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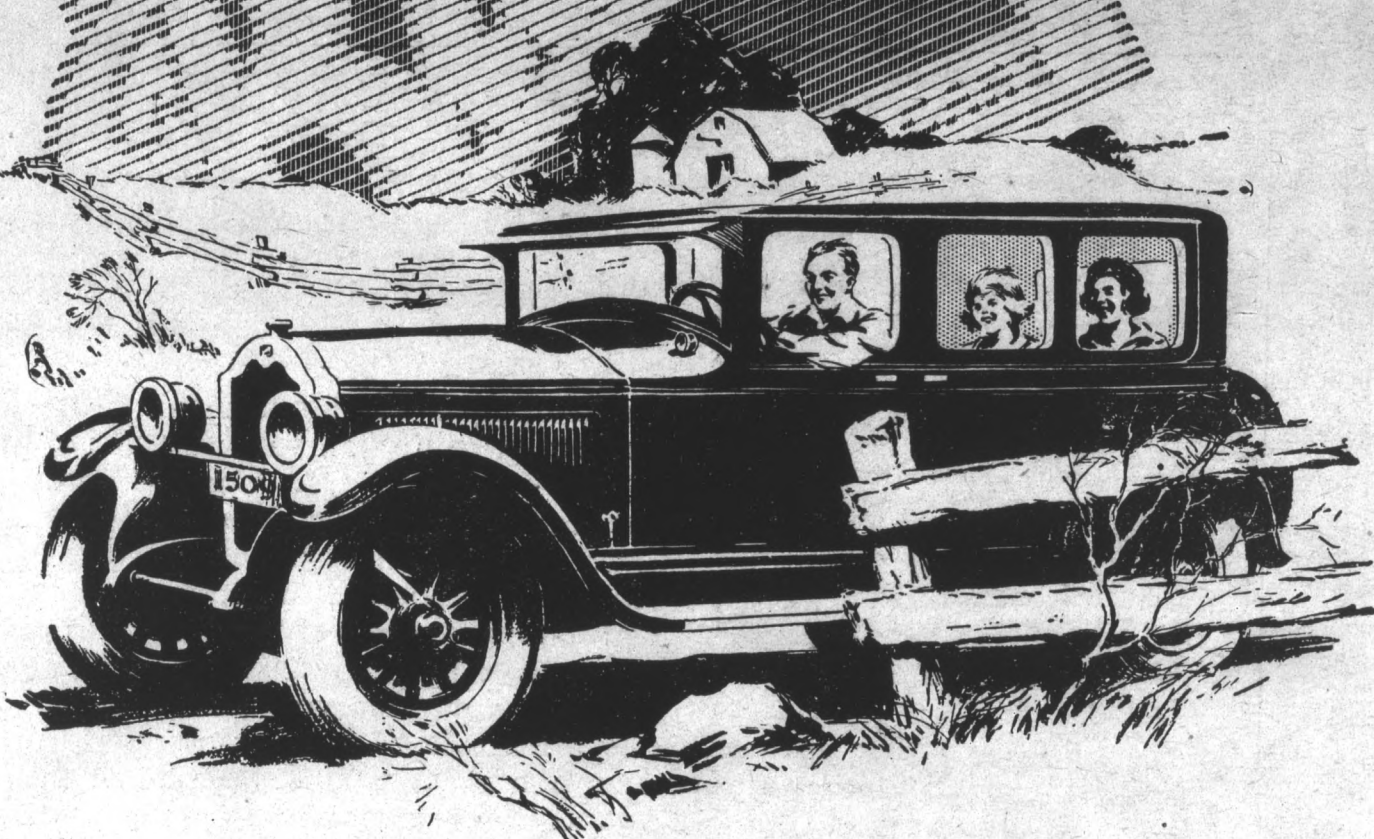


THERE is a widespread belief that Michigan is not an important agricultural state. This opinion is quite general outside of Michigan and a surprisingly large number of people within the state hold the same view. A thorough analysis of the statistics bearing on the subject not only fail to verify this opinion but actually disprove it. Care should always be exercised in making comparisons to see that correct conclusions are obtained. A comparison of the volume of production in different states means relatively little. It is the returns per acre or per man and the regularity of such returns year after year that counts. It determines whether agriculture is profitable or not. One would not expect Rhode Island to produce as much as New York because of the disparity in size; but if the Rhode Island farmer produces as many dollars' worth of crops and as regularly as the New York farmer, it is obvious that the former state should be considered on a par with the latter in crop production.

Michigan ranked seventeenth in the value of its crops last year, but a careful analysis shows that 12 of the 16 states outranking it had a greater area of improved land. Only 35 per cent of Michigan's land area is improved and only 52 per cent is in farms. The greater part of the 17 per cent of unimproved land now in farms is capable of being reclaimed.

While Michigan's record as an agricultural state is now being made chiefly from 35 per cent of its area, it is safe to say that the improved area can be doubled as the need for it arises. Neither has the limit of production been reached. The marvelous growth of industries has drawn heavily upon the able bodied man power of the farms until, in the majority of cases, the farms are not being operated to their maximum capacity. This is a situation that need cause no alarm. It is merely the application of the law of supply and demand, and emphasizes the fact that the State has a potential crop production asset that will take care of its needs for a long time to come, and when developed, will place Michigan ahead of many leading states that are already well developed and incapable of a similar degree of expansion.

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VOLUME CLXV

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

QUALITY
RELIABILITY
SERVICE

NUMBER TWELVE

Beef Growing in Michigan

Conditions are Becoming Even More Favorable for This Branch of Livestock

By C. A. Branaman

Animal Husbandry Department, M.S.C.

BEEF production is a system of live stock farming, wherein large quantities of roughage and of pasture are converted into marketable products with the addition of only enough grain feed to produce a market finish.

A herd of cows or steers will spend the summer on pasture with very little attention, and rarely any loss from disease. The concentrating of animals in large numbers on small areas and under unnatural and forced conditions creates the proper medium for disease.

Expensive winter quarters are unnecessary for beef animals. A shelter from rain and snow, and a good windbreak, is all that is required, if considerable grain is being fed to fattening cattle. A herd of dry breeding cows, or of stocker steers, will maintain their weight on roughages of good quality, without the addition of the more expensive concentrates; however, a fairly warm barn will save considerable feed.

No single feed has been found that will surpass good, luxurious pasture for a complete cattle ration. Fresh green grass supplies all the food nutrients required for normal growth and milk production, except possibly in alkaline regions, or other sections where some essential minerals are lacking. Mature animals will fatten readily on good pasture. Kentucky bluegrass, or June grass, is the most common, and one of the best pasture grasses. The clovers probably surpass bluegrass in nutritive value, although they must be used with care to prevent bloating.

For heavy milk production, or for fattening young growing animals, the feeding of grain on pasture is doubtless the most economical method for

producing milk or beef. The nearest approach to fresh pasture is well preserved corn silage. It comes the nearest to replacing green grass as succulent feed of any winter feed that can be economically preserved. Also in time of summer drought when pastures are closely grazed and flies are tormenting the cattle, the supply of silage will prevent a sharp setback in gains or production.

The Silo Preserves Feeding Value of Corn.

Many farmers think that when the whole corn plant is put in the silo, the feeding value of the grain is greatly reduced. However, in three successive years comparing normal corn silage

with stover silage for fattening steers at the Michigan Experiment Station, we found in each case that the corn in the silo gave better results than did an equal amount of dry corn fed with the stover silage. The cattle made better gains, carried a better market finish, and cost less per hundred pounds of gain. Other experiment stations have obtained the same results in similar trials. The only case when it might be more profitable to ensilo only the stover would seem to be for the purpose of wintering dry cows or stocker cattle. Even then the extra labor involved in saving the corn might make it just as profitable to give a lighter feed of normal silage,

and feed more hay or cured corn stover.

Corn silage is lacking in one of the essential food nutrients, protein, and in order to get the most value from the silage ration, protein must be supplied in the form of a protein concentrate, such as linseed oilmeal or cottonseed meal, or in the form of good quality legume hay, clover, alfalfa, cowpeas or soy-bean hay. For maintaining breeding cows or stock cattle, one pound per day of the protein supplement, or four or five pounds of the legume hay will supply the necessary protein, and also add some of the necessary mineral matter which is somewhat lacking in corn silage.

Probably the strongest objection to the use of the silo is the labor necessary at filling time. However, records show that it requires practically the same amount of total labor to harvest the entire corn plant in any other manner. It is simply a case of mobilizing enough labor at one time, instead of using all fall and part of the winter to do it. Many communities solve the problem by working together with their available labor and in some cases hiring a few extra men. Of course, the more help one has, the faster the job. In a few days' time the fields are cleared for wheat or rye seeding, and the feed is stored for the winter. The big advantage is larger feed value obtained from silage as compared to any other method of harvesting.

Corn, the Paramount Fattening Material.

Corn is the standard fattening concentrate. The grain is especially high in carbohydrate material, which pro-



O, the Crowds—they Enthuse Me, they Thrill Me, then they Restrain Me, they Bring Me Comedy and Tragedy—All the Elements that Enter Into the Fabric of a Normal Life.

Following the Fertilizer Fiend

Taking a Long Squint at a Big Business

By O. B. Price

THE use of fertilizers in Michigan has a very great part to play in the production of agricultural products. Whether the crops are produced to sell from the farm, or to feed to the stock on the farm, they must be produced at a profit. When using fertilizer it should be with the idea of cutting the cost of production per acre, or per man or animal unit, rather than to increase the yield per acre. Many times the large productions are completely taken up by the cost of production, leaving no profits for the labor or investments.

Occasionally we hear a neighbor tell us about using fertilizer and getting no results from it. But why didn't he? There may be several reasons. In practically all cases where unfavorable results have been secured, it has been the fault of the farmer rather than the fertilizer. He has used the wrong kind, he has applied it in the wrong manner, or he has not used the right amount. The soil must be considered and the crop response to fertilizers must be understood. It is just as essential, and probably more so, to know what to feed your crops while they are growing, as it is to feed your dairy herd for maximum milk and butter production.

The use of fertilizer in Michigan is

increasing each year, but this means very little to the future agriculture of the state, if the farmers are using the wrong mixtures on their soils, or are not using the proper method of application. These increases have not been rapid, but they have been steady. Even during the years 1921 to 1923, when the prices of farm products were relatively low, the increase in tonnage was about fifteen per cent annually.

It is encouraging to note that during this time, and since, the trend of fertilizers has been upward in so far as the quality of material is concerned. More high analysis materials have come on the market, and more low analysis materials have been dropped from the list of fertilizer companies. This was a great move, but it is only one of several factors that enter into the use of fertilizing materials. Even though a high analysis fertilizer is used, it may have an improper ratio of nitrogen, phosphoric acid and potash.

What Are High Analysis Goods?

It might be well to consider here just what we mean by high analysis goods. When we speak of a high analysis fertilizer we mean a fertilizer containing fourteen or more units of

plant food. A unit of fertilizer being one per cent per ton, or twenty pounds. Then a high analysis fertilizer would contain a total of fourteen per cent of plant food as a minimum, or 280 pounds of available plant food.

In comparing a 1-8-1 with a 2-16-2 we find that the 1-8-1 contains a total of ten units of plant food, while a 2-16-2 contains twenty units of the same plant food, or twice as much, in exactly the same proportions. When you buy either of these fertilizers on the market, you will find that the 1-8-1 will cost you about seventy-five per cent as much as the 2-16-2, and yet you will get only one-half as much plant food. Fortunately, the 1-8-1 has about served its time, and in its place has come the 2-16-2 along with other high grade goods, giving the farmer cheaper and better plant food for his crops.

This change has been very rapid the last three years. In the spring of 1922 there were twelve brands of 1-8-1 sold in Michigan, in the spring of 1923 there were only six brands, in the spring of 1924 only three brands, and this spring we were able to get quotations on a 1-8-1 from only one com-

pany. During this same period of time the number of brands of 2-16-2 increased from four to thirteen, so that now practically all companies selling complete fertilizers in Michigan have it on their list.

There are still many farmers who want 1-8-1, or other low grade goods, because they are cheaper per ton. For this reason many fertilizer companies keep these materials on their list, knowing full well that it is costing the farmer more per unit than if he were using only high grade materials. This is also a handicap to those fertilizer companies who are cooperating with the Michigan Agricultural Experiment Station by selling only high analysis goods.

Will Soon Be Extinct.

Low analysis materials in general are on the decline. In 1912, fifty per cent of the brands collected and analyzed by the fertilizer inspection service of the college were low analysis materials. In 1917 this increased to sixty-eight per cent. In 1922, five years later, the fertilizer inspection service was transferred to the newly created state department of agriculture. We find in their 1922 report that only thirty per cent of the brands were low analysis. This was a marked

(Continued on page 245).

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CURRENT COMMENT

This Ought to Work

HERE is a little stunt that occurred in Wexford county. In the northern part of that county a cow testing association has been formed. It so happened that but twenty-three men were signed up. The tester came on the first of July. Having two days remaining in the month, County Agent Ousterhout, during July, signed up another farmer and the local elevator man to fill out the schedule.

