often been shown to be very remarkable. But why not have this settled by an X-Ray picture? There is no need for doubt in this age,

CIDER

Sells Undergrades —At Big Profits—

THE wise orchardist of today depends as much on his cider production for profits as upon his grade A fruit. Ciderpure, sweet and sparkling—is now in great and growing demand, and offers the sure way to a PROFIT-MARKET for undergrade apples.

Mount Gilead HYDRAULIC CIDER PRESSES



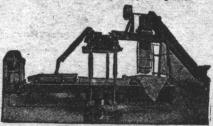
Have led the field in cider making for more than fifty years. Ruggedly built for years of dependable service, they press the greatest possible amount of juice from your fruit and assure you thoroughly efficient, trouble-free operation—always. They range in capacity from 80 bushels of apples per day to the largest custom sizes that press 1,500 bushels per day, and include roadside, orchard and custom presses.

The Mount Gilead Process

Is a recensly developed Process for refining and bottling all kinds of fruit juices. It produces a pure,
delictous juice that remains sweet indefinitely without
the use of any preservatives or other adulterants.
Write us today for our interesting book "A Golden
Harvest from Undergrade Apples." Contains complete descriptions of Mount Gilead Hydraulic Cider
Presses and the Mount Gilead Process.

THE HYDRAULIC PRESS MFG.CO.
Originators of the Hydraulic Cider Press
804 LINCOLN AVE.
MOUNT GILEAD, O.

The most complete line of machinery for fruit products plants, including cider presses for every need.



MEN WANTED—to sell dependable fruit trees and shrubbery. Big demand. Complete cooperation. Commission paid weekly. Write: Willems, Sens' Nurseries, Dept. 4, Rochetter, N. Y.

STRAWBERRY PLANTS
Raspberry, Blackberry, Grape, etc. Fruit Trees, Bosee,
Ornamentals, Bulbs. Prices reasonable. Catalog free.
J. N. ROKELY & SON. R. No. 6, Bridgman, Mich.

BETTER AND BETTER ALWAYS BEST After TENYEARS OF USE in every Part of the world

OF USE in every part of the world—in all climatic conditions—in all kinds of wind and weather—after ten years of constant study and effort to improve it—the Auto ciled Aermeter is teday a proven machine, tried and tested.

MORE WATER WITH LESS WIND When you buy the Aermotor you buy a machine that has been subjected to every test of service and wear.

and perfectly self-oiling and self-regulating with the most simple and effective furling device, the Aermotor gives more service with less attention than any other farm machine.

Whether you are in the market for a windmill now or will be later, write for circular

AERMOTOR CO.

Chicago Dullas Des Moine Kansas City Minneapolia Oakland Backed by grantest experience in bullding atom windonlile.



FARM RELIEF LEGISLATION.

HE middle west drive upon congress for agricultural relief legislation is on. It began when the committee of twenty-two, selected at the DesMoines conference to represent eleven middle western states, headed by George N. Peek, of Illinois, establishel headquarters in Washington.

A conference of the committee of twenty-two with a delegation of congressmen and senators representing each of the eleven states, held March 1, was attended by Governors John Hamil, of Iowa, and Carl Gunderson, of South Dakota.

At this meeting congress was warned by Mr. Peek, that if no relief legislation is enacted at this session, a new political alliance of the south and west could be expected.

PURE SEED BILLS.

THE clover and alfalfa seed dyeing bill is said by its friends to be in a favorable position, and in a fair way to pass congress this session.

A new pure seed bill introduced by Representative Hare, of South Carolina, covers all sorts of seeds and bulbs entering into interstate commerce. It provides that all interstate shipments of seeds or bulbs shall bear a uniform label showing name, variety, and percentage of purity, or freedom from inert matter. Any seed or bulbs purporting to be of one variety, containing more than three per cent of any other variety shall be deemed as adulterated, unless labeled so as the counties, and the balance was placto give the true content. Any seed or bulbs offered for sale under the name of another variety, is held to be misbranded.

PRODUCER-CONSUMER EXPERI-MENT OF FUTURE.

AST year congress authorized the L AST year congress to conduct expostmaster-general to conduct experiments with fifty rural routes to encourage the direct shipment of foods from producer to consumer by parcel post. This experiment has just ended in failure. Notwithstanding a systematic attempt was made to interest postmasters, rural carriers, producers and consumers in the direct from farm to consumer project, with low rates of postage, and commissions to carriers. little interest was aroused and the volume of business was negligible. In reporting the experiment, the postmaster-general says that the result leads to the conclusion that there is no public need or demand for this character of service.

ANTI-DISCRIMINATION BILL.

SENATOR Capper's bill to prevent discrimination against farmers' co. operative marketing associations by boards of trade and similar organizations, is being vigorously supported by the legislative committee of the American Farm Bureau Federation. Under the Capper bill the cooperative would have the same right as any other trad- G. H. & M. will be abrogated by the es and boards of trade.

RECOMMENDATIONS ON TARIFF.

THE National Board of Farm Organizations, through its secretary, continues to demand abolition of the United States Tariff Commission in senate your ailment by looking at you, the committee hearings. The tariff commission, however, is apparently little to the merit of the corn he intends to worried over the attacks that are be- plant. Today's requirements demand ing made against it. It has just made more careful work from the doctor, and its recommendations to the President certainly will not excuse the farmer on its butter production costs investi- for not making a germination test of gation, and it is understood that the his seed corn.

report recommends a full fifty per cent increase in butter tariff duties. This would make the rate twelve cents a pound, which, if President Coolidge decides to make the increase, should be effective in eliminating importations of butter and adequately protect the American creamery industry.

It is worthy of note that under the flexible tariff law, every important increase in tariff rates announced by the President, has been on farm products and favorable to the farming industry.

AMENDMENT TO GRAIN FUTURES ACT:

A N amendment to the grain futures trading act, introduced by Senator Capper, of Kansas, seeks to prevent manipulation of the grain markets, and consequent excessive price fluctuations. Trading in futures would be limited to one million bushels daily for a single trader. This limitation does not apply, however, to bona fide transactions. Each board of trade designated as a contract market would be required to enforce this provision.

Senator Capper has been making a careful study of the operations of grain exchanges under the futures trading act, and this amendment is his effort to strengthen the act so that it will be more effective in preventing market manipulation to the disadvantage of the grain growers.

STATE CAPITAL NEWS.

(Continued from page 348). ed in the state highway fund. The cost of collecting the weight tax was \$521,534. Receipts from chauffeurs' and opeartors' licenses. duplicate licenses and transfers totaled \$552,677 .-25. Receipts from used car dealers' licenses, titles, duplicate titles, and title transfers and assignments amounted to \$616,858. Thus the total state receipts from above sources amounted to \$22,084,219.51. While the law makers were glad to know how much money the state received from these sources, many of them felt that they should have similar information as to where the money went.

The Grand Trunk Railroad deal, as discussed in the Michigan Farmer last week, finally passed both houses with but very little opposition. In its final form this bill provides that the state will obtain a new right-of-way for the Detroit, Grand Haven & Milwaukee branch of the Grand Trunk between Royal Oak and Birmingham, about eight and one-half miles in length. The state will advance the necessary money to finance the project from the state highway sinking fund, and will pay that fund 4.3 per cent interest during such use. The railroad company agrees to pay the state for its new right-ofway \$200,000 a year until the account is settled, and give the state the present right-of-way to be used for widening Woodward avenue. When the state is fully paid, the old charter of the D., company will then pay annually to the state in primary school fund taxes about \$350,000 instead of the \$25,000 a COL. JOE FLESHER, Auctioneer year which it has been paying under its present charter.

The old family physician guessed same as the average farmer guesses as

hictite Fence

A Genuine Columbia Hinge-Joint Poultry Fence with one inch spacing between lower line wires

HERE is a new fence that is needed by all who raise chickens,—strong, flexible and durable,—and made in heights from 24 inches to 72 inches. This new fence, which is especially adapted to confine young chickens, is a genuine

Columbia Supezinced Fence

It is made complete in our own mills, and fabricated on modern machines which employ a new engineering principle of fence weaving. It is a perfected hingejoint fence with one-inch spacing, Super-Zinced against rust, and worthy of the "Columbia" name.

All Super-Zinced fences are guaranteed unexcelled in quality and durability, and include styles weights and designs for farm, poultry, garden and lawn. Look for our brands when try, garden, and lawn. Look for our brands when try, garden, and lawn. Wire, gates, steel posts, you buy fence, barbed wire, gates, steel posts, wire nails, etc. Write for the handy account book and fence



AUCTION SALE

Having decided to quit farming, I will sell at Public Auction, at the Bergtold Farm, located 4 mi. of Midland, or 1½ mi. north of the Midland coal mine, on

MARCH 17th, COMMENCING AT 9 O'CLOCK

Tunch served on place all day.

24 HEAD OF REGISTERED HOLSTEIN-FRIESIAN CATTLE 24 HEAD OF REGISTERED HOLSTEIN-FRIESIAN CATTLE

Herd sire born April 9th, 1923. (Cass River Butter Boy). The sire of this bull is a grandson of
Maple-Crest Korndyke Hengerveld, the first bull in the world to have a 1200-lb. dam, a 1200-lb. granddam, with three direct generations of 30-lb. cows, and is the first bull in the state to have 100 A. R. O.
daughters. His dam made the remarkable record of 29.82 lbs. of butter, with 4852 lbs. of milk at 29
yrs. of age, and is by a brother to two cows with records above 31 lbs. 11 milch cows under 8 yrs., 2
heifers to freshen scon, 7 heifer calves, 1 bull calf from present herd sire.

1-bull 15 mo. old, 1 bull 10 mo. old.

4 young mares, 1 young horse weighing 1600, well broke.

All tools, feed and grain, some household goods, 2 brood sows, 1 thoroughbred Duroc Jersey boar, 2 yr.

All sums under \$10.00 cash, over that amount 9 mo. time will be given on good bankable notes drawing 7% interest, payable at the People State Savings Bank of Midland. No goods to be removed until settlement is made with the clerk.

WM. J. BAKER, CLERK. GEO. BERGTOLD Props. COL. FRED COTTON COL. JOHN BAILEY

DISPERSION SALE

OF REGISTER OF MERIT JERSEY CATTLE AT BROOKWATER FARM

4 miles north, 2 1-2 miles west of ANN ARBOR, MICHIGAN

March 23, 1926

er as regards membership in exchang. Grand Trunk, which means that the

FEDERAL ACCREDITED HERD Write for a catalog

J. B. ANDREWS, Mgr

Auctioneers

POULTRY

From trapnested, pedigreed blood lines. E.A.B. COCHERUS context winners for years. Shipped C. D. COCHERUS Coursets winners for years. Shipped C. D. COCHERUS Williams of the Contest with the Contest of the Contest of

HUSKY CHICKS

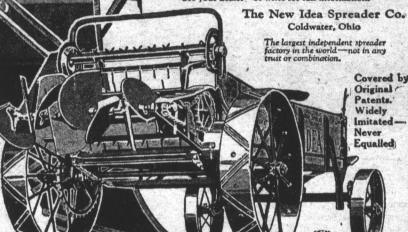
W. and B. Rocks, Reds, Wyandottes, Catalog, and culted for production and standard quality of the circular, LAWRENCE HATCHERY, B. Grand Rapids, Mich. Healthy, famous strains, tested, winter-laying, pure breds, Satisfaction guaranteed, W. and B. Leghoms W. and B. Rocks, Reds, Wyandottes, Catalog

We ship C. O. D. and guarantee 100% live delivery of sturdy, pure-bred chicks. Wh. Br., & Buff Leghorns, 13c; Bd. Rocks, Wh. Rocks, S. C. Rods, Anconas, 14c; Buff Rocks, Buff Orps, Wh. Wyan., 15c; Black Minor., 15c; Mixed, 10c. Comas, 14c; Buff Rocks, Buff Orps.; Wh. Wyan, 16c; Black Minor, 15c; Mixed, 10c. Less than 100 chicks, lc each more. SILVER LAKE HATCHERY, Box M, Silver Lake, Ind



NEW IDEA leads again—in improving spreader construction. Our new models are all equipped with "Balloon Tires"—extra wide, easy-running wheels with continuous cleats. This latest improvement makes it easy to handle the spreader and without cutting up the soil—preon soft ground without cutting up the soil—prevents "skidding"—and insures smoother running—lighter draft—and longer life.