The plan is for the tester to spend one day each month with the elevator man who furnishes commercial feed to the farmers. By this arrangement it should be possible for the elevator man to get a better idea as to the feed requirements of the farmers. Furthermore, the tester will be on hand to counsel with any farmers outside of the association who may wish assistance in compounding feeds.

The reason why announcement is made here of this innovation is that the whole idea is permeated through and through with the finest type of spirit of the cooperative variety.

What of Pride

PRIDE is an impelling force that drives us on to do the things that others do. We don't like to be outstripped by our friends or by our enemies. We work and toil to keep up with, or defeat, our associates, not necessarily for pecuniary gains, but to satisfy our pride. Many a farmer has worked hard to secure a crop that would beat his neighbor, more than to gain financially by the extra preparation.

Pride is sometimes confounded with ambition. When we work for position or distinction, or wealth, solely for the purpose of possessing it, that is ambition; but when we compare our efforts with others and do the things for this purpose, that is pride. Ancestral or family pride causes us to compare our ancestors or our family with other families, and we use our influence and effort to keep the family name clean and honorable.

Pride is sometimes confounded with bravery. When we do things in a courageous manner, not thinking of the effect it will have upon us, that is bravery, but when we do things for the plaudits or approval of others, that is only pride. An ex-governor of one

of our states, a veteran of the Civil War, once said there were very few men who faced the cannon's mouth from pure bravery. He admitted that he did not. Every instinct told him, he said, when he went into the first battle, to get behind a tree or a rock—out of range. But pride, what the boys and his friends back home would say if he showed the white feather, compelled him to march right up to the jaws of death—with the rest of them.

A certain amount of worthy pride is a virtue. It is proper to do things for the purpose of holding the respect and esteem of our friends and neighbors. But when pride is carried to extremes it ceases to be a virtue. It has been said that pride made the devil. It is equally true that some of the finest folks in the communities of our state are what they are because their lives have been tempered with the right degree of this element—pride.

Salaries Too High

THE Maine Potato Grower's Exchange has been in a bad way. Last year salaries amounting to \$70,800 were paid to ten officials to sell 3,396,725 barrels of potatoes, which netted the growers \$2,413,854, or a fraction over seventy-one cents per barrel.

Somehow or other the growers allowed themselves to harbor the feeling that the salaries were too high for officers who were able to secure for their good crop but seventy-one cents per barrel. So, recently the representatives of these growers met and reduced the salaries for the ten men from \$70,800 to \$46,400. The sales manager was cut from \$18,000 to \$12,000.

The peculiar thing is that the officers seem to think the same way on the subject for, rather than go out to find other employment, they all accepted the reduction. And, having gone that far in equalizing the returns between members, we have a hazy idea that these men will take the hint and work even harder to secure favorable returns from the crop they are called upon to market this year.

Time to Absorb

THE rate of immigration has been considerably checked by the new immigration law. For the year closing June 30, 1925, the total immigration into the country, according to the National Industrial Conference Board, amounted to 294,314, as compared with 706,896 for the preceding year. Deducting the aliens who left the country during the past year, the net increase amounts to but 201,586, compared with a net of 630,107 for 1923-24. Many countries have failed to fill their quotas. More native Italians left the United States than entered during the year.

Since, in times past, it was frequently remarked that people from other countries were coming here too rapidly to be properly absorbed or Americanized, it would seem that now is the time to absorb. Absorbing simply means for the old-comers to be friendly and helpful to the new-comers.

Cooperation That Co-ops

IT seems that there are several reasons for the success, or lack of success, of co-operation. One of the prime essentials, it seems, is that there be a unity of purpose. The Dutch farmers had to find a market for their eggs and bacon; the California fruit growers had a freight handicap that the individual could not cope with; the Canadian wheat growers grew far inland more exportable wheat than any other nation, with the buyers in the advantage as far as market information is concerned. Distance from market, and the handicaps that distance brings

seem to be one of the greatest factors in stimulating real cooperation.

Another certainty of cooperative success is that the cooperation should make some improvement over the existing agencies which the cooperative effort attempts to replace. There is no need of cooperation if the farmers can not get, through it, better or more economical service in the grading, packing and marketing of their products.

Cooperation, to succeed, must, in the final analysis, be on the dollar basis. Sentiment and enthusiasm developed by high powered orators, make unsafe foundations upon which to build. Co-operation is primarily a business proposition and should, therefore, be built from the ground up, on a cold, hard, business foundation.

Michigan and Florida

ONE is out of contact with the world if he doesn't know that Florida is enjoying a pretentious real estate boom. City newspapers throughout the country contain large advertisements of get-rich-quick land propositions, people come back with tales of fortunes growing like mushrooms. Florida has just been discovered and the rush is on. As in all rushes and waves of enthusiasm, some are going to win; others are going to wake up and find that they have been holding the bag. Regardless of real value, every rush is overdone; therefore, care and caution are necessary. Watch your step and pocketbook in Florida. And now, just take out your map of the United States. You will see Florida as a peninsula pointing south. On the upper part of the map you will see Michigan as a peninsula, extending north. Florida has a vast shore line and spots of beauty within. Michigan has 1,800 miles of coast on the great lakes, over five thousand interior lakes, forests and other natural places of beauty, all suitable for wholesome recreation.

The tendency is for people to play more. Machinery is helping man to do his work quicker, therefore he will have more time for the enjoyment of life. May it not be that Florida and Michigan, the two great peninsulas of this country will be its great playgrounds, Florida for the winter and Michigan for the summer.

Florida has been discovered. It is not without the range of possibility that Michigan will be discovered very shortly, too. If so, good Michigan property will certainly be a safe investment.

The Criminal Young

DURING the past year we have had plenty of evidence of the criminal tendencies of many of our youths. The girl in the west who shot her mother, the two young millionaires in Chicago who killed for sensation's sake, and the young man in the east who killed the six-year-old girl, are high marks in the year's crimes. Bank robberies and various other escapades just add to the thought that there is something radically wrong somewhere.

We blame the spirit of youth for these crimes, but sober thought brings the realization that it is not youth, but rather the bringing up, environment or care that the young get that causes youthful energy to flow in the wrong channels. This, to a great extent, brings the responsibility upon the older ones, upon the parents.

The spirit of youth can not be suppressed; it must be directed. If properly directed in sound, wholesome ways, it can not go far wrong, and often proves an asset to the individual and to the community as well.

In this respect, one can not stress too much the value of activities such as boys' and girls' club work, the scout movement, the camp fire girls, etc.,

to supplement the influences of the parents. But, please note that the word supplement, not supplant, is used. Parental influence cannot be supplanted. Proper parental guidance gives the child the feeling that he has something back of him. It gives him greater courage to face life's battles in the right way, rather than to take the easy way.

We parents have great responsibilities, often neglected, toward our children in doing our level best to give them a good foundation upon which to build. The homes of the nation can do more to lessen the crime wave than any other agency.

Corn Borer Inspection Tour

PLANS are nearly complete for an inspection trip through areas in Ohio, Michigan, and Ontario, that are infested by the European corn borer. Representatives not only of these infested areas, but from important corn-producing areas of both the states and provinces, will join in this trip. A demonstration of control methods will also be made. It is to be hoped that out of this trip, and from the work being done by the state and federal governments, something practical will be discovered or developed for the economic control of this pest.

Sleepers

YOU folkses what have been reading my weekly spasums know that I ought to know somethin' about this subject. Anyhow, Sofie says I'm the sleepinest sleeper she ever met. I don't know how many fellows she's met, but I know I lost so much sleep tryin' to get her, I ain't been able to ketch up yet.

There's lots o' difference in sleepers. Some just sleep, and others take what you call their vocal exercises while they sleep. There's lots what have gotta close their eyes and open their mouth before they go to sleep.



Sofie says I don't have to do anything like that, 'cause I'm asleep all the time, 'cept when there's some pretty girls around, then I'm wide awake.

There's lots o' different ways 'o sleepin'. Fer inst., me and Sofie is takin' a little trip and we're doin' some sleepin'. They make our car seats into shelves, put a curtain in front of it, and we go head first into sleep. We sleep about sixty miles a hour, and when the train stops we stop sleepin'. We go to sleep in one place and wake up in another. And we have a black man in a white coat what makes our beds.

I was sleepin' in my shelf, and I thought I heard Sofie, across the aisle, drivin' a nightmare. Well, I was just reachin' over across the aisle to tell Sofie she did enuf talkin' during the day, when I touched a lady walkin' by, on the leg; Sofie says limb. I guess she didn't get scairt much by the hand o' mystery reachin' out from behind a dark curtain, 'cause all she said was, "What you tryin' ta do?" As I wasn't tryin' to do nothin' but stop Sofie's nightmare from runnin' away with her, and as I don't like ta talk ta strange ladies when dressed in my tired attire, I just didn't say nothin'. I was as still as a mouse, an' felt about as big as one.

You know, it's lots o' fun takin' your mornin' walk in one o' them sleepin' cars when them curtains is bulgin' out with folkses dressin' behind them. You kin never tell whose wife you're goin' ta run into. Anyhow, this fast sleepin' is likely ta bring complicashuns, like fast livin', but you certainly have a rattlin' good time while you're at it, especially if the tracks is rough.—HY SYCKLE

Try This on Your Swamp

By K. K. Vining

ONE of the factors that limits the successful growing of alfalfa is the matter of drainage. Alfalfa simply must have a dry footing if it is going to grow. Not so with sweet clover, that able first cousin to the first named legume.

Up in Emmet county, near the Straits of Mackinaw, there is a considerable amount of cut-over and burned-over swamp land—land that once grew a countless number of balsam, spruce and cedar. The lumberman came along and took off the timber for pulp wood, posts and poles, and left a mass of dry tops and second growth. Then fire came along and left nothing much.

J. C. Schmalzreid, a farmer who lives south of the region described, but

belief that once seeded after a fire the clover will crowd out all second growth and become a defense against fire, on the one hand, and, on the other, provide an abundance of pasture and good hay, since this crop has already demonstrated its ability along all these lines in the north counties.—K. Vining.

FERTILIZER TREND.

(Continued from page 243). improvement during the ten-year period. Since then there has been even greater improvement. In 1923 there were only eighteen per cent low analysis, and in 1924 only fourteen per cent low analysis.

When you buy your fertilizers, take your pencil and draw a line through



Joseph Steffens has tried out one of the new rotary hoes on his sugar beet crop. He is enthusiastic over the results. This hoe consists of twenty-nine wheels mounted on two parallel shafts, and each of which has sixteen points, or prongs, making 464 in all. This means that in every six feet covered, 464 of these prongs dig in the soil and loosen it up for a depth of from three to five inches. Levers easily raise or lower the wheels. The implement works the soil close to and between the plants in the row without damaging them. It does not throw the soil on the crowns of the plants.

who owns an eighty of what was once a cedar swamp, decided to try an experiment in the spring of 1921. He wanted to see if sweet clover would grow on that land. There was still some snow on the ground and the depressions were filled with water when they went down to sow the seed. There was also a considerable amount of new growth on the land. A fiddle seeder was used. Crawling over the stumps and logs, and skirting the ponds, about three acres of land was finally covered with seed.

The seed came on after a fashion that year, but didn't look good enough to make Mr. Schmalzreid think it would ever amount to anything. Along in the summer of 1922 one of his neighbors called him and told him he had better go down and look at his "sweet clover jungle." So he and his son Frank visited the seeding, and imagine their surprise when they found a regular wilderness of sweet clover growing in the swamp.

They skirted along the edges and, hearing a noise ahead of them, saw three deer run out of the sweet clover in the nearby slashing. Examination showed that the deer had been feeding on the sweet clover all summer, judging by the runs through the patch. The growth was so thick that it was hardly possible to get through it, and so tall that a good-sized man would be lost to view when six or eight feet from the edge.

The clover was still growing there this summer, and has become so thick and dense that it has quite driven out the second growth. It hasn't been practical to try to cut the crop for seed or hay because of the stumps and logs, but it has been of value to know that the swamp will grow sweet clover.

Mr. Schmalzreid says that if fire ever goes over this land again, he will seed the entire eighty. It is his

all the brands that do not contain fourteen or more units of plant food. Then select the fertilizer you need from the remaining high grade goods. If you do not know which of the high grade materials to use, consult your county agricultural agent, or write to the Michigan Agricultural Experiment Station. Whatever you do, however, remember to use only high analysis materials.

In 1920 there were over 65,000 farms in Michigan reporting the use of fertilizer. This was only about one-third of the total farms, and the amount used only represented an investment of about \$75 per farm. This would only buy about two tons of high grade material, or enough for ten to twelve acres. This is not enough, and there is little doubt but what this average will be higher this year.

A Big Investment.

The fertilizers used at the present time are over 125,000 tons per year, representing an investment of nearly five million dollars. This represents a large investment and the proper materials must be used if the greatest dividends are to be secured.

It is interesting to note that those counties using the largest tonnage of fertilizers have the most productive soils. Just how long that practice has occurred cannot be ascertained, but there is no doubt that the counties of Wayne, Macomb, and Ottawa, with over 5,000 tons used annually, find it profitable. Genesee, Huron, Monroe, Oakland, Sanilac, Tuscola, Van Buren and Washtenaw have been using well over 4,000 tons annually. The tonnage is steadily increasing and with this growth will come more profitable farming.

The carry-over of beans in California this year totals 148,092 sacks, as compared with 537,697 sacks on August 1 a year ago.

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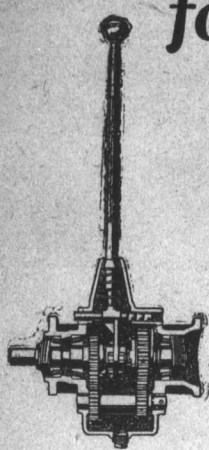
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Twice as much PULL for the Ford Truck



Find out about the amazing shift control that only Warford can build into a transmission. Give your truck twice as much power. Pull two ton loads anywhere at Ford one ton cost.

When your Ford truck is equipped with the Warford TEE, you will have a truck that gets the best of a two ton load whether it is in your corn field, or a hog wallow, at the bottom of a hill, or in deep sand.

And it will be easier to operate than you ever dreamed a truck could be. The gears can't clash. You can't fail to make a shift. In fact you can shift from high to low at thirty miles an hour if you want to.

In combining twice as much actual pulling power with this amazing shift control, the Warford equipped Ford gives you performance far above that of any other truck you can buy—at any price.

Check up these statements. Call on the Ford dealer next time you are in town and ask him about Warford. Or, better still fill in the attached coupon right now and send it to the Warford distributor nearest you for complete information and prices.

Warford

AUXILIARY TRANSMISSION

Send this Coupon to nearest Distributor

Transmission Sales Company • Stockbridge, Mich.
Transmission Sales Company • • • Detroit, Mich.

Please send me full information—without obligation on my part.

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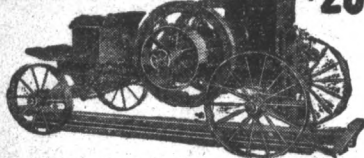
☐ I have a Ford Truck ☐ I expect to have one (Please check which)

New Cut Prices FREE
Write for my new cut price catalog before you buy Fence, Gates, Steel Posts, Barb Wire, Paints or Roofing. You'll save a lot of money. We pay freight.
THE BROWN FENCE & WIRE CO.
Dept. 2614 Cleveland Ohio

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Possess a profitable grove or farm in this "County Bountiful." Hills and 1500 lakes. Delightful year-round climate. Rare investment opportunities. For FREE booklet write: Orange County Chamber of Commerce, 54 State Bank Bldg., Orlando, Florida.

12 H. P. \$250



BATES & EDMONDS MOTOR CO.
"BULL DOG"
ENGINES AT BARGAIN PRICES

We have in stock for immediate delivery these well known gasoline and kerosene engines in 10 & 12 HP sizes. Can be furnished as portable, stationary or wood sawing outfits. Guaranteed for all kinds of hard service. Above price is for 12 HP stationary gasoline engine F. O. B. Lansing. Write for booklet and further information.

HILL DIESEL ENGINE CO.,
Successors
Lansing, Michigan.

White Lamb Lined Coat



with fur lined sleeves, best out sidecloth, high grade, ask your clothier or write

W. W. Weaver
Custom Fur Tanner
Reading, Mich.

GRAIN AND MILL STUFFS

Assorted Cans of Feeds and Flour. Prices on application
CONSUMERS MILLING CO.
103 3rd Ave. S. Minneapolis, Minn.

Thousands of Farmers have already bought this



Galvanized Square Deal Fence

The Red Strand (top wire) takes the guesswork out of fence buying. This marking means fence made from copper-bearing steel. (Lasts twice as long as steel without copper.) Patented, "Galvanized" process results in 2 to 3 times more zinc protection than is found on ordinary galvanized wire. This, together with the can't-slip knot; full gauge, live tension wires; picket-like stay wires, combine to make "Galvanized" Square Deal, the best fence investment you can make.

Free to Landowners
(1) Ropp's Calculator (answers 75,000 farm questions), (2) "Official Proof of Tests"—tells all about comparative tests on different kinds of wire fence and (3) "Square Deal" fence catalog. A request brings all three free. After reading them you'll know why so many are buying the New RED STRAND fence.

Keystone Steel & Wire Co.
4954 Industrial St. Peoria, Ill.

OUR SERVICE DEPARTMENT

Always Give Name and Address When Sending Inquiries as Satisfaction
Service Cannot Be Given to Unsigned Letters

TRANSPORTATION FOR SCHOOL CHILDREN.

When children live three miles from a school, should the township provide transportation for small children? If so, where should we apply for same?—D. L. W.

No duty to provide such transportation exists in the absence of statute requiring it, and we find no such statute. Session Laws (1921) No. 79 provide for transportation to high school pupils who have completed the first eight grades if the district does not maintain a high school.—Rood.

PAY FOR SERVICE.

Can a bull owner collect for service if the cow does not catch?—W. C.

This is purely a matter of contract. If the service is all that was sold, recovery may be had, though no value accrued to the purchaser; but if a calf was warranted, no recovery can be had in this case.—Rood.

UP-KEEP OF FARM.

We have a farm and it was worked by another man and his son on halves. When we came to settle up this fall there arose an argument about some damage done by them to the property. One day their horses ran away, struck the house, ripped off part of the boards and tore down the water pipes from the eave troughs. Another time one of the men rode over a large wooden gate with the tractor, and smashed part of it. These things were left unrepaired and they claimed it is our business to repair them under upkeep of the farm. Is this correct, is it our place to repair these damages? What is considered under the head of upkeep of a farm?—J. Z.

The use of the term "up-keep" in agriculture, generally means keeping the land, buildings, fences, etc., up to a normal state of condition. Such a term should be qualified if used in a farm lease, as it is too general.

Property under ordinary use depreciates in value, due to the elements and ordinary wear. This type of depreciation the landlord assumes. However, damages done to property outside of ordinary use should be borne by the party causing the damage. Many farm leases have clauses in to this effect.

ROADSIDE STAND.

I sold the state a strip of land along my place, 150 feet wide, for highway purposes. I put up a booth (where I sold little things, mostly of my own raising), on the side of this road. Can they order me back, (it hurts my business), as long as I am not hindering traffic?—J. W. K.

The rights of the abutting owner in the street depends upon the terms of his conveyance. Ordinarily the fee in the land belongs to the abutting owner; but it may be that the fee was deeded to the state instead of an easement for highway purposes. If the conveyance was of the easement only, the abutting owner can use the road for any purpose that does not interfere with traffic. If he deeded fee to the state he can use the street only for access, and as other members of the public.

LINE FENCES.

What kind of fence must I have between me and my neighbor? His hogs are destroying our pasture. Do I have to have a fence against hogs? If so, what size?—H. H.

This is a difficult question to answer. By Compiled Laws (1915) Section 2206: "All fences four and one-half feet high and in good repair, consisting of rails, timber, boards, wire, or stone walls, or any combination thereof, and all brooks, rivers, ponds,

creeks, ditches and hedges, or other things which shall be considered equivalent thereto, in the judgment of the fence viewers, within whose jurisdiction the same may be shall be deemed legal."

The courts in interpreting this statute have declared that the fences should be so constructed as to turn the animals ordinarily kept upon farms. This is about as far as the decisions have gone. The rest seems to be left to the fence viewers to determine. It is believed there are no express decisions on the exact question.—Rood.

News of the Week

National

More than forty-one per cent of the men's clothing manufactured in the United States is made in New York City.

A cloudburst near Wenatchee, Washington, caused the death of seventeen people.

Whiskey and brandy will be listed in the United States Pharmacopoeia for the first time, when the tenth revision becomes effective January 1.

The new post office to be erected in Chicago will have an airplane landing place on its roof for the landing of mail planes.

Auto traffic at congested corners in Detroit is greater than that at New York's worst street intersections, according to latest auto traffic counts.

The airplane PN-9 No. 1, which was to make a non-stop flight between San Francisco and Honolulu, was found adrift in the Pacific ocean with her five aviators safe, after floating for nine days. All hope had been given up for the crew.

It is reported that the Ford Motor Company wants to purchase some more of the government ships which are for sale.

On September 1 the population of the United States was 114,340,000, according to a treasury department estimate.

General S. D. Butler, who was loaned to the city of Philadelphia as head of the vice crusade, is ordered to quit January 1 to resume active service in the Marines.

President and Mrs. Coolidge returned to Washington September 19, after spending the summer at Swampscott, Mass., the summer Capitol.

A Chicago man has a name with twenty-nine letters in it. He is Mr. Econonapoulouskibergewxeriew. Take your time to pronounce it; we can't.

The Chicago Board of Trade is co-operating with Secretary Jardine to end wide price swings in grain.

One acre of the farm of T. A. Davis, near Ava, Ohio, is offered as a shrine in memory of the fourteen who were killed in the fall of the airship Shenandoah. The Shenandoah fell on Mr. Davis' farm.

Mrs. Woodrow Wilson is living near Geneva, Switzerland, devoting her life to studying the League of Nations, which her husband, former President Wilson, founded.

Foreign

Rene Viviani, former Premier of France, and one of the greatest orators of the day, died recently at the age of sixty-one years.

Former Kaiser William, of Germany, lays the blame of the World War on Great Britain because that country blocked an alliance between the United States, Great Britain and Germany, which alliance might have prevented the war.

The unofficial strike of British seamen has failed to prevent ships leaving Great Britain on schedule time. In Australia and South Africa, however, the strike is seriously affecting shipping.

The Allies have decided to invite Germany to a conference on the security pact at Geneva.

Rabbi Stephen Wise said that the rioting at the Zionist Congress at Vienna was not directed at the Jews, but against the Austrian government.

English financiers, who backed rum running into this country, are heavy losers in the breaking up of the rum row in the sea by the United States government dry fleet.

COW TESTING IN ISABELLA COUNTY.

A NEW cow testing association has recently been organized in Isabella county. It is composed of twenty-seven of the progressive dairymen living in the neighborhood of Mt. Pleasant. R. V. Hoyle is president of the organization; Charles D. Brown, vice-president, and H. McNamara, secretary-treasurer. They have employed Eldon Davidson as their tester. He is a very capable young man of the likeable sort, who came to the extension department last year from Bowling Green, Ohio, and has demonstrated his ability to make good in cow-testing work. Credit for getting the association into working order is largely due to the zeal and untiring efforts of Mr. Grambaugh, the Smith-Hughes teacher in the high school at Mt. Pleasant.

TESTERS' LICENSES.

HEREAFTER testers' licenses for Michigan can only be issued to parties who are eighteen years old or over. On account of difficulties experienced with younger testers the commissioner of agriculture has directed that no more licenses shall be issued to testers under eighteen years of age.

NEWS OF THE WEEK.

Forestry extension work is meeting with much interest among the farmers of Kent county.

Potato growers of Mason county, numbering around 300, are considering the handling of a county potato pool this fall.

A potato tour is being conducted by Agricultural Agent Milham, of Ottawa county, to study diseases and insects, and to inspect a number of fields produced by the better growers of the county.

H. C. Moore, potato specialist of the Michigan State College, declares that conditions in Michigan are ideal for the development of potato blight. He recommends spraying every ten days with a 4-4-50 Bordeaux spray.

Extensive plantings of grapes in the Ozark regions promise Michigan grape growers serious competition in the near future. The acreage in Missouri alone increased from 6,000 to 8,000 acres in 1924.

Peppermint growers who escaped damage from the frost last spring, are reaping a splendid financial harvest, the oil at this time bringing over \$12 a pound. Yields as high as forty pounds per acre have been reported.

It is expected that over three million bushels of potatoes will be produced in Montcalm county this year. While the acreage planted is seventeen per cent under that of 1924, the yield promises to be in excess of last year's record crop.

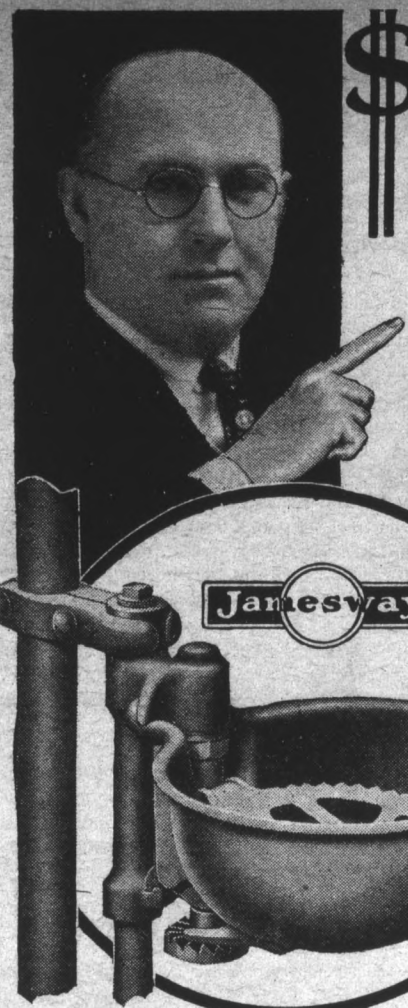
Sales amounting to over one million dollars are reported by the Farmers' Cooperative Grain Company, of Kinde, for the past year. The organization marketed 256 cars of beans and grain. There are 425 active members of the organization.