You want the utmost in spreader quality. To be sure of getting it, insist on the genuine New Idea. See your dealer—or write for full information.



BSORBINE TRADE MARK REG.U.S. PAT. OFF.

Reduces Strained, Puffy Ankles, Lymphangitis, Poll Evil, Fistula, Boils, Swellings; Stops Lameness and allays pain. Heals Sores, Cuts, Bruises, Boot Chafes. It is a SAFE ANTISEPTIC AND GERMICIDE

Does not blister or remove the hair and horse can be worked. Pleasant to use. \$2.50 a bottle, delivered. Describe your case for special instructions and Book 5 R free.

ABSORBINE, JR., antiseptic liniment for mankind, reduces strains. Painful, Knotted, Swollen Veins. Concentrated—only a few drops required at an application. Price \$1.25 per bottle at dealers or delivered.

W. F. YOUNG, Inc., 488 Lyman St., Springfield, Mass

PULVERIZED LIMESTONE

Finely Pulverized High Calcium Limestone, either in bulk or bags. Highest grade sold in Michigan. Campbell Stone Co., Indian River, Mich

Free Trial of Proved Swedish **Abortion Treatment**

Famous Foreign Formula quickly relieves badly infested herds. Gives amazing results in cases believed hopeless.

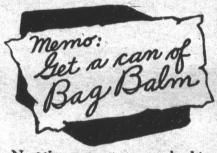
Thousands of American Farmers say the Froberg Swedish Abortion Treatment has saved their herds from destruction. This remarkable treatherds from destruction. This remarkable treatherds from seed for years in the big dairy country Sweden, and has cleaned up whole districts over there literally rotting with abortion. Frank Halfman, Crown Point, Ind., writes: "Two years ago, I lost every calf from my herd of forty cows. All remedies failed until I used yours. I have never lost a calf since."



C. C. C. (Cow, Calf. Control) is guaranteed to absolutely stop abortion or the treatment cost is refunded. Write today for full details explaining our free trial offer.

Simply send your name and address, without further obligation on your part to Froberg Remedy Co., U3 Lincoln St., Valparaiso, Ind.





Next time you go to town, take this memo with you. Your can of Bag Balm will insure you against milk losses and annoyance due to sore teats, chaps, cuts, inflammation or injuries of any sort to the udder and teats of your cows. For caked bag, bunches, cow pox or any stoppage in the delicate tissues of the milk-giving organ the penetrating, healing power of Bag Balm is the ready answer.

Used by hundreds of thousands of farmers regularly for all kinds of animal sores. Big 10-ounce package, 60c at feed dealers, general stores, druggists. Order direct from us if you have trouble getting Bag Balm. DAIRY ASSOCIATION Co., Inc. Lyndonville, Vt.





ENCOURAGING MILK COWS TO DO THEIR BEST.

PROFIT from dairying depends more upon the average production of the herd, than upon the advance records made by a few individuals. In practically every dairy herd, there are milk cows of high production, and also, cows of good breeding that are average producers. Good milk cows can not, under the most skillful management, make up for the low production of the poor ones. The most profit is derived from a high average performance of the herd.

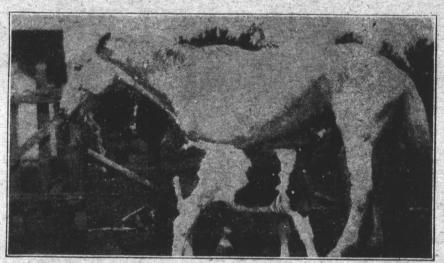
In feeding the milk cows at Forest Grove Farm, I have endeavored to study closely the disposition of the cows, their individual likes and dislikes, their capacity to consume food, and the kinds of food they crave most. Milk cows differ quite a considerable in their appetites. While, in feeding the average dairy herd on the farm,

Among the 1,448 P. B. sires owned by C. T. A. members there are 789, or 54.4%, P. B. H. sires; 298, or 20.5% P. B. G. sires; 283, or 19.5%, P. B. J. sires, and minor percentages for other

There are 1,538 members, or 75.4%, of the 2,039 dairymen listed in eightyseven C. T. A.'s have alfalfa seeded on their farms. Since 1920, 966 of the 1,538 dairymen have made their first alfalfa seedings. Only thirty-two C. T. A. members had alfalfa seeded prior to 1910.

In 1924 the acreage of alfalfa was 16,884 acres on C. T. A. members' farms. In 1925 there were 22,215 acres of alfalfa, a gain of 24%. There are 14.4 acres of alfalfa per farm, based on 1,538 dairymen reported growing alfalfa. Based on all cows owned in eighty-seven associations reported in a census completed during 1925, there are .96 acres of alfalfa per cow.

This census shows that there were



Here is an Opportunity to Learn what Sort of a Cow Mare's Milk will Make. We Received the Picture From G. P. Rippie, of Gratiot County.

too much time cannot be wasted in making up rations for individuals in the herd, yet I believe the average production can be materially increased by

catering to the likes of each animal.

Much can be accomplished in improving the average production of the herd by feeding a wide roughage and grain ration. Milk cows tire of the same kind of feed, and especially cows of delicate appetite. When a cry ration is being fed milk cows, some kind of succulent feed should be supplied In my locality a great many dairymca are feeding pea vines and sweet corn silage obtained at a large cannery. This succulent food . 's roving very valuable, and some dairymen are feeding it as a large portion of the roughage ration. I find that clover or alfalfa hay, bean pods and dry corn stover, along with silage, make a very nutritious and appetizing roughage ration that meets the general requirements of each individual in the herd. The grain ration should be palatable and easy to digest.—Leo C. Reynolds.

FACTS ABOUT C. T. A. WORK IN MICHIGAN-

CENSUS of eighty-seven of the 108 cow testing associations at the end of 1925 shows the following facts: There are 7,711, or 33% pure-bred cows among the 23,169 cows reported in eighty-seven associations.

There are 11.36 cows per herd owned by 2.039 C. T. A. members.

are 5,283, or 71%, P. B. H. cows; 1,464, or 18.9% P. B. J. cows; 687, or 8.9% P. B. G. cows, and a smaller per cent of other breeds.

There are 1,990, or 97.5%, dairymen using P. B. sires; while 2,039 members own 1,448 P. B. sires. There are 158 dairymen using P. B. sires cooperatively among the 1,990 P. B. sire users.

3,498 acres of sweet clover seeded on C. T. A. members' farms during 1924, while 6,395 acres of sweet clover seedings are listed for 1925, an increase of 82.8%.

Out of 2,039 dairymen listed, 83% or 1,693, are using silos. They own 2,187 silos on 1,693 farms-

MIXED HAY COMPARED WITH CORNSTALKS.

Will you kindly inform me as to the difference in feeding values of mixed lover and timothy hay, compared with cornstalks? What would constitute a lanced ration for dairy cows when have mixed clover and timothy, and the following feed: Ground oats, ground corn, bran, and oil meal. Would I do better to purchase more kinds of feed in combination with the feed mentioned? If so, how should it be mixed?

—J. B. B.

Timothy contains 2.8 per cent pro-

Timothy contains 2.8 per cent protein, and clover 7.1 per cent, hence, if they were mixed equal parts, this hay would contain 4.95 per cent protein. Cornstalks contain only 1.4 per cent protein, therefore, so far as protein is concerned, one ton of this mixed hay would be worth as much as 3.5 tons of cornstalks.

Mixed hay, cornstalks, oats, corn, ran and ... i meal make a good variety. It would be better if you had some succulent food, as silage, roots, etc. It will 1 it be necessary to purchase any other 'cod. The following ration is auggested:

Twenty pounds of mixed hay con-Among the 7,711 P. B. cows there taining .99 pounds of protein; six pounds of corn, oats and bran, .57 pounds of protein; three pounds of oil meal containing .94 of protein, making a total of 2.50 pounds of protein.

A full ration for 100-lb. cows would consist of all the hay they will eat without waste, and gradually increase the grain ration to the limit of profitable production.

Herds Show High Production

But Effort Will be Made to Futher Increase Milk Yield

state institution herds named in the table below, show an unusually high average. There are 847 cows in these institutions. For the fiscal year ending in June, 1925, they gave a total of 8,539,301 pounds of milk, or an average of 10,081.8 pounds per cow. The methods employed in determining the production of these herds is the same as that used in the cow testing associations of the state, in fact, the majority of the herds are in cow testing associations, and the figures given out by the testers in such cases are those used here. The following table gives the number of cows and the average annual production of the thirteen herds:

Traverse State Hospital... 98
Michigah Reformatory... 77
Newberry State Hospital... 58
Branch Prison, Marquette 21
Ionia State Hospital... 47
Pontiac State Hospital... 44
Michigan Training School128
Kalamazoo State Hospital130
Michigan State Sanatorium 41
Michigan School for Deaf 16
Michigan Farm Colony... 50
Michigan State Prison... 45
Beys' Industrial School... 62 12939.6 12606.4 11636.6 10721.6 10643.1 $9803.0 \\ 9253.9$ 8843.1 7364.2 7238.1 6624.0 847 10081.8

These herd averages are very interesting, and in most cases very good. Three of the herds averaged above 12,000 pounds per cow, a very remarkable showing in large herds. These were the Traverse City State Hospital, Michigan Reformatory, and Newberry State Hospital herds. The Branch Prison herd at Marquette showed an average above 11,600, and Ionia and Pontiac State Hospitals were above 10,600. The Michigan Home and Training School, and Kalamazoo State Hospital herds, the two largest herds, were above 9,000 pounds—the former crowding the 10,000-pound mark. Below these they dropped rapidly. The average for all the herds is 10,081.8 pounds per cow, 8.47 cows producing 8,539,301 pounds during the year. Compared to the average production of the dairy cows of Michigan, which is 3,918 pounds per cow, according to the last federal census, this is a very satisfactory showing, as it would have required 2,180 such cows to produce the amount of milk given by 847 cows in Michigan state herds during the year.

On the other hand, the high production in the leading herds shows the wonderful opportunity for improvement in the balance and we must make every possible effort to get every one of the state herds above the 10,000-pound average.

GOOD PRODUCTION IN U. P. -HERDS.