At the West Michigan Potato Show, to be held at Greenville, October 29-31, a mock trial is being arranged to feature the neglect that attends the production of potatoes on many farms. The total cash prizes at this potato show aggregate \$1,000.

Students of market conditions believe that potato growers in the northern states will receive a fair price for their spuds, unless abnormally favorable weather obtains during the next two months. With normal conditions, Maine and New York will have nearly 20,000,000 bushels less to sell this fall than last.

A large pack of extra fine quality corn is being made at the Edmore canning factory. At Traverse City, three canning plants are running extra shifts to take care of the large quantities of apples brought in from surrounding orchards. Farmers are paid from sixty to seventy cents per hundred for this fruit.

Stanley Johnson, superintendent of the South Haven Experiment Station, has observed that pear trees growing along the east shore of Lake Michigan are practically immune from blight. Should his observations be farther substantiated, the pear orchards of the state may, in the future, be largely on the shore of that body of water.

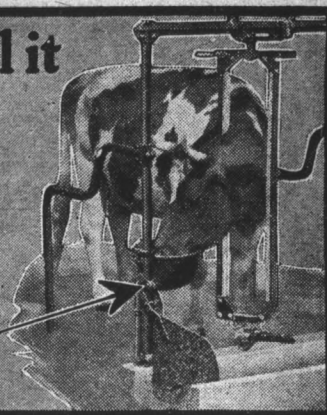


\$55.00 More Milk Per Month from 20 Cows

Let the Cow Tester Tell it

Fred G. Engelstad, Tester for Rewey Cow Testing Ass'n., Rewey, Wis.:

"A good opportunity was had to note the value of drinking cups in two herds recently, one belonging to Ralph Matthews, the other to Wesley Eddington. Mr. Matthews found his fresh cows gained 5 lbs. of milk per day, one as high as 7 lbs. Eddington's herd of 20 cows gained 75 to 80 lbs. per day after installing drinking cups. This increase was worth \$1.85 per day, or \$55.00 PER MONTH."



Jamesway Drinking Cups Did It!

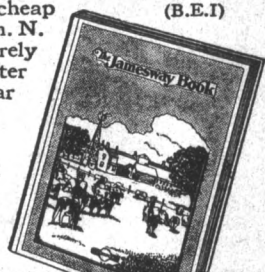
They will do it for you. You can't afford to be without them. If you don't put them in, you'll pay for them just the same—over and over again—in the loss of milk every two or three months.

L. H. Klaas, of Illinois, writes: "Our cows increased in milk production 25%. In three months this paid for our cups. Before, we were paying for them every three months and not getting them."

Don't make the mistake of putting in a cheap drinking cup. If you do, you buy trouble. Wm. N. Taylor, Fond du Lac, Wis., says:—"I surely appreciate your Jamesway Drinking Cups after having used other makes. Yours are by far the best."

Prove it Yourself Send for This Book

Get posted on this important, money-making, time-saving convenience. Send today for our New Jamesway Book. Satisfy yourself that the Jamesway Drinking Cup is all and more than we claim. Stop losing money daily. Mail coupon today. To office nearest you.



(B.E.I.)

JAMES MANUFACTURING CO., Dept. A14
Ft. Atkinson, Wis., Elmira, N. Y., Minneapolis, Minn.

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P. O. _____
State _____ St. No. or R.F.D. _____

17 EXCLUSIVE Features

1. Easily removable—can be cleaned and put back in a jiffy.
2. Top and bottom feed—a big feature.
3. "Locktite" fasteners never work loose.
4. Valve Holder can't move.
5. Bowl as rigid as if one piece.
6. "Stay Put" fastenings always stay put.
7. Jamesway Paddle for operating valve.
8. No danger of overflow.
9. Keeps floors dry.
10. Can clean without removing if desired.
11. Trouble-preventing strainer.
12. Enlarged inlets.
13. Non-stick valve always works.
14. Replaceable Fuller Ball.
15. Extra Large Bowl.
16. Attach to Wood or Steel Stalls.
17. Accessibility.

—and YOU Can BUY Them —Plus ONE Profit Direct From Factory

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Why Not PUT THIS NEW MILL ON YOUR OLD TOWER

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

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

COAL

\$2.75 PER TON

at the mines. West Virginia lump. Hand picked and shaker screened. Best quality guaranteed. Farmer agents wanted to solicit orders from their neighbors. Write us for delivered price and sample by return mail.

THEO. BURT & SONS, MELROSE, OHIO.

LEARN AUCTIONEERING

at World's original and greatest school. Successful auctioneers make big money. Write today for free catalog and important information. Carey M. Jones Nat'l. School of Auctioneering, 28 N. Sacramento Blvd., Chicago, Ill.

Mention Michigan Farmer When Writing to Advertisers

Time Tested Windmill

The Auto-Oiled Aermotor has behind it a record of 10 years of successful operation. In all climates and under the severest conditions it has proven itself to be a real self-oiling windmill and a most reliable pumping machine.



An Auto-Oiled Aermotor, when once properly erected, needs no further attention except the annual oiling. There are no bolts or nuts to work loose and no delicate parts to get out of order.

There are no untold features in the Auto-Oiled Aermotor. The gears run in oil in the oil-tight, storm-proof gear case just as they did 10 years ago. Some refinements have been made, as experience has shown the possibility of improvement, but the original simplicity of design has been retained while greater perfection of operation has been achieved. The Aermotor is wonderfully efficient in the light winds, which are the prevailing ones. The self-oiled motor works with practically no friction, and the wind-wheel of the Aermotor is made to run in the lightest breeze. It is also amply strong to run safely in the strongest winds. In any condition of wind or weather you may be sure that the Auto-Oiled Aermotor will give you the best of service. It is made by the company which established the steel windmill business 38 years ago.

AERMOTOR CO. Chicago Kansas City Dallas Minneapolis Des Moines Oakland

Please Mention The Michigan Farmer When Writing to Advertisers

FARM WAGONS

High or low wheels—steel or wood—wide or narrow tires. Wagon parts of all kinds. Wheels to fit any running gear. Catalog illustrated in colors free.

Electric Wheel Co., 35 Elm St., Quincy, Ill.

Walsh NO-BUCKLE HARNESS

Send no Money. Try a Walsh for 30 days on your own team. Stronger, neater, handier than any other harness. Ten styles. Easily adjusted to any horse. Write for Free Book. Direct-from-factory offer. \$5.00 after a month's free trial—balance easy monthly payments. Return if not satisfactory. James M. Walsh, Pres.

WALSH HARNESS CO., 439 Grand Ave., Milwaukee, Wis.

\$5.00 AFTER A MONTH FREE TRIAL

\$5 Down Buys Any WITTE Engine up to 10 H-P

Uses Kerosene, Gas-Oil, Gasoline, Distillate or Gas. Completely equipped with celebrated Trouble-proof WICO Magneto, speed and power regulator and throttling governor. Simplest and cheapest to operate. New device makes starting easy. 25% surplus power. Sizes 2 to 25 H-P.—all styles. Sold direct from factory to you on THIRTY DAYS' FREE TRIAL and Easy Terms. Write today for my illustrated Engine Book—sent absolutely free. No obligation to you. Or, if interested, ask for our Log and Tree Saw, 3-in-one Saw Rig or Pump Catalogs.

WITTE ENGINE WORKS

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World's Headquarters
For Pumps-Hay Tools
Door Hangers

MYERS

Self-Oiling Water Systems

A REGISTERED TRADE NAME

THERE is a Myers Self-Oiling Water System that exactly meets your needs—whether you have a deep or shallow well—a modest farm cottage or a large ranch or suburban estate. There are Myers Self-Oiling Systems with capacities up to 10,000 gallons per hour—and types for electrical, gas engine, windmill or hand operation. All are quality built—to give long years of dependable, noiseless, trouble-free service. Myers Self-Oiling Water Systems are unfailingly reliable—they supply an abundance of water at a cost that is almost negligible.

Fifty years experience in building pumps and water systems is back of every Myers Water System. Our immense resources, expert engineering ability and established reputation are your guarantee of complete satisfaction and low-cost operation.

Take Off Your Hat
To The
MYERS

The Myers Line also includes hand and windmill, well and cistern pumps, shallow and deep well power pumps, electric house pumps, pumping jacks, hand and power spray pumps—and hay unloading tools, door hangers, gate hangers, lawn and porch swings. All are of standard Myers quality.

See your dealer—or write us direct for catalog and free water-service suggestions.

The F.E. Myers & Bro. Co.
260 Orange St. Ashland, Ohio.



FIG. 2252

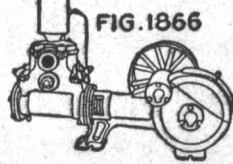


FIG. 1866

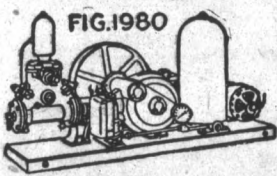


FIG. 1980



FIG. 2181

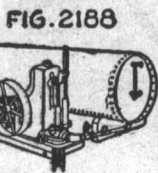
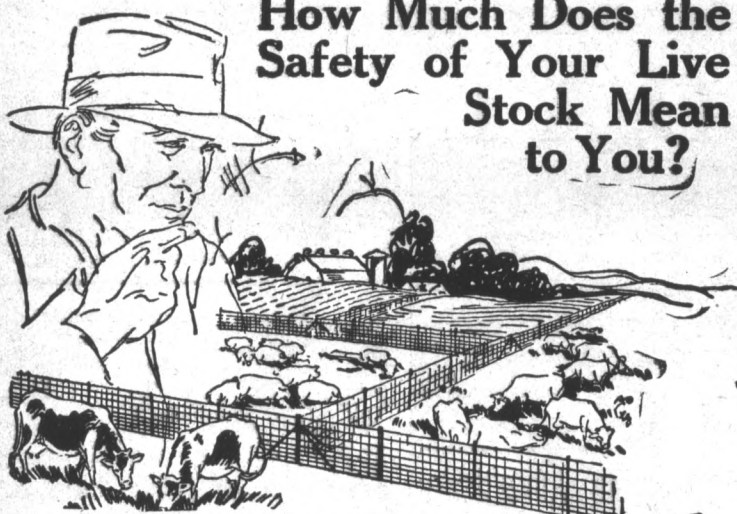


FIG. 2188

When Writing to Advertisers Please Mention
The Michigan Farmer

How Much Does the Safety of Your Live Stock Mean to You?



Good livestock is the foundation of good farming. But, without good fences, livestock could not be managed. And, the more good fences you have, the easier it is to handle livestock at a profit. Properly fenced fields on a farm are like rooms in a building. The more you have, the more revenue you can make.

You buy certainty of good fence service when you buy American Fence and Banner Steel Posts. American Fence is backed with this

GUARANTEE

Our dealer will hand you with every purchase of American Fence our written guarantee that it will equal or outlast in service any other fence now made, of equal size wires and used under the same conditions.

Use Banner Steel Posts

Easy to drive—no holes to dig. They root themselves firmly into the ground with the large Banner slit-wing anchor plate. Railroad design—the strongest known form of construction. Continuous notches close together make it easy to attach line wires. Ask the American Fence Dealer in your town.

Zinc Insulated

American Fence and Banner Posts

R.R. RAIL
DESIGN STEEL

American Steel & Wire Company

Chicago New York Boston Birmingham Dallas Denver Salt Lake City

Rural Health

By Dr. C. H. Lerrigo

BLOOD PRESSURE.

HIS face reddened with anger. His blood pressure mounted to the bursting point!"

You have guessed correctly. I am quoting from a sensational novel. But I give the quotation because it illustrates a very popular misconception about blood pressure. It does not mean getting red with anger, and it is very possible to have high blood pressure without any redness of the features.

It is only in the last decade that the testing of blood pressure has become a matter of routine examination by physicians in general practice. To patients it is still a matter of mystery. I believe I am not going too far if I say that it is also a matter of mystery to a great many doctors.

When a doctor tells you that you have high blood pressure he has not told you anything very definite. He might almost as well have contented himself by saying, "You are ill." It is worth while to know if you have high blood pressure, but the knowledge of the bare fact does not go very far towards getting you well.

High blood pressure is not a disease in itself, it is merely a symptom. It is possible that some good may come from general treatment of the symptom, but not very likely.

So the thing for you to say, when the doctor tells you that you have high blood pressure, is, "Very well, doctor. Why is it high? What causes it?"

High blood pressure may be caused by a disease of the kidneys, a disease of the heart or blood vessels, a nervous disease, a bad habit, or it may simply be an indication of too much work or worry.

There are conditions under which high blood pressure is incurable. There are also cases in which it is actually desirable; cases in which, but for the increased pressure, the circulation would be insufficient. There will also be cases in which the doctor's best efforts will not enable him to find a good and sufficient cause for the high pressure, and all that he can do is to treat the case experimentally. But in most cases of high blood pressure the doctor has not completed his job until he has found why, and ordered plans for relief.

INSULIN FOR DIABETES.

Can a person with diabetes get an absolute cure by using the preparation called insulin?—G. A. R.

I do not think that insulin can be called a "cure" for diabetes, and no such claim is made by its advocates. Yet it is the most wonderful discovery ever made for the control of the disease. The effect of insulin is to help diabetes patients take care of sugars. It supplies a deficiency in their digestive ability. It is a splendid remedy and in some early cases may result in cure. Every person who has diabetes should know about insulin.

NEWS FROM CLOVERLAND

POULTRY SCHOOL PLANNED.

A POULTRY club was organized at Hermansville, August 26. It is expected to hold a poultry school there this fall, under Michigan State College direction. Mr. R. L. Gulliver, of the college, is poultry specialist for the peninsula.

WILL SHIP TO DETROIT.

WORD comes from Manistique that it is planned to establish a farmers' produce market in that city, for the purpose of shipping local products directly to Detroit.

MARKET DAY IS POPULAR.

AUGUST market day at Ewen, Ontonagon county, saw about 400 farmers, and others, turn out. The market comprised registered dairy cattle, poultry, pigs, used cars, fresh vegetables, and used furniture. Outside cattle buyers were present. On the same day the Ontonagon County Valley Farmers' Association held a meeting and elected directors for the ensuing year.

CALVES GO WITH DEER.

WILD and domestic animals sometimes get pretty friendly in this territory. It has long been known that dogs and wolves occasionally get familiar. The latest recorded instance comes from Baraga county, where two calves have been enticed into the wood by a wild deer and have eluded all efforts at capture. The calves are reported to have become quite as wild as the deer itself.

PUBLIC MORE CONSIDERATE, SAYS WARDEN.

REPORTING on the forest fire situation in the Upper Peninsula during the past season, district fire warden H. J. Koepp, of Marquette, notes an increasing sense of responsibility on the part of the public. Individuals are more ready to report fires to headquarters and to take the initiative in putting them out.

In Mr. Koepp's district, which comprises Marquette, Baraga and a portion of Houghton counties, there were 178 fires up to September 1, which represents an increase over years preceded.

ing, but which might have been much worse, declares the warden, but for this increased efficiency in fire-fighting. There has been a pronounced lack of rainfall in this region, the deficiency at Marquette amounting so far this year to eleven inches of precipitation, and eight inches at Houghton. Many small streams are dry, or nearly so, and the hydro-electric power situation is very unsatisfactory.

TRAFFIC TOO HEAVY FOR GRAVEL.

HIGHWAY Engineer Levin, of Chippewa county, has recently given attention to the traffic on the most traveled highways. He quotes Maine's experience, which has led to the conclusion that the most such roads can take care of and be maintained in condition is 500 vehicles for a twelve hour day. Counts recently made on principal trunk lines through Chippewa county shows that on M-12, 1,139 automobiles used the road in one day at one point in that county. On M-25 the number of cars was 1,240. On M-29 the figures were 202 at Stawart. The time covered by these counts was from 7:00 a. m. to 9:00 p. m. The traffic on M-12 and M-25 has about doubled in four years. These figures refer to a normal day's traffic—not to a holiday.

ROUND-UP WAS WELL ATTENDED.

THE attendance at the annual farmers' round-up at the Michigan State College Experiment Station, Chatham, Alger county, is reported to have been about 1,700. There was a large attendance of women. About 200 farmers gathered at the Upper Farm in the forenoon to witness a marl-digging demonstration. This demonstration revealed to the farmers that in all probability they have marl on their own farms without realizing its presence.

Among the events for club members Iron county took first in potato demonstrations, poultry culling, boys' health contest, sheep-judging and camp stunts. About 350 boys and girls were in attendance at the camp on the banks of the Slapneck. Gogebic county sent sixty-three boys and girls, and Chippewa enrolled forty-six. Menominee county took one first and two second places. The first place was won in clothing demonstrations.



SPY TREES BEAR EARLY.

THAT the old belief that it takes Northern Spy apple trees twenty or more years to bear is erroneous, has been proved by Olney & Anderson, on their fruit farm three miles from Fremont, Michigan. They set out 100 Northern Spy trees in 1912. When they were eleven years old, they produced ninety bushels of fine salable fruit, notwithstanding they were given only a cursory spraying that year. This year, at the age of thirteen years, they will average five bushels to the tree, some of the trees having as many as fifteen bushels. They give as the reason for the early and prolific bearing, the fact that "we didn't cut the guts out of 'em." They prune spar-

the rack may be made of wooden slats or poultry netting. Place the heads in these racks, but not so deep but what the air will circulate easily among them. With a week or ten days of dry, windy weather the seeds will be in shape to handle and thresh out. But even after the seed is separated from the heads it is apt to ferment and mold or rot if packed in sacks. The seed must be watched carefully from the time the heads are harvested until it is thoroughly dried.—V. M. C.

RASPBERRIES TROUBLED WITH MOSAIC.

We had trouble with our black raspberries, they are so small and they don't mature, only two or three seeds fill out and the others dry up. The



Guy Beattie Cut Marketing Costs to a Minimum, and he Finds the Truck Invaluable in Doing So.

ingly, cutting out only such branches as interfere with others. "This little Spy orchard is going to be a little gold mine for us," they say.—H. Spooner.

TAKING CARE OF THE SUN-FLOWERS.

THE sunflower crop is maturing and will soon be ready to harvest. The most important and difficult part is the drying and curing after the heads are gathered. A good many people have been led to believe that there is a small fortune in sunflower culture. We surely have to pay a high price for the seed when we come to buy it for poultry and dairy feed, and really, it would seem that it might be a paying crop to raise.

If the crop could be handled and cured as easily as corn it would pay, but this can not be done, especially near the water, or any place where there is a humid climate, for the reason that the seed contains so much oil it is very difficult to get it thoroughly dry. With more than the usual amount of rainfall, the task of drying out is greater than ever. The writer has raised several good crops of sunflowers, but the curing in several instances was a tedious and laborious job. The sparrows and some other birds work great havoc when once they get started in a patch.

The best plan for harvesting the crop is to wait until the heads are thoroughly ripe, then cut them off and, with a farm wagon having a large box, drive through the field and throw them into the box, being careful not to shell any more of the seed off than can be helped. A good many loose seeds will be found in the bottom of the wagon box, but all this can be saved.

For curing the crop, racks may be built in some dry building where the air circulates freely. The bottom of

young sprouts are healthy and nice now. Is it the disease of the root or are they run out? They have been in quite a while. We trim the old stalks all out and cut the tips off from the young sprouts after the berries are gone. Does it make any difference by cutting the tips off from the young sprouts? When should this be done?—F. H.

The description fits exactly that of the mosaic disease of black raspberries.

The mosaic disease is one of the so-called virus diseases of plants which leads to stunting, dwarfing and eventual death of the affected plant. Fruit from diseased plants are undersized and frequently fail to ripen. The characteristic of the mosaic disease is the mottling of the leaves. This is more readily seen early in the season, but even at this time it will be noted that diseased plants have leaves of an "off color." The mosaic disease is spread through the patch through the agency of aphids or plant lice.

With young plantations it is advisable to rid the fields of all diseased and slow-growing plants. The spaces can be filled in then with healthy plants.

I notice that you state that the plantation has been in for quite awhile. I believe that it would be advisable to secure new stock and start a new patch, since old patches frequently have so many "loafer" plants that they are unprofitable.

The State Department of Agriculture is now inspecting all raspberry fields from which nursery stock comes, so that one is now able to get a much better grade of plants than formerly.

It is, of course, possible for you to secure good plants for setting by putting down tips from the strong, vigorous plants in your own plantation, but there is some danger if the mosaic and other diseases are very prevalent.—G. H. Coons, Plant Pathologist.

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—they last longer



Eveready Columbia Hot Shot Batteries contain 4, 5 or 6 cells in a neat, water-proof steel case. It is not a 'Hot Shot' unless it is an Eveready Columbia.

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Demands for Firestone quality and mileage have more than doubled the sales of Gum-Dipped Cords this year.

Gum-Dipping, the Firestone *extra* process, is a big and important economy factor in tire performance. This method impregnates every fiber of every cord with rubber—gives extra strength to withstand the extra flexing strain.

See the nearest Firestone dealer. He will furnish economical transportation, with maximum safety and comfort, by equipping your car with Full-Size Gum-Dipped Balloons.



MOST MILES PER DOLLAR

AMERICANS SHOULD PRODUCE THEIR OWN RUBBER *H.B. Firestone*

Advertising that Pays

TRY 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 263 of this issue.

Michigan Farmer, Detroit

NEW LAMP BURNS 94% AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up; is simple, clean, safe. Burns 94% air and 6% common kerosene (coal oil).

The inventor, J. O. Johnson, 609 W. Lake St., Chicago, Ill., is offering to send a lamp on 10 days' FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him to-day for full particulars. Also ask him to explain how you can get the agency, and without experience or money make \$250 to \$500 per month.

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To Sell and Install
**The Pfahler Rolling
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in a Fordson Tractor; gives 25 per cent more power with 25 per cent less fuel. Write for particulars.

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Soy Bean Enthusiasts Meet

Crop Has Great Promise

THE growing of soy-beans is rapidly developing into an important American farm industry. This was the impression gained by attending the sixth annual field meeting of the National Soy-bean Growers' Association in Washington and vicinity, September 1-3. Upwards of 600 soy-bean enthusiasts were in attendance from eighteen states and Canada.

On the first day a visit was made to Arlington Experimental Farm, where an extensive exhibit of soy-bean products was shown, and the soy-bean fields and experiments were inspected. Seventy-five acres of the Arlington Farm are now devoted to experimental work in soy-bean growing, and more than a thousand varieties of soy-beans are under test.

The second day a meeting was held at Union Farm near Mount Vernon, in Virginia, which was originally owned by General George Washington, and on which he carried on his experiments in soil improvement and practical methods of farming. Union Farm is now owned by Harvey C. Clapp, president of the Virginia Crop Improvement Association, who is experimenting with a large number of varieties of soy-beans. He usually has from seventy to seventy-five acres in soy-beans. In addition to his seed improvement work, Mr. Clapp has invented a broadcast soy-bean harvester, and a double-shovel plowing outfit that is saving time and labor on his farm, and is effective in keeping the land in good tilth.

The third day was spent at the Maryland Experiment Station, where much experimental work has been done with soy-beans.

In welcoming the soy-bean growers, Dr. W. A. Taylor, chief of the bureau

of plant industry, mentioned that 200 plant diseases are now under investigation in his bureau, and sixty to seventy-five plant breeding projects are under way.

Speaking on the subject of "how we got our soy-beans," Dr. C. V. Piper, of the bureau, said that soy-beans had been known in this country since 1804, but up until 1880 they were grown only in botanical gardens. About 1880 a few varieties were brought in from Japan. At present there are 1,133 varieties grown here, and 150 new varieties have been introduced from Japan and Korea in the last two weeks and will be tested at Arlington. Dr. Piper predicted that soy-beans will become a major crop in this country.

Soy-beans is the middle west's most valuable crop from the standpoint of protein production, according to Professor J. C. Hackleman, of Illinois College of Agriculture, who exhibited charts showing that soy-beans outranked most other hay crops in protein, having almost as high protein content as alfalfa hay. This crop adapts itself to sections and soils where other legumes do not succeed, and is finding a place on many farms that no other crop can fill. Records of five years' comparison tests on Illinois farms showed that soy-beans had paid a substantial profit to the grower, during which time oats was a losing crop and wheat and corn returned only small margins above cost of production. While experiments have not shown that soy-bean ground was any better than oat stubble as a seed-bed for wheat in some cases, Professor Hackleman said he believed that if the soy-bean ground were properly prepared and properly inoculated, soy-beans was a good crop to be followed with wheat.

Notes on the State Fair

As usual the largest attendance was on Labor Day when Detroit turned out.

Swine and sheep fanciers were enthused with the exhibits of stock in those two departments.

Professor Smith, of the University of Purdue, declared that no better Poland China show could be found anywhere. We feel particularly happy to get this from Indiana.

A prominent Ohio sheep judge, who covers the country from east to west in placing the ribbons, gave it as his candid opinion that the Michigan show of sheep could be excelled by none, and that the display of Cotswolds was particularly outstanding.

While some criticism may be justly deserved because of a general lack of competition in the grain and forage department, one could but admire the taste and skill in fitting together the major crops of the state into one large show. This exhibit provoked a great deal of favorable comment, particularly from non-agricultural patrons.