H 1GH production records in the Upper Peninsula Cow Testing Associations are shown for January, according to the report of J. G. Wells, Jr., dairy specialist for the district. The high herd honor goes to Albert Whybrew in the Alger Association, whose four pure-bred and grade Holsteins averaged 1.321 pounds of milk and 49.4 pounds of fat. The high association was South Menominee, where each cow in the group averaged 571 pounds of milk, and 24.5 pounds of fat. The high four-year-old cow was also in this group, C. P. Hansen's grade Holstein, with 1,705 pounds of milk and 66.5 pourds of fat.

Marquette county showed up well with the second high association, also with the high individual cow, a mature pure-bred Holstein in the Branch prison herd with 2,108 pounds of milk and or dried beet pulp, which contains 4.1 84.3 pounds of fat. Chippewa county per cent protein, owns the high three-year-old, a grade Holstein in C. F. Albon's herd, with 1,737 pounds of milk and 74.4 pounds

EPORTS made on the thirteen of butter. C. E. Johnson's grade Holstein in Gogebic county led the twoyear-old class with 1,538 pounds of state to make a systematic analysis of milk and 53.8 pounds of fat. In the loss sustained in the handling of same herd a three-year-old pure-bred Holstein produced 2,069 pounds of milk much of this waste as possible. year-old class with 1,538 pounds of and 70.3 pounds of fat in twenty-eight

"The higher production for January," said Mr. Wells, in commenting seventy unprofitable cows sold during the month. The Dickinson association sold more than half of these at the end of their year.'

SOON HAVE CLOVERLAND CLEAN.

A CCORDING to State Veterinarian, Dr. F. K. Hanson, all the counties in the Upper Peninsula that have voted the money for the TB, test will have their cattle tested this coming season. This will leave only two, Chippewa and Mackinac, that will be untested in the Upper Peninsula, and no doubt these will be ready as soon as the other countles are finished testing. It is hoped to have the whole Upper Peninsula federal accredited area in the next three years.

BARLEY AND OATS FOR GRAIN.

I have barley and oats for grain, silage and mixed clover hay for roughage. What feed must I buy yet to make a balanced ration for my dairy cows? How much should I feed? I did not price the different feed here yet.—H. C.

As barley and oats are not rich enough in protein, to get the proper Producers' Commission Association has amount in a ration with mixed hay and violated the provisions of the packer corn silage, it will be advisable to pur- and stockyards act. chase some concentrate rich in protein, like oil meal or cottonseed meal to mix with them. The following ration is suggested:

Twelve pounds mixed hay; thirty pounds silage; four pounds barley; four pounds oats; two pounds cottonseed meal.

This will give 2.5 pounds of protein in the ration, and is sufficient for a one-thousand-pound cow giving a full flow of milk. For larger or smaller cows the ration can be varied to suit their requirements.

A good rule would be to feed all the roughage they will eat up clean, and then as many pounds of grain per day as they produce pounds of butter-fat in a week. Or, give them a pound of grain for every three or four pounds of milk they produce in a day, depending on the quality of the milk, but feed the grain in the proportion of four pounds of barley, four pounds of oats, and two pounds of cottonseed meal.

SORGHUM FOR LIVE STOCK.

What is your opinion of sorghum seed for feed to cattle, sheep and horses? How much can one safely feed? How much protein does a pound contain? Will it take the place of oil meal? We have fed it in small lots to poultry as well as stock, but expect, to rejies quite a lot next year, and wigh to raise quite a lot next year, and wish to know just what part of ration it might make. How much is it safe to feed?—H. O. H.

Sorghum seed contains only 4.6 pounds of protein in 100 pounds, or four and one-half per cent. Therefore it is not a substitute for oil meal which, contains \$31.5 per cent, more than seven times as much. Sorghum seed would be a substitute for corn-and-cob meal, which contains 4.4 per cent protein.

If sorghum seed is finely ground it can be fed as liberally as any grain

MOVE TO SAVE WASTE IN SHIP-

A MEETING of farm representatives and state department of agriculture, Michigan State College, railroad and claim men at State Farm Bureau offices in Legisland American State reau offices in Lansing a week ago, resulted in taking the first step in this

In Ohio such an organization is now functioning. Mr. Reed, representative of the New York Central lines, explain-"The higher production for January," said Mr. Wells, in commenting on the report, "shows that the association members are realizing that feeding pays, because higher production is cheaper production. Poor cows going to the market are also helping. The eleven testers in the district report of the New York Central lines, explained the results of investigations already made, and the plan of organization in that state. Statistics gathered from areas in the west where educational work has been conducted, show that where at the beginning of the results of investigations already made, and the plan of organization in that state. Statistics gathered from areas in the west where educational work has been conducted, show that where at the beginning of the results of investigations already made, and the plan of organization in that state. Statistics gathered from areas in the west where educational work has been conducted, show that where at the beginning of the presults of investigations already made, and the plan of organization in that state. Statistics gathered from areas in the west where educational work has been conducted, show that the beginning of the presults of investigations already made, and the plan of organization in the state. Statistics gathered from areas in the west where educational work has been conducted, show that the beginning of the presults of investigations already made, and the plan of organization in the state. Statistics gathered from areas in the west where educational work has been conducted, show that the plan of organization in the state. Statistics gathered from areas in the west where educational work has been conducted, show that the plan of organization in the state. Statistics gathered from areas in the west where educational work has been conducted, show that the plan of organization in the district report work has been conducted, show that the plan of organization in the district report work has been conducted, show that the plan of organization in the district report work has been one in every 400 pigs shipped. They hope through the use of placards, lectures, pictures, and general publicity, to reduce the million dollar annual loss there, to a low figure.

Inasmuch as improper feeding and

handling before reaching the local stock yards has been discovered to be major causes of death in shipping, much of the effort will be directed to-ward improving methods of feeding and handling.

The Grand Trunk, Ann Arbor, Michigan Central and Pere Marquette Railroads, the State Department of Agriculture, the State Farm Bureau, the Michigan State College, and the Michigan Live Stock Exchange representaigan Live Stock Exchange representa-tives participated in the session. J. H. Meally, secretary of the Michigan Live Stock Exchange, was made tem-porary chairman of the new organiza-tion. A committee was also appointed to submit a plan of organization to another meeting for adoption.

A survey of the apple orchards of the country, and our increased popu-

as to whether the Chicago Cooperative

Neutralizing

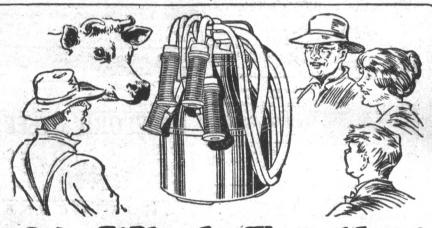
power

Better Lime for **Better Crops**

HE biggest thing about a lim-I ing material for soil sweetening is its neutralizing power. The greater this power the quicker and more thoroughly is your soil made ready to give every element to your crops Everything grows bigger, better, faster when you use Banner Limestone. Its neutralizing power is 108%—the highest in quality. Banner is a finely pulverized kiln-dried material giving immediate and lasting results. Quick and dependable service is assured if you'll send your orders to the



Michigan Farmer Liner Gets Results. Try One.



The Whole Fami

FATHER likes the De Laval Milker because it saves so much time, produces more and cleaner milk, and makes milking cows so much more profitable.

Mother likes it because there isn't so much help to care for, and because milking describes the belong the whole family.

doesn't require the help of the whole family. Brother likes it because it is so much fun to milk with it, and because it enables him to take the place of a man in milking.

The hired man likes it, too, because milking is so much easier, and he and the boss "trade off" milking every other Sunday, so that one has a full day off.

And best of all, the cows like it because of its regular, stimulating and soothing action—and prove it by giving more milk.

Agent De Laval

WAL SEP AZATO Chronic at Staff Paradect of Three of The Better Way of Milking



THERE'S no excuse for either. They disappear quickly with the application of Gombault's Caustic Balsam.

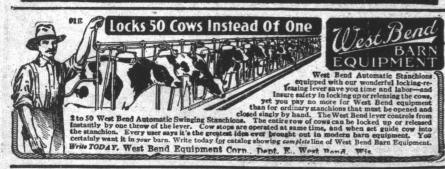
This 42 year old standard remedy is unexcelled for practically all lameness to which a horse is liable. You can apply it yourself simply by following directions that come with bottle. It positively leaves no scar or blemish.

Don't let your horses suffer from strains, sore, swollen tendons or GOOD

lameness of any kind. Horses are too valuable. Their work means too much to you to let them get out of condition. Get them fit—keep them fit with Gombault's Caustic Balsam. \$2.00 from your druggist or direct from us on receipt of price.

The Lawrence-Williams Co. Cleveland, Ohio FOR HUMANS, TOO

Caustic



BREEDERS' DIRECTORY

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

FARM AUCTION

18 head of Guernsey, C. T. A., 8 registered cows, one proven sire. 6 registered Percherons, 2-year-old stud. 30 sheep. Tools for 120 scres. JAMES LEWIS, Eaton Rapids, Mich.

FOR SALE Four registered Guernsey Helf-ers—ages one year and six months, one year and seven months, and seven months. Also registered Guernsey cows, one will freshen in a few weeks. Apply Chas. F. Clippert or Clippert Brick Company, Wyoming and Southern Avenues, Fordson, Michigan.

G UERNSEYS for sale, males, females, sired by sires whose dams have records of 19,460,50 milk 909.05 fat, and 15,108.10 milk 778.80 fat. T. V. HICKS, R. I, Battle Creek, Mich.

Forest Hills Guernseys for sale, two helfer calves, 4 to 8 mos. old. A. R. breeding. M. HOMPE, Forest Hills Farm, R. No. 5, Grand Rapids, Mich.

Guernsey Dairy Heifer Calves, Practically Pure-bred, 8 weeks old, \$20 each. We ship C. O. D. Write L. Terwilliger, Wauwatesa, Wis.

Guernseys Some real bargains in registered cows and helfers, on young bull. W. W. Burdick, Williamsten, Mich.

Practically pure Guernsey or Holstein dairy shipment. Edgewood Dairy Farms, Whitewater, Wis.

FOR SALE Guernsey Bulls from young cows now on A. R. Test.

"The Michigan State Herds"

An il ustrated booklet of 56 pages, just off the puress, records a few of the achievements of the pure-bred Holstein herds owned by the State of Michigan, and gives a brief history of their development. The Michigan State Herds include some of the best known herds of the bred, herds which have long been famous and which will continue to do their part in making Holstein history in the years to come.

Send for your copy of this booklet.



Bureau of Animal Industry Lansing, Michigan

Will Exchange registered Silver Black Foxes with farmers for hard of registered Hoistelns or Guernseys, or good grades. Want 20 to 25 cows. Heifers fresh, or to freshen. Also herd sire. Buy or trade. Priced right, FRED C. FEIERABEND, 16086 Mound Avc., North

FINANCIAL KING JERSEYS

for sale, excellent bull calves from R. of M. dams. COLDWATER JERSEY FARM, Coldwater, Mich.

Sophie Tormentor --- St. Mawes Jerseys Buils from Register of Merit Dams making around 600 lbs. fat and up. Also a few cows and helfers J. K. HATFIELD, Remus, Mich.