One lad had the misfortune to have a fine young sow injured, and she prematurely gave birth to six pigs. This eleven-year-old boy stood by and, what with rubbing and feeding, he now has good promise that the litter will be saved. One wonders what kind of exhibitions these young fellows will put on when they are in authority.

The Baby Show in the Women's Building attracted a large crowd of grown-ups as well as all the babies the physicians and their attendants could properly score. Little Bertha Jean Douglas, of Detroit, scored 99.8, and according to Dr. E. P. Mills, director of the contest, such a score has been recorded only once in the seven years the Better Baby Contest has been conducted at the fair. Awards for the contest were given out at the close of the fair.

All over the grounds could be seen fine evidence of boys' and girls' club work. The camps, the schools, the live stock, the canning, dress-making, craft work, all made one feel that club work is finding in the fair one of the fine means of carrying their programs of work to a much higher degree of

excellence than could be done otherwise. That these displays are the products of a high degree of skill becomes evident when, on not a few occasions, the youngsters take blue ribbons in the open classes.

The second floor of the Women's Building was crowded to overflowing with every kind of handiwork. Feminine fingers had spent hours, and even years, of time in creating the masterpieces in needle-work. A crowd lingered continuously about the booth of antiques, proving that the old is ever new and interesting.

To even those with no keen artistic sense, the \$100,000 art exhibit held more than a usual interest. It is an extraordinary fact that the artist can, with his paints and brush, create a picture of the everyday things about us and clothe them in such naturalness that the picture becomes a thing of beauty and a joy forever. The exhibit of the New York Museum of Art was a feast for any eye.

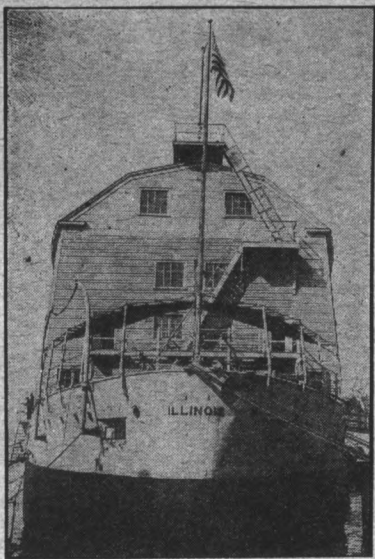
The Michigan State College contributed largely to the agricultural interests of the fair. The entries of live stock—horses, cattle, hogs and sheep, and the displays representing the activities of the various branches of college work caught the attention of many. How a cosmopolitan crowd will take interest in some unusual display was observed in connection with the veterinary exhibit of the college.

A better breed of men, women and children was the laudable aim of the Fitter Families—Happier Homes contest. This unique department was under the charge of a committee of physicians headed by Dr. Van Amber Brown, aided by a number of eugenic experts and officials of the Eugenics Society of the United States of America. The exhibits showed in a graphic manner that the general laws of heredity and health operate with human stock the same as those demonstrated at fairs in relation to plant and animal husbandry.

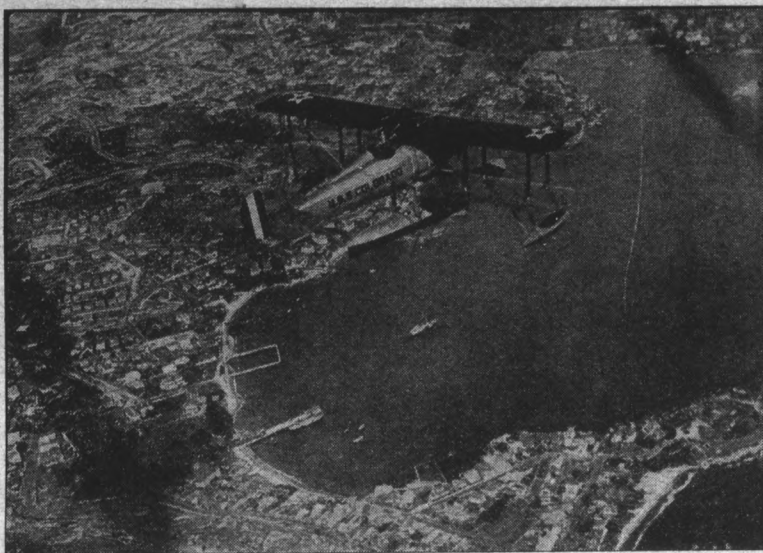
A thorough mental and physical examination was accorded each family registered, together with tests by specialists in psychology and psychiatry. The first triplets ever examined in the seven years the contest has been conducted in other states, were entered.

(Continued on page 239).

WORLD EVENTS IN PICTURES



The former U. S. Battleship Illinois docked in North River, may be rented for public dances.



When the American fleet visited Australia, 300,000 people gave the American gobs a riotous welcome, including launching of a squadron of escort planes and the tooting of hundreds of fog horns.



Three modern Norsemen crossed the Atlantic in seventy-three days in this forty-five-foot yawl.



San Francisco paid tribute to the late Edward Addison Bancroft, American ambassador to Japan, as the cortege passed through the streets, escorted by a detachment of sailors and marines.



Auto busses are slowly but surely supplanting the street car railways in many parts of U. S. Albany, N. Y., is the latest to adopt the use of auto busses instead of street cars.



Capt. Fraser Hale, air aide to President, and his mechanic, Private E. C. Norris, were killed in this airplane wreck.



Mrs. Seldon A. Day, author, willed her brain to Cornell University for research work.



On fat woman's day at Coney Island, jolly Marie won the first prize by tipping the scales to six hundred and twenty pounds.



The Boeing BP-1 seaplane was built at Seattle for a non-stop flight to Honolulu. When this giant plane lifted its twelve tons of steel and wood, it represented a milestone in airplane building.



A monument marking the spot at Mere Point, Maine, where Round-the-World Fliers first landed on U. S. soil near the finish of their remarkable air trip, was dedicated recently.

THE wind howled down over the crest of the mountains and threw itself against Signal Tower Z as though it would tumble the flimsy structure into the valley below. March was coming to an end contrary to all traditions. The warmth of spring seemed as distant as in the depth of winter. It had been raining steadily for a week, and now it had grown colder. The gale carried a biting chill and a large proportion of sleet with the rain that it swept along.

Tower Z marked the half-way point of a forty-mile spur of the Midland Railway, running north into the anthracite coal fields of Pennsylvania. On the time-tables of the system the spur was known as the Pipestone Branch because of a large mine of that name which stood at its head. A solitary passenger train ran daily in each direction. But the branch was a valuable feeder because of the coal that it carried to the main line. It had but a single track.

Howard Branton, the youthful signalman at Tower Z, shivered a little as the wind made the small room in which he lived and worked tremble. Looking out from the window he was barely able to see the green light of the semaphore which indicated that the track was clear ahead.

"Clear enough!" he muttered to himself, as men will who spend a large part of their time alone. "It's clear enough, all right, although it doesn't really make a blamed bit of difference tonight. This is one rotten hole to be stuck away in—nothing to see, nothing to do but wait for No. 3 and No. 6, which usually pass without even whistling. The Division Super. doesn't know I'm alive. And they told me railroading was a fine job for a young fellow to work his way up in!"

Branton jabbed savagely at the fire in the old-fashioned stove which served to heat the tower. Youth is the time for companionship, and he was lonely. He had been at Tower Z for more than a year, and to twenty-two a year is a long time. The fact that back in his home town there was a girl named Susan, who had intimated that she could not wait too long, did not add to his patience. Susan had brown eyes and a very modern nature. She felt sure that she saw the world very clearly, and it is certain that she demanded much—but Branton was trying to put Susan out of his mind for the present.

It had been dark two hours now, and No. 6 had gone by at dusk. Unless a string of coal cars came down from the mines there was little chance of additional work. The coal trains ran on no definite schedule during the night. When enough cars had been filled, the dispatcher at the mine sent along a wire instructing the Tower Z signalman to see that the line was clear. This, in turn, was relayed to Tower W, which stood at the junction with the main line. The principal function of Tower Z was to guard against landslides, and particularly to watch the long trestle which carried the track to the south.

It was just eight o'clock when Branton was summoned to his key by hearing his own call repeated.

"No more freights," said the dots and dashes. "Thought I'd tell you, so you could turn in. It's a rotten night. The rails are coated with ice. Good night."

Branton returned the greeting. He then turned toward his radio receiving set, which had helped to lighten many of the weary hours at the tower. Possibly Susan would be listening to the same concert tonight, he thought, forgetting his determination to think of her but little. The possibility comforted him, however, and he opened an evening paper which the crew of No. 6 had tossed to him, and looked for the broadcasting program from Harrisburg and Pittsburgh.

Outside the storm was increasing in violence. The wind crashed against

Only Ten Minutes to Spare

By Henry F. Pringle

the sides of the tower with renewed vigor and bent huge trees growing near by, almost to the ground. It was a bad night, the worst that Branton had experienced in the course of his year on duty. He was glad that no trains were due. The steady clicking of his telegraph instrument gave assurance, however, that the lines were still in place.

The radio program that night was about as usual. Branton determined to tune in for the program to be broadcast by a newspaper at Harrisburg. Much was being made of the fact that an opera company was in town that night. Part of the performance was to be sent out into the ether. The twin operas, "Pagliacci" and "Cavalleria Rusticana," were to be sung. The tenor in the leading roles, so the account read, was Signor Sanitelli.

"All right, Signor," said Branton to himself as he twirled the wave-length knob on the receiving set. "Show us what you've got."

He adjusted the ear-piece to his head, as he seldom used the amplifier

the answer from Tower W after Branton had described the message from the air. "This storm's raising Cain with the wires. I can't get Altoona. How are your own lines?"

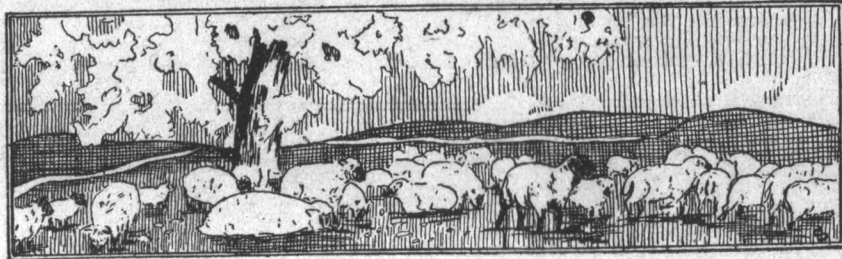
"Seem O. K. so far," said Branton. "Let me know if you hear anything. Relief trains may be started out, you know."

The radio was silent for several anxious minutes, and then:

"Later dispatches state that the officials of Pipestone mine believe the entombed men have taken refuge in an old shaftway, and that they are alive. The accident was caused by the collapse of No. 1 shaft after an explosion in a passage in which the night shift was working."

"The mine owners telephoned to Altoona about fifteen minutes ago (said a still later message). They ask for assistance in the shape of pulmotors, doctors, and relief crews."

"A dispatch from the Midland Railroad offices (droned on the voice) states that a relief train is being manned. The train will consist of a high-



except when some of the miners, or men on the freights stopped in for a brief concert on their way to the junction. The signalman found that the storm had affected the transmission but little. He listened somewhat impatiently to the bedtime stories, the market reports, and the fashion hints. Then came a series of news dispatches. Among them was one stating that the storm which was raging outside of the tower had covered a large area. Several lives had been lost in neighboring towns and villages. Finally, the voice of the announcer explained that the operatic performance was about to begin.

Branton was amazed at the clearness with which he heard the pure tones of the orchestra as the music started. He lit a pipe and waited for the curtain to go up. Now it seemed as though he were actually in the theatre at Harrisburg. The sound of the storm faded into the background, and the voice of Sanitelli moved him with its beauty. Before he was well aware of the passage of time the opera had ended, and the last notes of the sobbing Pagliacci had died away. Again came the howl of the wind and the tattoo of the sleet against the windows of the tower. The voice of the announcer stated that the usual news dispatches would be broadcast during the intermission between the two operas. Branton jumped to his feet as the first one sounded in his ears:

"Harrisburg, Pennsylvania, March 28 (it said), word has just been received here that fifty-eight men are buried in the Pipestone mine, which is located about fifty miles north of Altoona in the anthracite coal fields."

The signalman hurried over to his telegraph key after throwing into position his radio amplifier, so that he would not have to depend on the ear-piece. He broke into the circuit and called the junction.

"Haven't heard a word," came back

speed locomotive and two coaches. It should reach the mine in about two hours."

Branton again rushed to the telegraph key in the corner. Operas, as far as he was concerned, were over for the night. The relief train would necessarily run over the Pipestone Branch and past his own signal tower. It would follow the main line of the Midland for forty-five miles. This part of the journey should take about an hour. Then would come the switch to the branch on the last leg of the trip. The grade from the junction was a descending one. Here the train could travel from sixty to seventy miles an hour despite the ice on the rails.