Choice Jersey Buils ready for service, and bull calves, for sale from R. of M. dams accredited herd. SMITH & PARKER, Howell, Mich.

Cows, 4 Bulls from R. of M. Cows. Chance to select from herd of fo. Some fresh, others bred fall freshening. Colon C. Lillie, Coopersville, Mich.

22 wt. around 630 lbs. 50 wt. around 600 lbs. 50 wt. around 450 lbs. around 450 lbs. 50 wt. around 450 lbs. with a second quality dark reds, edoned, well marked Hers-ford steers. Good stocker order. The beef type are usually market toppers when finished. Will sell your choice from any bunch. VAN D. BALDWIN, Elden, Wapelle Co., Iowa.

SHORTHORNS

Cows with calves, bred helfers and bulls. Will make very attractive prices for the next 50 days. Over 100 head of well-bred cattle to select from. Herd founded at a time when we can afford to sell at farmers' prices. Write to Supt. GOTFREDSON FARMS, Ypsilanti, Mich.

The Stanley J. Gardner Herd, Croswell, Michigan MIKLING SHORTHORNS A herd of low down, deep bodied, well fleshed cow with good udders. Records from 6,000 lbs. to 11,00 lbs. milk each. Caoice stock at all times for sale Bulls, cows, helfers, and calves. Write today.

Shorthorns Best of quality and breeding. Bulls, cows and heifers for sale. BIDWELL, STOCK FARM, Bex D, Teeumeeh, Mich.

Reg. Shorthorns
1b.; 6 bulls, 7 to 10 Mo. old., \$75 each.

SONLEY
BROS., St. Louis, Mich.

HOGS

Two good Berkshire Boars for spring service. Bred Gilts, Sows, Weanlings ready March 1st, CHASE STOCK FARM, Mariette, Mich.

AKEFIELD FARMS DUROGS Lakefield Farms, Clarkston, Mich.

Duroc Jerseys Choice fall boars with type, tion solicited. F. J. DRODT. Monroe, Mich.

O.1. C. HOGS on time Write for Hog Book Originators and most extensive breeders.

THE L. B. SILVER CO., Box 196, Salem, Ohio

L. T. Poland Chinas bred sows Popular strains. JAMES G.

B. T. P. C. Just 12 Choice fall pigs. Also one of our herd sows. GEO. W. NEEDHAM. Saline. Mich.



The Day of "Baby Beef"

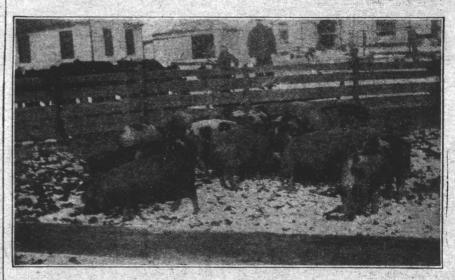
The Big Steer Has Had His Day By Pearl Pope

ing. For twenty-five years his bid for favor has been gradually weakening. During the early years of tle show at the International Live loads of mammoth bullocks, three and four-year-old cattle of great size and weight. Today the same great and popular show is made up almost entirely of yearlings, with a few loads of two-year-olds.

Out on the range it is the same story. Increasing overhead expense is calling for a quicker turn-over, and sending the steer to market early. The old-time movement of southern cattle to northern pastures has almost be-

HE reign of the big steer is pass- market place direct the work of the breed builders.

Coupled with this trend toward "Baby Beef," and dictated by the same rules this present century, the great fat cat- of economy, is also the tendency toward the production and finishing of Stock Exposition contained many car- the entire product at home. Not all farms are well suited or equipped to maintain a breeding herd, but there are thousands of farms in Michigan that are, and no doubt the coming years will see more and more of them keeping high quality beef cows and raising their own baby beeves. Several herds that I have personally been in close touch with are giving very satisfactory returns to their owners. There is much to learn about methods of cheap maintenance as experience



A Family of Twenty-four Pigs that Weighed 2,400 Pounds at Six Months. They Are the Properly of Charles Cook, of Isabella County.

come a thing of the past. Each year gives opportunity but briefly, the beef calves and yearlings going directly to corn belt feed lots for a quick finish.

The inevitable trend has been toward fenced pastures, smaller herds, and better cattle. The great world war, and the financial crises that followed it has had a powerful influence toward the rapid development of this changing program. So rapid has been the change these late few years, that it is not easy to keep pace with.

Twenty years ago we could buy all the yearling steers we wanted, carrying quality and breeding, for three cents a pound. I have bought hundreds of them here in Michigan. Today a veal calf brings as much money, and the same class of cattle, what few. there are to be found, costs twice as much. Given a little extra finish, they bring three to four times as much.

Then, farmers did not think of finishing cattle until they got all the cheap growth possible on grass. The market did not call for them, and many of them would have been lacking in the necessary early maturing qualities. They would have taken on more size and growth, rather than the necessary market finish.

All the beef breeds of cattle have been working more and more toward a smooth, tidy, pony type, that matures into a finished form early in life. The big-framed, heavy-boned, rangy animal that grew to a ton or more before reaching market form, has no doubt, passed forever into history. The day of his little brother is here. Hereford, Angus, Shorthorn-it is the same story with all of them. Select the champions of each breed, dress them up in all look alike. The demands of the for kitchen conveniences.

sees increasing numbers of range-bred breeding herd may be likened very much to a flock of sheep as regards the care and management required by them. The essentials of success are good blood, cheap maintenance of the breeding herd, and plenty of good feed for the bobies.

FIRST CROSS GOOD.

WAS much interested in the letter on stock yard prices in the last issue. I have been in the Buffalo market many times with stock of my own raising. I do not agree with the price on some of the things he mentions-First, his quotations are too high for grass cattle, and not low enough for the undesirable kind. I do not find that the first cross with a pure-bred dairy cow and a beef sire, to be so objectionable as the second or third, for the reason that the male offspring from the first cross invariably inherit the vigorous foraging temperament found in all pure-bred dairy animals which bring a nice covering of meat along the back that helps to cover the rough frame. The second and third cross seems to lack this. I can read between his lines, an argument for the dual-purpose cow.

When I sold in Buffalo last fall, I went to Toronto and spent two days at the yards there. Their Durham cattle are a size larger than ours and a little rougher built-suggestive of some value as dairy animals, but business was bad then and breeders much discouraged .- E. Richardson.

Many a housewife would be pleased the same coat and color, and they will to exchange one-half her weary steps

You won't be dis-

KEEP THE TAILS CURLED AND EARS COCKED.

FIND there is no trouble in keeping a sow or full-grown hog in good flesh and health, as long as they have plenty to eat. But, what I wish to say is, to keep the young pigs' tails curled and their ears cocked. If you of wool. As a result they do not need succeed in doing so, the rest of the much protected area. A windbreak and pig will take care of itself.

four weeks of age, need little or no If the fleece is kept dry, the sheep will attention; after that age, if there is a good litter, I start to feed them, as they are a heavy drag on the sow. They naturally get in the trough and learn to eat with the mother.

Then I plan to have what I call a creep-that is, a hole provided for the young pigs to creep through, away from the mother. There I feed them separately. This feed consists of finely ground oats and middlings, with the oats soaked ahead from one meal to another. By doing this it softens the hulls and the pigs eat them. The oat of having good fat pigs. I had three meal makes a milky slop by soaking, Duroc Jersey pigs, weighing 330 pounds and it prevents the troughs from filling each at eight and one-half months of with the hulls. I feed the pigs this mixture until they are weaned.

of

to

re

feed my young pigs a warm slop. I win County. think I am well paid for my extra trouble. But I don't forget to give them plenty of fresh, cool water during the warm weather.

At five weeks old I plan to castrate the boars. I find if done at this age, while still getting nourishment from the mother, they heal quicker, and there is less danger than when left until an older age.

My method of weaning seems to be successful. I plan to wean at eight weeks old so at the beginning of the eighth week I start on my plan. The first step is to cut off the sloppy feed from the sow, and feed corn on the ear, and water. Just enough corn is given her to reduce her milk flow. The pigs begin to eat more warm slop and by the end of the eighth week the pigs are getting most of their nourishment from the feed. By weaning the pigs gradually in this way, they hardly notice the effect, and their tails don't come uncurled

The pigs are now weaned, so I start to feed some heavier feed with the oats and middlings; this is barley or CONDUCTED BY DR. S. BURROWS

something like \$4.69 to feed a ewe and in feed twice daily. her lamb a year. The same group reported that the income from selling the lambs, and the ewes' fleeces, \$11.15. This leaves a rather high profit. This might be increased by a little additional care and feed. There is nothing that will so completely clean up a weed patch as sheep. They are also not locally as the patch as sheep. They are also not locally as the patch as sheep. They are also not locally as the patch as sheep. They are also not locally as the patch as sheep. They are also not locally as the patch as sheep. They are also not locally as the patch as sheep. They are also not locally as the patch as sheep. They are also not locally as the patch as sheep. They are also not locally as the patch as the p

vert waste materials into mutton and

They improve the appearance of the farm in several ways. One of the many is the destroying of weeds. Not only weeds, but shrubbery and small bushes are readily eaten by the sheep-Sheep are protected by a heavy coat a shelter is suitable. The sheep needs Young pigs, from birth until about the cover worse than anything else. keep warm.

If all of the farmers kept a few sheep of one breed, one or two good sires might be purchased and steps taken to build up the herd. It is best for a beginner to start with a few choice ewes that are bred, and build up the herd for the future.-Holt.

HOW ABOUT YOUR BIG PIGS?

WONDER if any of the Michigan Farmer readers can beat my record age. If anyone can do better, I would like to see same in our paper, The My next most important step is to Michigan Farmer.—Adam Sturm, Glad-

TELLING AGE OF COW.

About how old would a cow be, the teeth being worn down so there were only white spots in place of the teeth? I bought two cows from a man who said they were seven and nine years. Supposing him to be an honest man, I did not look in their mouths. Both cows died, although they were being fed all the silage they could eat, and ground feed. I had a cow that was twelve, and it had good teeth.—Subscriber.

Very little can be told about the age.

Very little can be told about the age of a cow from her teeth. The teeth of a horse are a more reliable indication of age. Experts can determine very closely the age of a horse by its teeth, but they can not do this with cows. Possibly your cows did not die from the effects of age.

Veterinary.

oats and middlings; this is barley or corn. The barley is ground and mixed with the oats and middlings in the slop, that is, providing I grow the barley. If I have none of this grain, I make no change in the slop feed, but feed all the corn on the ear that they will nicely clean up twice a day. In cold weather, the corn is the best, as it gives the pigs exercise in getting it off the cob and by rooting for what shells and drops to the floor. Exercise is very important during the cold weather.

During the last two months I cut on the slop and feed all the corn on the ear, and plenty of fresh water to drink. By this time there will soon be another bunch of pigs coming on, which requires the same attention that has been given this bunch.—A. Hoeft, Wayne County.

A FEW SHEEP ON EVERY FARM.

SHEEP will come the nearest of anything living upon what the farmer usually permits to go to waste. It has been definitely proved that sheep are profitable; improve the appearance of the farm; and not not require any expensive equipment.

Over 1,000 farmers in the United States have estimated that it requires something like \$4.69 to feed a ewe and her lamb a year. The same group reported that the income from selling but the feed all the corn on the ear, and plenty of fresh water to drink. By this time there will soon be another bunch of pigs coming on, which requires the same attention that has been given this bunch.—A. Hoeft, Wayne County.