"Notice to all signalmen and dispatchers," came a message just as Branton reached his key:

"Special train leaves Altoona at 9:55 Eastern standard time, for mine disaster at Pipestone field. Has right of way over all other traffic. Tower man at Z will—"

Here the instrument gave a final click. The signalman tried frantically to get the connection again. But the wires were cold; evidently the lines were down at some point between the chief dispatcher's office at Altoona and Tower Z. He swore to think that the break had occurred just as he was to receive vital instructions. He was glad to remember that his radio set was still, apparently, in working order. At least he would get some idea of what was going on by means of the dispatches which would probably continue from the newspaper office at Harrisburg. The sound of the wind and the storm sent a chill of apprehension down the young man's back.

The broadcaster at Harrisburg sent a final message stating that the special train had just left Altoona and that "with one hundred volunteer workers, ten physicians, and twenty-five nurses, it is now roaring through the storm on its errand of mercy."

A low rumble sounded from the ravine to the south of the signal tower. It was followed by sharp cracks which rose above the turmoil of the storm. Branton, horrified, heard the grinding of timbers and the crash and thunder of tons upon tons of earth in motion. The detonations, which reminded him of artillery fire, first made him think that part of the mountain was bearing down on the tower. He started for the door, but then the sounds ceased and only the storm remained.

The signalman glanced in the direction of his telegraph key to see, whether by some miracle, connection had been reestablished. But no signal came from the wire. Taking down a flashlight from a shelf he opened the door of the tower and was almost thrown back into the room by the force of the wind. With the gale blowing full in his face, he groped his way down the ice-coated track to the trestle across the ravine, which was about a hundred yards distant. His worst fears were realized. Part of an overhanging bluff had slipped away, due to undermining by the constant rain and the battering of the wind. The rear end of the trestle had been crumpled and now lay twisted in the gorge. The single track of the Pipestone Branch ended in mid-air.

—With one hundred volunteer workers, ten physicians, and twenty-five nurses on board, the special train is now roaring through the rain and wind on its errand of mercy—

The last dispatch from Harrisburg had throbbed through his mind. The special was due at Tower W at the junction within an hour, and once the onrushing train had turned into the branch line no power on earth could stop it from plunging off the end of the shattered trestle and crashing into the gorge with all on board.

For a moment Branton considered the possibility of building a fire, of burning the signal tower itself, in the hope that the glare against the sky might warn the engineer of the special that disaster lay ahead. Then he remembered that the track curved just before the trestle, and that a steep cliff obscured the view. The special, coasting on the down-grade from the junction, would be running at fearful speed. The signalman again groped his way to the side of the gorge and stood peering into the darkness. The nearest bridge was two miles above, and the first house on his side of the canyon even farther. By the time that he could reach a telephone it might be too late. And, besides, the first duty of the tower guard was to remain at his post.

He hurried back to his tiny office, but the wires were still silent. Branton could not get connections in either direction.

The situation, he reflected, was hopeless. A long-abandoned mining company had damned the stream almost opposite the tower, and because of this obstruction a deep body of water a hundred yards across and a half mile long, had been formed. The trestle was just below the dam. Help might lie across the stream; but Branton had no boat, and he could not swim well enough to get across in that way. The only boat he knew of was moored on the other side. The Fates seemed to have considered every factor and thrown them all against him. Branton knew that to clamber down below the dam would be suicidal, for the precipitous rocks were coated with ice. To go around the headwaters of the dam would take too long. The spring freshets meant that a full head of water was thundering over the dam, so he could not walk across that. And besides, came the ever-present reminder from the code of the tower man; he could not leave his post for more than a very few minutes!

While Branton had been out of the tower, the second of the two operas had started. An audience at the Har-

(Continued on page 257).

Activities of Al Acres—Slim Says He's all Ready to Go Over the Top

Frank R. Leet



Name _____

Address _____



Woman's Interests



Mothers and Motors

Conveniences Liberate Mother's Time for Her All-important Job

THE course of our daily life runs along smoothly and, as a rule, we take things as they come, but on some occasions a bit of information, statistically compounded, brings us up with a jolt and we wonder if this even, steady trend of life is pursuing its course in the right direction, or possibly at the right speed in the right direction.

But these facts regarding our Pilgrim mothers have recently come to light. Between 1701 and 1745 there were 418 graduates from Yale who married. What happened to their wives? Thirty-three died before they reached the quarter-century mark, fifty-five died before they were thirty-five years old, and fifty-nine died before they were forty-five years of age. Those 418 husbands lost 147 wives before middle age.

And Harvard was no better. The class of 1671, which was a typical one, graduated eleven students, one of which died a bachelor. Of the remaining, four were married twice and two were married three times. For ten husbands, therefore, there were eighteen wives. Because of the work and hardship of those pioneer days, women were short-lived and it took two or three mothers to bring up a family.

It has been truly said that the height of any civilization can be measured by the plane upon which its women live. Judging from this standard, we have made great progress, but we

shortens the time and labor of wash day, it makes sweeping and cleaning easy. There is no aching of arms and back when the churning is finished.

Then, if we add to these motor conveniences, running water and a practical heating plant, we are adding days to the lives of mothers, giving them time to devote to their real work—motherhood.

WATER THE BULB BEDS IN DRY WINTERS.

BULBS are not planted outside until October for the best rooting, for if planted too early they are likely to start growth before freezing up for the winter, and this is not desirable. They need to begin rooting promptly after being planted, for on their rooting depends their successful blooming, so I water my bulb beds well at once if they are at all dry. If the winter is a dry one they will need watering again perhaps, for there should be no check in the rooting until ground freezes. I water enough later so I will be sure they have good growing conditions

when the soil thaws out in the spring. They will get a good start and will be the stronger in plant and bloom for this care.—A. H.

POISON THE FLY!

WHAT greater pest for the busy housewife from spring until late fall, than the little, disagreeable, unsanitary, annoying fly!

On the farm most of the flies breed around the barns. Large quantities can be killed by swabbing the sides of the barn with a mixture of one tablespoon of lead arsenate, white arsenic or Paris green tincture in one pint of syrup.

Of all the poisons for killing flies, formaldehyde is probably the best, but it must be kept away from children. Use two tablespoons of it with a cup of milk, one of water, and a little brown sugar. Fill a glass tumbler with this solution, then place a piece of blotting paper on a saucer and invert the saucer over the tumbler, then holding the saucer down tightly, quickly turn the tumbler over and you will

have a self-feeding poisoner that will prove effective.—Mrs. B. S.

MEDITATIONS FROM THE KITCHEN.

Eliza Ann says that if the second baby could come first, it would save mothers a lot of worry.

It's funny how short some folks' memories are. After they get a new closed car they can't see how anyone can enjoy riding in an open one.

When Autumn Comes

THE advent of autumn brings with it the end of many of our fresh vegetables, but the home cook should see to it that vegetables still hold a prominent place in the menu she plans for her family for the fall and throughout the year.

For our contest this week, send me three of your choicest menus you serve in the fall. Five handy rubber kitchen aprons will be given for the five best letters.

Send your letters, before September 25, to Martha Cole, Michigan Farmer, Detroit, Mich.

School Perplexities

Or "Where Will the School Teacher Board?"

By Hazel B. Girard

VACATION time has reached its omega; the alpha of a new school year has dawned. Once again, Old Glory floats over the red and the white school-houses that dot America. School bells ring and the voices of children set the air vibrating with the joyousness of youth.

The ringing of the school bell will always be euphonious to our ears. It carries us back to our own school days when we parked our gum under the initialed, carved desks. Each passing year, we are more grateful to our childhood guardians who saw to it that we were well schooled—or else our hearts take on a deeper sense of remorse that we were among the unfortunate ones who quit school too soon. After all, the reasons for quitting were very obvious ones.

What a blessing that it has been realized at last that the uneducated men and women—the "might-have-beens," by so much hold back the progress of our great country.

The long pigtails and floating curls have become passe. The convenient bob has been substituted. The girl with the natural, honest-to-goodness curls will be remembered as the queen of the lot. Remember how she used to sit at noon, while those curls were fondled, combed and recurled? No more do we behold the vieing Scotch plaid, the flowered and water-colored ribbons. They have been relegated into mere memories with the erstwhile slate and indispensable "slate rag."

Everyone knows at last just who the new teacher is, where she came from, whether her hair is raven or auburn, whether her frocks are abbreviations or happy mediums, and now that big question, "Where will teacher board?" is to be solved.

Have you ever stopped to think just how much that means to us and to our

children? Certainly, we house our presidents and governors well. Their palatial rendezvous are matters of national and state pride—but how about those civic instructors to whom we send our children for more than half their waking hours?

Too often the best homes in the community are closed to her because the owners do not need her board money. In consequence, she is forced to seek abode elsewhere—where the need of filthy lucre is dominant.

I once read the diary of a rural school teacher. It was a laughable epistle, but nevertheless pitiful. If that diary were published, it would awaken many people to their obligations, it would arouse many communities to the immensity of the question—"Where will teacher board?"

Each morning in the golden autumn, the blizzardy winter and budding spring, this little teacher was forced to partake of pancakes and soggy, hurried-up oatmeal. The pancakes were of the greasy variety that she could still taste at the first recess. The lunch was always a replica of the previous day's one—no change, no daintiness, no planning.

Certainly, it should behoove any comfortably-situated family not to "turn down" the teacher. When she is enticed to your door by the soft look of your curtains, the quietude of your front porch, and the delicious aroma of your cooking as it percolates into the adjacent air, think twice before you answer negatively.

Somebody must board the teacher. Whoever does it should do it well. It is both a privilege and an obligation.

Let us endeavor to make this school year a prolific one. Have you given to the new teacher the glad hand of welcome? Have you responded to the first Parent-Teachers' meeting?



Mother Would Appreciate an Electric Range.

have not made as great a stride as we should, nor has that progress been rapid enough.

The average home lacks many conveniences to save much hard work and drudgery for mother, and liberate her time for the care of the home and her children, and her own personal recreation.

Motors, either electrical or gasoline, cost only a few cents an hour to run, and yet mothers use their valuable time doing the work that a motor could do at coolie wages.

The time when a mother can exert her influence in a child's life is brief. A great philosopher once said, "Give me a child until he is seven years old and I care not who has him afterward." Then it is a pity that long hours of a mother's time must be given to washing, ironing, sweeping and cleaning by methods little improved over our mother's of two or three centuries ago.

The use of a motor with attachments

It gives one a funny feeling to see somebody working in the garden in the very same kind of a dress you've been saving for a party.

The family tells me I have "casteritis" because everything in the kitchen has been put on casters.—Mrs. E. M. C.

Household Service

GRAPE JUICE FOR WINTER.

Please tell me how to make grape juice for winter.—Mrs. T. M.

Wash and stem ripe grapes. Fill can half full of grapes. Add quarter-cup of sugar and fill the can with hot water.

Place rubber, spring wire, but not bale of jar, place in water bath and process for thirty minutes. Remove and seal.

This makes a concentrated grape juice which can be diluted, and is most refreshing.

GOOD BEET RELISH.

How do you make beet relish.—Mrs. J. J. D.

The following is a very good beet relish:

1 qt. minced cooked beets	pepper
1 qt. minced cabbage	1 tb. salt
1 cup grated horseradish	½ tsp. cayenne pepper
2 cups sugar	½ tsp. pepper
½ cup minced green	1 qt. vinegar

Drain part of the juice from the relish after it has stood for twenty-four hours, and can. This relish need not be cooked.

To carry on the telegraph system of the United States, 1,500,000 miles of wire are required.

Know Beans

As Told by the Prize Winners

THAT hundreds of Michigan housewives did know beans was proven by the bean recipe contest this week. Recipes contributed showed how to use beans in more than a score of appetizing ways. I thank every reader for their part in the generous response to the contest. If your recipe is not among the prize winners, don't be discouraged, for it may be printed later.

The three other prize winners were Mrs. A. C. C., of Ypsilanti; Mrs. M. L. S., of Litchfield, and Mrs. E. G. W., of Grand Rapids.—Martha Cole.

Bean Loaf.

Wash and drain one pound of dry beans. Place them in a saucepan and cover with plenty of cold water. Add an onion stuffed with cloves, salt, a bay leaf, and a half teaspoon of thyme. Cook until the beans are tender, then put through the food chopper, season with salt, pepper, one-half cup of tomato catsup, two pimentoes, and the whites of two hard-boiled eggs chopped fine. Form into a loaf, brush with the white of an egg and sprinkle with bread crumbs. Bake three quarters of an hour.

Bean Croquettes.

Chop two onions fine and fry until transparent, but not brown. Mix with two cups of cooked beans that have been put through a sieve. Shape into croquettes, dip into beaten egg, roll in bread crumbs, and fry in hot fat. Serve with creole sauce made by stirring one tablespoonful of flour with one tablespoon of fat in a saucepan, and adding one cup of canned tomatoes, one chopped onion, one-half cup of chopped green peppers, and salt.

Bean Fritters.

2 cups mashed beans 2 well beaten eggs
1 chopped onion Salt, pepper

Fry onions in a tablespoon of beef suet, mix with other ingredients, and drop by spoonfuls into hot fat. Fry to a golden brown.—Mrs. C. J. P., Scottville, Mich.

Creamed Beans.