A FEW SHEEP ON EVERY FARM.

SHEEP will come the nearest of anything living upon what the farmer usually permits to go to waste. It has been definitely proved that sheep are profitable; improve the appearance of the bare. Pig worked in this manure and slept in it. Is it possible that she has rheumatism caused by the change —A. H. S., Allegan, Mich.—The conditions you have mentioned are chiefly due to a diet, deficient in certain elements that nourish the bones and tiss

Tell your dealer you want to try some of that new



appointed, for in the Red Strand brand you get the longest lasting farm fence ever made—at No Extra Price. This new fence is, first of all, made from copper-bearing steel—that means the wire itself resists rust long after the zinc protection is gone. Then, the patented "Galvannealed" wire assures many years of extra wear because this wire carries from 2 to 3 times more zinc coating than ordinary galvanized wire. So that you can't confuse the ordinary galvanized fence with the new patented Square Deal we have marked this high quality fence with a Red Strand (top wire)—always look for it.

Galvannealed **Square Deal Fence**

The country's leading experts have made many impartial tests. Each of these authorities backs up our tests which show that patented "Galvannealed" fence will far outlast the ordinary galvanized wire.
Indiana State University, R. W. Hunt Company, Chicago, Ill., and C. F. Burgess Laboratories, Madison, Wis.,
reports are reproduced in a folder called "Official Proof DIAMP to Land Owners! of Tests"—every fence buyer should read it. Sent free ① Ropp's Calculaupon request.

Let us tell you all about the other big features such as: The knot that can't slip; full gauge wires; stiff picket-like stay wires, which require fewer posts; well-crimped line wires that retain their tension, etc.

This, together with copper-bearing steel and patented "Galvannealed" zinc protection results in the longest lasting fence you can buy. There's NO EXTRA PRICE.

See the Red Strand dealer—he'll gladly tell you all stone of the state of the state

Keystone Steel & Wire Co. Peoria, III. 4953 Industrial St.

narily sells for 50c—sent free). ② Official Proof of Tests, tells all about patented "Galvannealed" process. (3 Keystone Catalog, fully describes and illustrates new Red Strand fence, etc. All three sent free upon request.

tor, answers 75,000 farm questions (ordi-

Odorless, Steamed, Sterilized 3 times. Recommended by Agricultural Colleges. Latest scientific discovery for dairy cows. One-pound added to each 100 pounds of your ration will insure healthier cows and stronger calves at freshenings. If your dealer cannot supply RIVER-DALE brand, send us \$3.00 per 100 lb. sack, f.o. b. Chicago. Ask also for our Meat and Bone Meal for poultry.

BIVERDALE PRODUCTS CO. 2088 \$1.8 Salle St. Chicago.

RIVERDALE PRODUCTS CO., 2084 S.La Salle St., Chicag



SO-Boss Saves Milk!

So-Boss Cow Hobble & Tail Holder. prevents cows kicking or switching tail. 75c-hardware stores or sent prepaid. SIMONSEN IRON WKS., Sioux Rapids, Ia

HOGS

L ARGE TYPE POLAND CHINAS for sale. Bred gilts weighing 400 lbs. at \$75. Also fall pigs, either sex. A. A. FELDKAMP, Manchester, Mich.

C HESTER WHITES—Must sell entire herd of foundation stock. Some fine show prospects for next year. Boars, bred sows and gilts. JOHN C. a fine pair. Price \$2.50. F. E. Rice, Millington, Mich.

Poland China Gilts good ones, bred for spring farrow. Cholera immune. Registered free. WESLEY HILE, Ionia, Mich.

SHEEP

SHROPSHIRES of the Woolly type, bred to my best rams, Call on DAN BOOHER, R. No. 4, Eyart, Mich.

HIGH CLASS Registered Shropshire ewes, also ewe and lambs. C. LEMEN & SONS, Dexter, Mich.

SHROPSHIRES My entire flock of 21 ewes and 10 ewe lambs, bred for April lambs. Prices right. CARL TOPLIFF, Eaton Rapids, Mich.

Shropshires Am offering 8 bred ewes and cholce ewe lambs at reasonable prices. C. J. THOMPSON, Rockford, Mich.

HORSES

FOR SALE
black, weighs a ton.
individual. Will sell cheap if taken at once. IIM
WELCH, Millbrook, Mich.

REDUCTION SALE

OF ALL OF THE MILCH COWS AT GENRIDA STOCK FARMS Owned By Walter T. Hill, Davison Mich., with a draft of a few good cows from other herds in this locality. THURSDAY, MARCH 18, 1926.

HEAD OF REGISTERED HOLSTEIN FRIESIAN CATTLE

At the farm 1 mile north & 3 miles west of Davison, Mich.

Including the Senior Herd Sire Traverse Hengerveld Admiral, who is a son of the grand old cow Traverse Hengerveld Walker that made in seven days as a four-year-old, 34.88 lbs. of butter, and in one year 1123.32 lbs. His sire is Traverse Prince Inka Lad who is very near a Century sire, and a maternal brother to Traverse Colantha Walker. In fact, he carries 75% of her blood. There are ten grand-daughters of Maple Crest Korndyke Hengerveld, who is the only living Century sire of today.

A daughter of a 1000-lb. cow with 32 lbs in seven days, and she is a daughter of a 28-lb. cow that is a daughter of a 19-lb. cow.

A 21-lb. 2-yr. -old daughter of a 30-lb. cow that recently made in C. T. A. work in 43 days. 121.3 lbs butter, with 2894 lbs. of milk, milking an average of 67.3 lbs. on two milkings a day.

A 20-lb. 3-yr. -old daughter of a 900-lb. cow that is a daughter of a 30-lb, cow.

A daughter of Flint Hengerveld Lad, one of Michigan's greatest show bulls, with an exceptionally good C. T. A. record.

A 23-lb. daughter of Johan Hengerveld Lad, who is the greatest proven son of the first Century sire, Hengerveld De Kol.

There will be several fresh cows and heavy springers with as good blood lines as those mentioned above.

CLIV F. DODOGE M.

GUY E. DODGE Mgr., Clio, Mich.

SALE OF SHROPSHIRES **PUBLIC** MARCH 18th, 1926.

Having sold my farm, will-sell 50 bred ewes, well-wooled and good quality, 26 ewe lambs, 16 ram lambs, one extra good stock ram. This flock is sired by imported rams and are good Shropshire type, all registered. A good opportunity for boys' and girls' sheep clubs. Also, 5 good heavy horses, O. I. C. hogs and full line of farm implements.

SHEEP SALE AT 2:00 P.M.

FARM 4 1/2 MILES SE. OF HOWELL

W. B. McQUILLAN

HOWELL, MICHIGAN.



GRAIN QUOTATIONS

Tuesday, March 9.

Wheat.

Detroit.—No. 1 red \$1.74; No. 2 red \$1.73; No. 2 white \$1.74; No. 2 mixed \$1.73.

Chicago.—May \$1.58½@1.58%; July .38%@1.38%. Toledo.—Wheat \$1.72½@1.73½.

Corn.
Detroit.—New, No. 3 yellow at 75c;
No. 4 yellow 70c; No. 5 yellow 65c.
Chicago.—May 77%@78c; July 81c.

Oats.
Detroit.—No. 2 white Michigan at 44c; No. 3, 43c.
Chicago.—May 39%c; July 40%c.

Detroit.—No. 2, 86c. Chicago.—May 88½c; July 89½c. Toledo.—87c.

Beans Detroit.—Immediate and prompt shipment \$4.10.

Chicago.—Spot Navy, Mich. fancy hand-picked \$4.60@4.65 per cwt; red kidneys \$9.25@9.50.

New York.—Pea, domestic \$5@5.50; red kidneys \$8.75@9.50.

Malting 72c; feeding 67c.

Seeds Detroit.—Cash red clover at \$21; alsike \$17; timothy \$3.60.

Buckwheat. Detroit.—Buckwheat \$1.60@1.65.

Hay
Detroit.—No. 1 timothy \$22.50@23;
standard \$22@22.50; No. 1 light clover,
mixed \$21.50@22; No. 2 timothy \$20@
21; No. 1 light clover mixed \$20@21;
No. 1 clover \$20@21; wheat and oat
straw \$12.50@13; rye straw \$13.50@14. Feeds

Detrot.—Bran at \$31; standard middlings at \$32; fine middlings \$35; cracked corn \$37; coarse cornmeal at \$35; chop \$31 per ton in carlots.

WHEAT

Unofficial estimates of farm reserves of wheat on March 1 averaged 91,000,000 bushels, the smallest in over thirty years. These reserves, together with the visible supply and an unofficial estimate of stocks in country mills and the visible supply and an unofficial estimate of stocks in country mills and elevators, make a total supply of 207,000,000 bushels, compared with 250,000,000 bushels, compared with 250,000,000 bushels last year, and a fiveyear average of 286,000,000 bushels. Domestic consumption for food, seed and feed from March 1 to July 1 has averaged 140,000,000 bushels during the past five years. If this figure is equaled this year, there would be only 67,000,000 bushels left for export in the next four months, and to provide a carryover on July 1, 1926. This showing is decidedly bullish. Of course, these estimates of supplies may be too low. Wheat prices continued to decline until the total loss was about 30c from the high point of the season reached at the end of December. Disappointing cash demand during the last month or more, gradually undermined confidence that higher prices would be seen before the end of the crop year. As a result, specualtive holdings were gradually thrown overboard, winding up in the market crash of the last ten days. With this liquidation out of the way, the market has had a fair rally.

RYE

Rye has been weak along with wheat. Norway bought in a small way on the decline. The visible supply continues to increase in spite of the fact that the crop year is two-thirds over and primary receipts are not heavy. Exports since July 1 have been only about one-fifth as large as in the same period a year previous.

CORN

After gradually sliding lower for several weeks, corn prices finally passed under the previous low point of the season, reached last fall, but rallied slightly in the last few days. Private estimates show March 1 farm reserves of around 1,300,000,000 bushels, or about ten per cent more than the average of the last five years. The amount of corn required to take care of the live stock on hand is five to ten per cent below the average of the same period. period.

OATS

Oats prices also dropped to a new low on the crop during the last few days. Farm reserves are estimated unofficially at 550,000,000 bushels, or

about the same as last year. The amount is liberal compared with the average consumption from March to July, inclusive, in previous years, so so that there promises to be a substantial carryover. The large visible supply is not shriveling up rapidly. Prices are already so low, however, that they discount most of the unfavorable conditions. Also, a noticeable improvement in demand was noted as a result of the recent decline.

SEEDS

The usual spring demand for seeds is keeping the market strong, with a tendency toward higher prices. Offerings of choice red clover are very light, and prices have been marked up to the highest level on the crop. The general demand for sweet clover the selected up to unplies of good gual-The general demand for sweet clover has cleaned up supplies of good qualities. Prices are advancing, although the large crop has prevented any tight supply situation in spite of the active demand. Shippers' reports indicate that shipments from the 1925 crop of sweet clover seed will exceed those of the previous year by 30 per cent.

FEEDS

The feed market continues weak. Offerings are not large, but demand is lacking. Declining prices for feed grains, mild weather, and the approach of the grass season tend to curtail pur-chases by dealers from mills. Natur-ally, distributors are anxious to clean up their stocks before the season is

HAY

Lack of demand is depressing the hay market and prices declined last week. Farmers are marketing the supplies still on farms more rapidly. Low grades, which make up the bulk of the current offerings, are practically unsalable in spite of substantial discounts in prices, and stocks are accumulating. Demand in the Pacific Northwest has been slack, due to excellent pasturage, and it is estimated that about 30 per cent of the alfalfa hay crop in that section remains to be sold.

EGGS

The egg market has steadied in the past week, and prices are believed to be close to the bottom. Receipts at leading markets are running well belied by the company of the hind last year, although production probably is as large as at this time in 1925. Prices have been low, stimulating consumption in the country, so that a large proportion of the lay is not leaving the farm. Consumption in the larger distributing markets, likewise, is larger than a year ago, with ten per cent more eggs disappearing into distributing channels at the four leading cities in February than in the same month a year ago. Storage holdings of eggs are gradually diminishing, although stocks at the beginning of the new egg year were far above the average. The unsatisfactory close of the storage deal undoubtedly will act as a check on speculative activities this check on speculative activities this

Spring.
Chicago.—Eggs, fresh firsts 25½@
25¾c; extras 26¼@26¾c; ordinary
firsts 24½c; miscellaneous 25c; dirties
21½@22½c; checks 20@20½c. Live
poultry, hens 29c; springers 32c; roosters 21c; ducks 32c; geese 20c; turkeys 35c.
Detroit.—Eggs, fresh candled and
graded 27@27½c.

Detroit.—Eggs, fresh candled and graded 27@27½c. Live poultry, heavy springers at 32c; light springers 26c; heavy hens 31c; light hens 26c; geese 22@23c; ducks 36@37c; turkeys 42c.

BUTTER

A firm tone dominated the butter market early last week, and prices advanced, only to weaken at the close. Production is not so large as a fortnight ago, although it continues to show an increase over the corresponding period last year. The make is expected to be maintained, however, with the season of flush production so close at hand. Retail prices have reflected the stronger wholesale markets, and consumptive demand has suffered.

Butter prices are likely to hold around the present level, or a little lower. Stocks of storage butter are large and are priced at a substantial discount under fresh. The pressure of this butter will tend to check any advancing tendencies in the market on fresh. Consumptive demand falls off whenever prices are marked up, and since this offers the only outlet for butter at the present time, prices must be kept down to a level at which supplies are absorbed.

Prices on 92-score creamery were:

plies are absorbed.

Prices on 92-score creamery were:
Chicago 41½c; New York 42½c. In
Detroit fresh creamery in tubs sells
ofr 41½@42½c per pound.

POTATOES

Potato prices were lower last week. Shipments are smaller than in the same period a year ago, but are fully

equal to the demand. Indications all point to a continuance of high potato prices throughout the spring. Merchantable stocks of potatoes on January 1 in the group of surplus producing states which furnishes practically all of the carlot shipments of old potatoes between January 1 and the end of the season, were 60,707,000 bushels, compared with a six-year average of 92,757,000 bushels. The early potatocrop in the south is not large and is late, so that the demand for old stock will be active. Northern round whites, U. S. No. 1, are quoted at \$3.65@3.85 per 100 lbs., sacked, in the Chicago carlot market. **APPLES**

Apple markets remain practically unchanged. Shipments are larger than a year ago, so that supplies are liberal, and demand is generally dull. Michigan A-2½-inch Baldwins are quoted at \$4@4.50 per barrel. Washington Delicious, extra fancy, large ot very large size, are quoted at \$3.75@4 a box.

WOOL

A firm tone is again reported in seaboard wool markets. Sales are not large, but offerings in dealers' hands are too light to cause pressure, especially as foreign markets are firm, with American interests buying in Australia. No trading basis has been established in the west, although a few sales of Texas and Arizona wools have been consummated recently. Signs of improvement in the goods market have been noted, which, if true, should result in broader demand for raw material. Consumption of wool by reporting mills in January was 41,000,000 pounds, grease equivalent weight, against 45,000,000 pounds in December, 51,000,000 pounds two years ago, and 63,000,000 pounds three years ago.

DETROIT CITY MARKET

DETROIT CITY MARKET

First-class carrots, parsnips and cabbage were practically cleaned up early, but turnips, beets and winter radishes were slow to sell. Horseradish and leeks were in fair demand. The better grades of apples found a ready sale, and there was a fair call for potatoes. Live poultry was a ready seller at higher prices. Most of the eggs were disposed of at retail.

Apples \$1@3 bu; beets 75c@\$1 bu; carrots \$1.25@2.25 bu; collards 75c bu; cabbage, green \$1.75@2.25 bu; red, \$1.25@1.50 bu; dry onions \$1.50@1.75 bu; root parsley \$3@3.50 bu; curly parsley 50c dozen bunches; potatoes \$2.35@2.60 bu; winter radishes 75c@1 bu; topped turnips 75c@\$1.25 bu; parsnips \$1.75@2 bu; leeks \$1@1.25 dozen bunches; winter squash \$2 bu; bagas 75c bu; kale 75c bu; butter 55@65c; honey \$1 per 5-lb. pail; horseradish \$3.50@4.50 bu; eggs, retail 40@45c; hens, wholesale 32@34c; retail 35c; colored springers, wholesale 33@35c; retail 35c; dressed hogs 17c; dressed hens 38@40c; dressed springers 38@40c.

GRAND RAPIDS

Farmers were receiving a lower price for butter-fat in Grand Rapids this week, creameries slashing their quotations from 47 to 45c a pound. Eggs were easier, but other commodities were mostly unchanged. Eggs 26@27c; poultry, hens 22@27c; veal 15@17c; pork 15@16c; beef 10@15c; potaotes \$2@2.25 bu; onions \$1 bu; parsnips \$1@1.25 bu; carrots 75c bu; radishes 50@55c dozen bunches; leaf lettuce 13c lb; apples \$1@2.50 bu; beans at \$3.65@3.75 cwt; wheat \$1.53 bu; rye 68c bu.

COMING LIVE STOCK SALES

Holsteins.

March 17.—Abe Thorsburg, Geo. Bergtold, Midland, Mich.

Jerseys.

Live Stock Market Service Tuesday, March 9.

CHICAGO

Receipts 24,000. Market is mostly 15@25c higher than Monday's average; lighter show full advance; big packers inactive; 240-350-lb. butchers \$11.80@12.50; good to choice 200-225-lb. average \$12.90@13.25; good 180 lbs down, largely \$13.50@13.90; top 130 lbs. up \$14; 160 lbs. up \$13.90; packing sows \$10.50@11.50; bulk of assorted killing pigs \$13.75@14.

pigs \$13.75@14.

Cattle.

Receipts 13,000. Market fed steers, trade dull; steady to weak; about one-third run re-active; cows selling mostly at \$5.75, according to weight and condition; few loads of weighty steers held around \$11; bulk at \$9@10.25; feeding, scarce; vealers full, steady at \$13@13.60; few \$14 to packers; outsiders \$10@14.50.

Sheep and Lambs.

Receipts 10,000. Lambs are opening strong to 25c higher; common and medium grades offering at \$12.75@13.60; few double deck fat and shearing lambs \$14@14.50; best fat lambs held

lambs \$14@14.50; best fat lambs held around \$14.75; sheep steady; early sales fat ewes \$8@8.50; mostly odd lots; choice upward to \$9.

DETROIT

Cattle. Receipts 258. Market steady.

zecocapio zeo. zeetatect pec	THE NAME AND POST OF THE PARTY
Good to choice yearlings,	
dry-fed\$	9.50@10.50
Best heavy steers, dry-fed	9.00@ 9.75
Handy weight butchers	7.25@ 8.50
Mixed steers and heifers	7.00@ 8.00
Handy light butchers	6.25@ 7.00
Light butchers	5.00@ 6.25
Best cows	6.25@ 7.00
Butcher cows	4.50@ 6.00
Common cows	4.00@ 4.50
Canners	3.00@ 4.00

	Stock bulls 5.50@ 6.75
	Choice bulls 5.25@ 6.25 Heavy bologna bulls 4.50@ 5.00
y	Feeders
	Feeders 6.50@ 7.50
ś	Stockers
S	나는 사람들이 되었다. 이 경기를 하는 것이라면 살았다. 아들은 학교에 가장 내가 되었다. 가장 내가 되었다. 하는 사람들은 그래요 하는 것이다.
	Veal Calves.
,	Receipts 550. Market steady.
ó	Best\$14.50@15.00
S	Others 7.00@14.00 Sheep and Lambs.
3	Sheep and Lambs.
2	Receipts 440. Market steady to 25c
	higher.
	Best\$14.00@14.25
,	Fair lambs
	Light and common 10.00@12.00
i	Fair and good sheep 7.00@ 8.50
3	Culls and common 3.00@ 4.50
	Hogs.
t	Receipts 1,265. Market steady.
_	Mixed grades\$13.50
	Roughs 10.25
	Pigs and lights 14.00
5	Stags 7.50
	Yorkers 13.75
10	Heavies 12.50
	BUFFALO
ĺ	Hone

Receipts 4,800.. Hogs are closing steady; heavy \$12@13; medium \$13.25 @14; light weight at \$14@14.25; light lights and pigs \$14.50@14.75; packing sows and roughs \$10.75.

Receipts 60. Market steady; steers 1100 lbs. up \$8@10; steers 1100 lbs. down \$6@9.75; heifers \$5@9.10; cows \$3@7; bulls \$5@7.

Sheep and Lambs.

Receipts 12,000. Best lambs \$14.50@ 14.75; culls \$13 down; heavies, throw off \$11.50; yearlings at \$11.50@12.50; wethers \$9.50@10; ewes \$8@9.

Receipts 400. Top at \$15; culls at \$12.50 down.

March 17.—Abe Thorsburg, Geo. Bergtold, Midland, Mich.

Jerseys.

March 23.—Brookwater Farm, Ann Arbor, Mich.

See advertisements for the above sales on page 375).

Poland Chinas.

March 16.—Oscar Voelker, Pigeon, Mich.

Guernseys.

March 19.—James Lewis, Eaton Rapids, Mich.

March 18.—Walter T. Hill, Davison, Mich.

Shropshires.

March 18.—W. B. McQuillan, Howell, Mich.

ın-

ls

in-

ni-at

ot

ve of

e-e-

Lapeer Co., March 4.—Farmers are planning to follow their usual program except that everybody will give more attention to alfalfa and less to timothy and clover. Live stock is wintering in gine shape. There is not much hay left in this territory, but we have plenty of other rough feed and silage. Cream brings 43c; eggs 26c; hay \$20; milk \$3, less freight. Snow is about a foot deep on the level.—A. D.

Ingham Co., March 4.—Live stock is wintering in about a foot deep on the level.—A. D.

Ingham Co., March 4.—Live stock is wintering in about a foot deep on the level.—A. D.

Ingham Co., March 4.—Live stock is wintering in a beans have been marketed the beans \$3.65.—A: W. C.

Alpena Co., March 4.—In this local ity beans and beets will be its scarce.

foot deep on the level.—A. D.

Ingham Co., March 4.—In this locality beans and beets will be the principay money crops this season. Live stock is in fair condition. The feed supply is short. About all of farm products have been marketed. The farmer is deeply interested in the lowering of public expenses and the reduction of taxes.—A. H. C.

Cheboygan Co., March 4.—The big storm on February 25 made traveling difficult in this secton. As a result, very little is being marketed. About one-fourth of the hay crop intended for marketing is still in farmers' hands. Comparatively little feeding is being done here. With high winds prevailing it is impossible to open the roads. Farmers are receiving \$15 per ton for hay; 45c for oats; 35c for eggs. Cattle in good condition.—J. C.

Feed is scarce. Corn is worth \$1.25 per bushel. There are no cattle on feed, and only a few lambs. Hay is worth \$20 per ton; potatoes \$2 per bushel; oats 40c; butter-fat 42c eggs 30c; barley \$1.50 per cwt.—J. B. L.

Jackson Co., March 6.—Winter still holds its grip with ice and snow, and ponds of water under the ice. There seems to be enough feed for current local needs. Hay is bringing from \$20 to \$30 per ton. There is a fewer number of cattle on feed than usual. The sowing of alfalfa and some sweet clover will continue this spring. As spring approaches, prices of farm horses are becoming stronger.

Comparatively little feeding is being done here. With high winds prevailing it is impossible to open the roads. Farmers are receiving \$15 per ton for hay; 45c for oats; 35c for eggs. Cattle in good condition.—J. C.

MEAD Cycle Co., Dept. B-208 CHICAGO



SEED CORN—90-day Yellow, 93-day White; Reid's Yellow Dent, Developed from International Winning Corn, tested and ready to plant, \$3.50 per bushel. Chester Fowler, Seed Corn Specialis*, Crawfordsville, Ind.

NEW ALBOTREA sweet clover, just, out from Wisconsin Experiment Station. Wonderful for pasture and hay. New pedigree barley. Four new leaders in oats. Red clover, timothy, alsike, alfalfa seeds. Write for circular. H. E. Krueger, Beaver Dam, Wis.

CERTIFIED SEED GRAIN, from latest improved strains of highest yielding varieties under Michigan conditions. Wolverine oats, Robust beans. 1926 seed circular yours on request. A. B. Cook, Owosso, Mich.

SEED OATS FOR SALE—Worthy Wolverine, grown from certified stock on the Upper Peninsula farms of Dr. E. H. Webster. Write for prices to Albert V. Hardesty, Manager, Rudyard, Mich.

PROSTPROOF (ABBAGE PLANTS—Wakefield, Charleston, Copenhagen, Flat Dutch, 200, 00c; 500, 90c; 1000, \$1.50. Postpaid, Brown Plant Co, Hawesville, Ky.

5 BIG 2-YR. BRIDAL WREATH, \$1. POSTPAID. 50c size from agents. Over 20 other half-price bargains, trees, vines, plants. Write Gobies Nurseries, Gobies, Mich.

ASPARAGUS ROOTS—Plant some for home garden or commercial field. Washington and other varieties. Write for descriptive price list. J. C. Dunham. Law-ton. Mich. FOR SALE—Grimm Alfalfa Seed, grown from certified seed on my farm in Oscoda county. Price \$26 per bushel. Sample on request. F. A. Neff, Comins, Mich.

MILLIONS, Cabbage, Tomato and Onion Plants, \$1, 1000. Catalogue free. Clark Plant Co., Thomasville, Georgia.

SWEET CLOVER SEED, \$2.50 per bushel. White blossom. (Unhulled). Bags extra. S. E. Bell, Glennie, Mich.

ASPARAGUS, raspberry, strawberry plants of quality. Send for catalog of profitable garden luxuries. C. D. Thayer Co., Taree Rivers, Mich.

GLADIOLUS BULBS—100 for \$1.00. Price list free, Colvin's/Glad Gardens, Berrien Springs, Michigan.

CERTIFIED WOLVERINE OATS-Michigan's leading variety. C. D. Finkbeiner, Clinton, Mich.

ASSORTED COLORS GLADIOLA BULBS—60 large or 125 flowering size, \$1.00 postpaid, Martha Os mond, Fostoria, Mich.

ASPARAGUS—Washington Rust-proof, Good sturdy roots, \$1.25 hundred; \$0.00 thousand. Prepaid, Ken-nel's, Sadsburyville, Pa.

GOLDEN YELLOW SEED CORN—Tests 94-97%. Hand husked and air dried in crib. Write, Geo. W. Needham, Saline, Mich.

FANCY DAHLIA BULBS—Seven different colors for \$1.00. Prepaid. Jacob Dekker, Bridgman, Mich.

PET STOCK

SELECT YOUR SILVER AND BLACK FOXES from Fur Bred Strains, Raccoon, Mink and Muskrats. We can start and stock your fur farm. Booking orders now for fall delivery. Levering Fur Farm, Levering.

RABBITS—Real Flemish Giants. Bucks, 3 months old, weight 6 lbs., \$2.00 each. From stock weighing 13 to 17 lbs. Leonard Norton, Three Rivers, Mich.

FOR SALE—Pedigreed German Police Pupples, sired by our Imported Stud dog, \$20 each. Also young registered brood matron. E. A. Black, Howard City,

SNOW WHITE ESKIMO PUPPIES, \$15, on approval. Brookwood Kennels, Indianapolis, Ind.

REGISTERED SCOTCH COLLIES—natural heelers Silvercrest Kennels, Gladwin, Mich.

CANARIES that sing, \$5.00 each. Mrs. Harvey Haynes, Coldwater, Mich.

HOMESPUN TOBACCO: Chewing, five lb., \$1.50; ten, \$2.50; smoking, five lb., \$1.25; ten, \$2; cigars, \$2 for 50, guaranteed. Pay when received, pipe free. Roy Carlton, Maxons Mills, Kentucky.

RENTUCKY NATURAL LEAF SMOKING TOBAC-CO—5 pounds \$2.00; 10 pounds \$3.50; cash with or-der. Postage propaid. Tobacco Club, Mayfield, Ky.

HOMESPUN CHEWING or smoking tobacco: 5 lb. \$1.25; ten, \$2; twenty, \$3.50. Satisfaction guaran teed. United Farmers of Kentucky, Paducah, Ky.

POULTRY

12-WEEK-OLD PULLETS—heavy egg-laying strain.
S. C. White Leghorns \$1.80. Barred Plymouth Rocks \$1.90. S. C. Rhode Island Reds \$2.00. Hatching eggs \$10 per 100. Pine Hatchery. 803 Pine St., Alma, Mich. Mrs. O. G. Erway, Mgr.

PEDIGREED "Tancred" White Leghorns. State Fair Winning Barred Rocks, Buff Orpingtons, Light Brah-mas. Prices right. Write, Fenner Bailey, Mont-gomery, Mich.

WE PAY MORE for poultry, eggs and veal. A trial shipment will convince you. East Coast Poultry Co., Eastern Market, Detroit, Mich.

S. C. RHODE ISLAND RED COCKERELS—Good supply. Exceptionally fine, dark red birds. Wesley S. Hawley, R. No. 3, Ludington, Mich.

IMPERIAL Ringlet Barred Rock Eggs from a State Accredited flock. \$6.00 per hundred. Robert Martin Woodland, Mich.

WHITE WYANDOTTES EXCLUSIVELY—Eggs \$5.00 per 100 prepaid. Raymond Eash, Shipshewana. Ind

WHITE ORPINGTONS—Eggs \$9, postpaid, M. Thompson, R. 10, Box 92, Detroit, Mich.

HOLTERMAN BARRED ROCK COCKEREL, \$5.00. Mrs. James Carmichael, Wayne, Mich.

JERSEY BLACK GIANT EGGS—From Bennett's Black Beauty's. Eva Bennett, Rockford, Mich.

CHOICE WHITE ROCK HATCHING EGGS. Tom Lennon, R. 2, Three Rivers, Mich.

BABY CHICKS

BABY CHICKS from superior quality, heavy laying stock. We have one of the largest and oldest hatcheries in the Middle West. 25 years' experience in mating, breeding and hatching standard-bred poultry, 100% live arrival. Prepaid. Every chick guaranteed. Catalog free. Loup Valley Hatchery, Box 240, St. Paul, Nebr.

QUEEN ACCREDITED CHICKS—Officially approved by the State of Michigan, every breeder passed by State Inspectors, and every male banded, by Inspectors, Our accredited Leghorns represent 12 years of careful breeding. Tancred, Hollywood, S. C. White Leghorns, Browns, R. I. Reds, Ask for price and circular free, Queen Hatchery, Zeeland, Mich.

WHITE LEGHORN CHICKS from big white eggs. Shipped anywhere C. O. D. Guaranteed to live. Low prepaid prices. Egg contest winners for years. Trapnested, pedigreed foundation stock. Hundreds of coekerels, pullets and hens. Get our prices. Catalog free. Goo. B. Ferris. 634 Union. Grand Rapids, Michigan.

BABY CHICKS—From flocks culled and mated for production, type and color. Our chicks are strong, healthy and vigorous. Hatched from free range flocks. Write for prices. 100% delivery guaranteed. Homer Hatchery, Homer, Mich.

ACCREDITED CHICKS—Low Prices. Leading varieties. From flocks officially endorsed for high average egg production. Foremost egg strains. Live delivery. Catalog Free. Smith Brothers Hatcheries, Box 119. Mexico. Missouri.

BRED TO LAY—Barred Rocks and Pure Hanson White Leghorn chicks and eggs Stock blood tested three years. Catalogue free. Michigan Accredited. Assitine Poultry Farm, 1827 Belden Ave., Grand Rapids, Mich.

ENG. W. LEG. CHICKS—Guaranteed, pure-bred Eng. W. Leg. Chicks, direct from our M. A. C. Demonstration Farm Flock at extremely low prices, only 11c each in lots of 560. Send for circular. Model Poultry Farm R. 4, Zeeland, Mich.

BABY CHICKS from stock all newly blood-tested for Bacillary White Diarrhea. Third year blood-testing. Eight popular breeds. Hatchery State Accredited. Catalog and price list ready. Pierce Hatchery, Jer-ome, Mich.

BABY CHICKS—White Leghorns, \$10 per 100; White Rocks, R. L. Reds and Barred Plymouth Rocks, \$12 per 100, prepaid by parcel post. Snowflake Poultry Farm & Hatchery, R. 5, Middleville, Mich. L. Van-Schie, Proprietor.

SELECTED CHICKS from flocks subjected to most rigid tests for standard production and health. Twelve leading breeds at living prices. 80% of old customers re-order. Free catalog. Litchfield Hatchery, Litch-field. Mich. field Mich.

BABY CHICKS—Eleven varieties, from free range culled and inspected flocks. Liberal discounts in large numbers. Send for circular and price list. Estab-lished 1910. Shepard Poultry Farm, Litchfield, Mich.

STURDY CHICKS—Blood tested for Bacillary White Diarrhea, also State Accredited. Leghorns, Rocks, Reds, and White Wyandottes. Sunnyside Poultry Farm, Hillsdale, Mich.

WHITTAKER'S TRAPNESTED RHODE, ISLAND REDS—Both Combs. Michigan State Accredited, Bloodtested. Michigan's Greatest color and egg strain. Chicks and Eggs. Sixteenth Annual Catalog Free. Interlakes Farm, Box 9, Lawrence, Mich.

CHICKS—BARRED ROCKS—EGGS—Official records back of them 207-293. Winners, laying contests and shows. State Accredited. Good color. Lots of eggs. G. Caball, Hudsonville, Mich.

PURE-BRED CHICKS from State Accredited Stock. Fourteen varieties. Poultry Manual Free. Stouffer Egg Farms, Route 26, Mount Morris, Illinois.

BABY CHICKS, hatching eggs from our Ideal Barred Rocks from heavy laying strain, good healthy flocks. Farmrange Chick Hatchery, Charlotte, Michigan.

BABY CHICKS AND EGGS—Superior Ringlet Barred Rocks, Rose Comb Reds, White Leghorns, Catalog. Wyndham's Ideal Poultry Yards, Tiffin, Ohio.

S. C. BUFF LEGHORN BABY CHICKS from State Accredited Stock. Send for circular. J. W. Webster, Bath, Mich.

CHICKS—State Accredited English White Legheras, Barred Rocks and Black Minorcas. Circular, Hill-side Hatchery, R. 3, Holland, Mich.

RICHARDSON'S Rocky Ridge Barred Rock Chicks, \$16 per 100. Stock blood tested second time for Bacillary White Diarrhoes. Hanover, Mich.

TURKEYS

MAMMOTH GIANT Bronze Prize Tom, 40 lbs. Ex-cellent big range-grown young toms and females, soon laying. This quality scarce. Shiek Farm, Oxford, Mich.

CONTROL THE CORN BORER with White Holland turkeys, I have the best. Also Toulouse Geese. Alden Whitcomb, Byron Center, Mich.

TURKEY EGGS—all breeds, Strictly pure-bred, Booking orders for early spring delivery. Eastern Ohio Poultry Farm, Beallsville, Ohio.

FOR BRONZE TURKEYS—Toulouse Geese, write M. B. Noble, Saline, Mich.

SITUATIONS WANTED

SINGLE MAN WANTS WORK on poultry farm. Address John Dermertes, 2252 21st St., Detroit, Mich. SINGLE Man wishes position as milker. T. Denzler, 3475 Livernois Aze., Detroit, Mich.

HTLP WANTED

WANTED—Young man to work on small dairy farm, by the year. Must be willing to mills. Good pay and good home to right party. H. F. Groeb, R. No. 6. Box 228, Ann Arbor, Mich.

AGENTS WANTED

AGENTS—Our New Household Cleaning Device washes and dries windows, sweeps, cleans walls, scrubs, mops. Costs less than brooms, Over half profit. Write Harper Brush Works, 173 3rd St., Fairfield, Iowa.

WE PAY \$200 MONTHLY SALARY, furnish oar and expenses to introduce our guaranteed poultry and stock powders, cleaner .etc. Bigler Company X 683. Springfield, Illinois.

MAKE MONEY by selling baby chirks. We pay liberal commission. Shadylawn Hatchery. Zeeland, Mich.

MICHIGAN FARMER
Classified Liners bring results. Try one.

CLASSIFIED ADVERTISING

This classified advertising department is established for the convenience of Michigan farmers. Small advertisements bring best results under classified headings. Try it for want ads and for advertising, miscellaneous articles for sale or exchange. Foultry advertising will be run in this department at classified rates, or in display columns at commercial rates.

Rates 8 cents a word, each insertion, on orders for less than four insertions; for four or more consecutive insertions 6 cents a word. Count as a word each abbreviations, initial or number. No display type or illustrations admitted. Remittances must accompany order.

Live stock advertising has a separate department and is not accepted as classified. Minimum sharps 10 words.

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

REAL ESTATE

SNOW, ICE AND A LONG, cold winter saps the energy of the northern farmer, while down south cattle are grazing, the farmers are planting strawberries, potatoes and truck crops, which will be sold on early high-priced markets before the northern spring begins. Why not move to the country where farming pays? No hard winters, expensive living, nor fuel bills. Fine old farm, \$40 per acre, Rich virgin land, \$20 an acre, For full information and how to save \$1,000 in buying a farm, write W. E. Price, General Immiration Agent, Room 674, Southern Railway System, Washington, D. C.

LOVELY PLANTATION HOME—433 Acres, 40 Reg. Cattle, Horses, all farm tools; artistic residence valued \$10,000, 11 rooms, 2 baths, electricity, fireplaces, good barn, tenant houses, garage, etc.; on graveled road edge splendid small city; smooth rich fields, private lake, springs and spring branches, well-fenced, 200 acres wood and timber. \$200 acres land in North. Sacrificed, \$15,000 for everything. Terms arranged, Picture and details pg. 70 big new Illus. Catalog money making furm bargains. Free, Strout Agency, 205-BC Kresge Bldg., Detroit, Mich.

FOR SALE—Our pleasant farm home of 71½ acres, about five minutes drive to Hastings. Overlooking pretty resort lake with about 30 cottages. Good house and barn, nearly new, other outbuildings. Good or chard, one-half in second growth timber, the rest seeded, loam soil, large gravel pit. Main gravel road. Terms. Mrs. Chas Will, Hastings, Mich.

THERE NEVER have been such farm bargains in Gladwin County, Mich., as I have to offer you this spring. Write me explicitly your needs. Free list. U. G. Reynolds, Gladwin, Mich.

130 ACRES—70 cleared, good soil, small house and barn, good-orchard, well, wood-lot. Close to school, church, town, lake, \$2,500, with \$1,000 down. Taken within thirty days. Phone W. F. Umphrey, Evert, Mich:

240-ACRE FARM—Because of old age, a am obliged to self one of the best equipped farms for dairying or stock raising in central Michigan. A card will bring you full particulars. James Edgar, Lake-view, Michigan. FOR SALE—80-acre farm, with or without stock and tools. Will consider house and lot in desirable location, or \$4.900 cash, balance on mortgage. Elmer P. Johnston, R. No. 2, Tecumsah, Mich.

FOR SALE—The biggest little farm in Allegan County, good soil, good buildings, good roads, good neighbors, comfortable 6-foon house, good barn with two cement sitos, poultry bouse, 8-acre winter wheat. 11 acres alfalfa, 22½ acres, \$8,200 takes everything. Free Illustrated cataleg. C. C. Otis, "The Farm Bargain Man," Plainwell, Mich.

170-ACRE FARM on gravel road, near good market. First-class buildings, tile sile. Productive clay loam soil, well drained. Splendid dairy or stock farm. A real buy at \$40 per acre. Small down payment and easy terms. For complete description write C. L. Rose, Evart, Mich.

FOR SALE—160-acre farm, 2 miles northeast of Olivet College, house 18x24, basement barn, 30x60. Buildings fair condition. Will sell very cheap, \$60 per acre if taken at once. Chas. B. Scully, Almont, Mich.

GOOD FARM, level, timber, lake, orchaftl. R. W. Anderson, Clarkston.

GRAPE CULTURE—165 acres, grape growing soil in famed Worcester County, near Boston market. Excelent water supply. Good roads. Quick transportation. Plenty labor. Ralph W. Perkins, College House Offices, Cambridge, Mass.

FOR SALE—80-acre farm, with or without stock and tools. Will consider house and tot in desirable location, or \$1,000 cash, balance on mortgage. Elmer P. Johnston, It. No. 2, Tecumseh, Mich.

118 ACRES, 20 timber, clay loam, brick house, barns, on pavement. Old couple will sell, \$80 per acre, no trade, Terms; best buy in Southern Michigan. E. O, Loveland, Milan, Mich. FOR SALE 400 acre farm on main paved road, near Detroit. Modern buildings. Low price, Write Mrs. Sept. 5850 St. Antoine St., Detroit, Mich. 'Phone Northway 2371-J.

ELEVATOR, house and lot for sale, or will exchange for farm of 80 to 100 acres. Belt Phone. A. R. Fisher, Coral, Mich.

WANTED FARMS

WANTED—To hear from owner of farm for sale for spring delivery. O. Hawley, Baldwin, Wis. HAY AND STRAW

ALFALFA and all kinds hay. Ask for delivered prices. Harry D. Gates Company, Jackson, Michigan.

WE ARE IN A POSITION to supply you with good second-hand egg crates, including fillers and cover, complete for shipping, at the following rates: Carboad lots, 15c each, less than carload lots 18c each. This is the 30-dozen size case, Also have fillers and flats for sale. William Spitz & Sons, 2645 Chene St., Detroit, Mich.

MISCELLANEOUS

MARI.—MARI.—We do contract digging and sell mari digging machinery, featuring the Musselman Bucket. Pioneer Marl Co., East Lansing, Mich.

CEDAR POSTS, direct from forest to aser. Ask for delivered price. E. Doty, Atlanta, Mich.

FOR SALE—Small car cull beans for feeding pur-poses, \$15 ton, sacks included. F. O. B. Pierson. Pierson Elevator Co., Pierson, Mich.

WANTED—Will Mrs. A. Linderer, formerly of Illinois, please write to Mrs. L. Sassaman, R. 3, Three Rivers, Mich.

SEEDS AND NURSERY STOCK

CABBAGE PLANTS—My frost-proof cabbage plants will mature hard heads three weeks earlier than your home-grown plants. Varieties: Copenhagen Market, Wakefields. Succession and Flat Dutch. Prices by parcel post. 500 for \$1.25; 1000 for \$2.25, postpaid. By express. 1000 to 4000 at \$1.50 per 1000; 5000 to 9000 at \$1.25 per 1000; 10,000 and over at \$1.00 per 1000. Order now. Prompt shipments, first class plants. P. D. Fulwood, Tifton, Ga.

FOR SALE—Certified Wolverine Oats, Golden Dent Seed Corn (Germination 95%). Manchu Soy Beans and leading varieties of early and late potatoes. John C. Wilk, St. Louis, Mich.

REGISTERED AND CERTIFIED seed corn and oats. Clement's waite cap yellow dent, and Duncan's yellow dent. Fire-dried, on racks, ear-tested and germination guaranteed. From high-yielding stock. Registered and Certified Worthy oats, a stiff straw and high-yielding variety, developed by the Michigan State Collège. All seeds grown under inspection of the Michigan Crop Improvement Association. Michigan's largest producer of seed corn. Paul C. Clement, Britton, Michigan.

FROST PROOF CABBAGE AND ONION PLANTS—Varieties Charleston and Jersey Wakefields. Succession, Flat Dutch and Copenhagen Market. Prices, parcel postpaid, 250, \$1.00; 500, \$1.50; 1.000, \$2.50. Express collect, 1.000, \$1.50; 5.900, \$1.25 per 1.000; 10,000 and over, \$1.00 per 1.000. We guarantee to ship promptly a good-sized plant that will please you. Tifton Potato Company, Inc., Tifton, Ga.

CEDAR POSTS, direct from producer. Prices on request. Frank Ferry, Rose City, Mich.

CERTIFIED Wisconsin pedigree barley, improved ro-bust beans. Fritz Mantey, Fairgrove, Mich.

BARRED PLYMOUTH ROCK EGGS for hatching, from our heavy laying strain, \$2.00 per 15, \$5.00 per 50, \$9.00 per 100. F. E. Fogle, Okemos, Mich.

500 ENGLISH WHITE LEGHORN LAYING PUL-LETS., \$1.50. O. A. Braman, Palo, Mich.