1 pt. cooked beans 1 tb. sugar
1 pt. tomatoes 2 chopped onions
1 cup sweet cream Salt, pepper

Mix together and bake for one-half hour.

Hopin' John Beans.

1 pt. rice ½ lb. bacon
Two cups mashed beans 1 sweet pepper
1 pt. red beans

Cook beans until nearly tender, then add the remaining ingredients and bake in the oven until nearly dry. Serve with slices of bacon grouped in the center.

Kidney Beans with Bacon.

Cook one pint of kidney beans until tender, with three slices of bacon. Season with salt and pepper, serve on a platter with a nest of crisp bacon in center.—Mrs. S. B., Blissfield, Mich.

ONLY TEN MINUTES TO SPARE.

(Continued from page 252).

risburg Opera House sat warm and dry and unconcerned, while a train rushed on to destruction in an effort to save the entombed miners.

The signalman was out of breath from his battle with the storm, and weary with a feeling of horror that he must stand idly by, powerless to help, when the rushing train crashed off the trestle. Finally he dropped into a chair. In doing so his hand brushed against the knob that controlled the wave-length mechanism. The singing had just started, but instead of the bell-like tones of Signor Sanitelli, a peircing, wailing screech came from the horn.

Branton recalled that on previous occasions the amplifier had given forth loud and raucous tones when the wave-length apparatus had been improperly adjusted. Suddenly he conceived the idea of utilizing the wierd sound.

Only a short distance on the other side of the dam was a house, but it had seemed as remote as the poles, because of the barriers in the way. In it lived, a man named Tompkins, a somewhat eccentric character, who had made good in the days when mining had been more a matter of individual hard work and luck. His home was crude but comfortable and, most

important of all, as Branton recalled, he had a telephone and the telephone wires might still be intact. Moreover, he owned the solitary boat on the other side.

Feverishly Branton took down a coil of double-strand telegraph wire from the wall. He attached the ends to the receiving set and ran headlong into the night, this time with the amplifier in his arms. Unrolling the wire as he went, he hastened along the track to the edge of the gorge. He quickly adjusted the wires to the horn.

"If only Sanitelli will yell his head off now!" he muttered to himself as he dashed back to the tower and twirled the knob on the radio set. Faintly, because of the fact that the wind was blowing against the sound, he heard a wailing and screeching from the horn. The signalman hurried outside again, taking with him two small chairs, a can of kerosene and an armful of dry kindling wood.

Across the water, carried by the gale, the wild sounds from the amplifier swept out into the night. Branton hastily piled his kindling wood on the ground and soaked it with the oil. Using his body to shield the flame of a match from the wind, he ignited the pile, and in a moment flames were leaping ten feet into the air. On top of the blaze he threw the chairs. He hesitated for a moment to listen, and wished that a more powerful singer had been engaged by the Sanitelli Opera Company, a soprano with a high-pitched voice, or Caruso at his best.

"If only Tompkins will come out of his cabin and look across the stream!" cried Branton aloud, as if in prayer, as he again returned to his post at the tower. His wires connecting with the outside world were still dead. It seemed as though an hour had passed since he had heard the roar of the landslide. Half afraid, he looked at his watch and was relieved to find that it was only ten-ten. The special would still be forty-five minutes in reaching the junction. The door of the tower opened and Branton leaped to greet Tompkins, who stood, holding an oar in his hand, dripping with rain and melting sleet, and watching him as though convinced of the signalman's insanity.

"What in blazes," he demanded, "is the matter with you? I near got drowned crossin' that pond in the storm. But I hears that racket and looks out o' the window, and then I sees your fire. Are you celebratin' a raise in pay or are you drunk?"

"The trestle's down," burst out Branton.

"So that's what happened a little while ago? I thought I heard a lot o' noise."

"Yes, and you've got to help. Is your 'phone working?"

"It's workin' right enough," said the old man, still puzzled and unimpressed; "but what gets you so het up? Supposin' the durned trestle is down? They ain't no more trains tonight, is there?"

"But there is a train," answered Branton. "There's trouble up at the mines. A special's on the way. My wires are down, so that I can't get the junction—I can't get any place at all. The train will start on its way here from Tower W in less than an hour. You're the last chance. Tell the telephone operator to try for Altoona and the junction. If you don't get either, try to get the Westinghouse radio plant at Pittsburgh. Then tell them to broadcast this message at once, and to wire all other plants to send it out also. And hurry, hurry!"

He scribbled a message on a telegraph blank and rushed Tompkins, suddenly galvanized to action, out of the door. There was only a chance, a very faint chance, that the plan would work. But Tompkins would act swiftly and with intelligence, the signalman knew, for the man had gone through several mine disasters himself, and would be spurred on by the plight of the entombed men.

"I got 'em, boy, I got 'em," came a triumphant call some minutes later from the doorway, and Branton turned from his useless telegraph key to grasp the miner's hand.

"I gave the girl at the exchange your message," he said. "I said to burn the wires to Pittsburgh. I got the Westinghouse plant inside of three minutes after she'd said the Altoona wires was down, and no answer came from the junction."

"I'm talkin' for Tower Z of the Midland-Pipestone Branch," I says to 'em. 'They's been a landslide,' I says. 'The wires is down. A special is hell-bent for the cave-in up to the mines, and will run off a busted trestle unless she's stopped pronto. We can't get to the junction to warn 'em. If you folks'll broadcast this here message (Continued on page 257).

FADA Radio



Get a demonstration of Fada Radio

The Standard of Reception

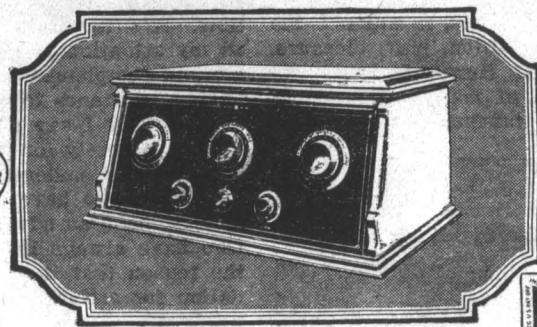
DAILY market reports, weather forecasts, and farming talks have made radio part of the necessary equipment of an up-to-date farm.

Choose your radio set the way you'd choose any other piece of equipment—for real service.

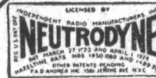
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as illustrated in the large view, requires 1 yard of plain material and 3 3/4 yards of figured 36 inches wide. 13c.



No. 5039—Ladies' Apron. Cut in 4 Sizes: Small, Medium, Large and Extra Large. A Medium size requires 2 3/4 yards of 32-inch material. 13c.

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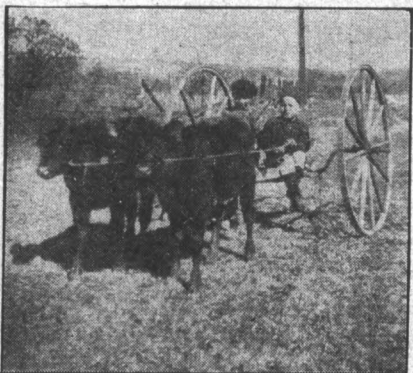
OUR BOYS AND GIRLS

Are Cross-words Beneficial?

By Ruth Bishop, M. C., Henderson,
Michigan.

Yes, cross-word puzzles are beneficial. Successfully working out cross-word puzzles, more than any similar amusement that any writer can recall, satisfies a long list of the fundamental desires of mankind. Included in this list are social distinction, group loyalty, cooperation, competition, pleasure, play, amusement, humor, curiosity, activity, and constructiveness.

Social distinction is the reward of one who the most skillfully and most quickly solves a difficult puzzle on which other puzzle addicts are working. Group loyalty and cooperation are manifested in the bonds that join puzzle fans, no matter how widely their other interests may differ. Any one who has ever worked a cross-word puzzle will admit that it satisfies the desire for competition, play, pleasure, and amusement. Humor finds its way into the game in many ways—sometimes by the far-fetched definitions



Lloyd Van Sickle, of Hart, With His Pet Calves.

that are given for the missing words. Curiosity, activity, and constructiveness, unquestionably, are displayed by everyone who tries a puzzle.

Also, cross-word puzzles increase the vocabulary. When one learns a word once, he does not forget it easily.

Cross-word puzzles are about the only means of amusement for prisoners, insane people, etc. What would these people do without the cross-word puzzles?

So, I say, "Let the cross-word puzzle stay!"

By Frank Van Tassell, M. C., Hart,
Michigan.

The cross-word puzzle is a very formidable looking object to me, especially when it contains very many squares. But the very formidableness of it should cause us to attack and solve it. And my reason is that it requires hard thinking to do it.

Habitual hard thinking is what we need, and what we must do, to develop brain efficiency. Of course, we must not neglect other activities, for the results would be very unsatisfactory in regard to our daily duties. We must confine cross-word puzzles entirely to our spare time, and be equally ambitious in our other interests. But we are not apt to become so infatuated as to disregard these other things.

The nature of cross-word puzzles is educational and impressive, so that what we learn from them sticks permanently in our memory. And this knowledge which is acquired from them is useful in almost any common need. They are within the reach of

nearly everyone, and in general favor everywhere.

If we let cross-word puzzles occupy our mind, instead of allowing it to dwell, perhaps, on harmful thoughts, or in reading every book, good or bad, that we find, we will be doing a deed very beneficial to ourselves. They are a form of clean amusement, while at the same time, they are a brain builder, so let's apply our M. C. motto to them, and watch for good results.

THE ADVANTAGES OF HANDICAPS. TO OVERCOME IS TO WIN.

I HAVE been a silent reader of the boys' and girls' page for a long time. A letter some time ago attracted my attention. That person, a girl, I think, complained of being poor and having no chance to work out her ambition. May I say she is having the best opportunity for a beginning. That girl does not understand it that way, but those who have suffered poverty, I think, have an advantage over those who have always lived in luxury, for the reason that it gives them a foundation for ambition and something to work for. Even though we may not have material articles, we are building in us something that will be of service to our country as well as ourselves.

Though we often get discouraged, we always have something to be glad about if we but look for them. Lincoln, our greatest president, was the

poorest of farmer lads. When he was splitting rails he was forming the foundation of his career.

If we think of what we have, instead of what we haven't, we would feel much better and would make it pleasanter for mother and dad.

Is it any wonder mothers get gray? Sis wants this, and brother must have that, and baby must have something else. Is there any mother who doesn't sacrifice herself for her children? Doesn't she always try to give them all the pleasures she can, and doesn't she always work her life away for them? Why are they so ungrateful to her? So, Merry Circleers, be cheerful, thoughtful and ambitious. Be thankful for what you have, and help ma and dad to make both ends meet.

Poverty isn't a crime, after all. Money has ruined many a young man and woman. There are more beautiful things in the world. It is the basis of nearly all crime. If we had not money our prisons would not be so full. Our country would not have to spend so much every year for protection.

If ambition isn't worth working for, it isn't worth having. Do your duty to make your home a happy one. Mother has a hard time. Do your bit to make it easier for her. It is a duty which belongs to us all. They sacrifice all for us. Let us show our appreciation by not finding fault because we haven't what we want.—Florence Ford.

OUR LETTER BOX

Dear Uncle Frank:

I agree with Arlene Campeau about us going back on you, if you weren't very good looking. I do wish a whole flock of letters would come to you, all saying they would write you, no matter what you looked like.

Say! Bob is a swell writer, isn't she? I would like to write as well as she.

If you keep from telling what you look like, and your name, I guess I can, too.—Oriole.

You have my name. If you wanted to send me a hundred dollars, I would get it, but if I wanted to thank you for it, Uncle Sam would not know which Oriole's nest to put it in. Bob is a good writer.

Dear Uncle Frank or What?

Well, how is my Uncle "What" and all the cousins? I just got over having the measles. Aren't they just great? You who haven't had 'em, don't wish for 'em. I sure was sick.

Say, I'm not afraid of you, Uncle Frank, and would be glad to meet you face to face any time. You might come here to see me. That's an invitation. I haven't had any invitation to come and see you yet.

Say, don't you ever get tired of receiving all these crazy letters from us, or do you find them interesting? I sure enjoy reading them when they are in print. We usually get our paper on Friday, and if I get the mail I hand the rest of it out, but keep the Michigan Farmer and run off and read our page the first thing.

Won't you please let us know when your picture is in the paper?

We can get over a little disappointment, but my curiosity is growing bigger and bigger.

I hope somebody's letter you received before mine gave W. B. such a terrible stomach ache that he won't want

to eat mine, not even nibble it.

Please print this, pretty please.—Your loving niece, Una Crandall, M. C., Newaygo, Mich.

I've had both kinds of measles, so I know all about them. How do I know who has seen me and knows my name? Well, "What" is as good as anything. Why be afraid of me? My picture was in the paper in 1913 and 1924. I have not been arrested since, so I have received no special notoriety. There is an open invitation for all to come and see me.



Uncle Frank Reading the Evening Paper.

Dear Uncle Frank and Cousins:

What have you been doing this summer? I suppose just reading loads up on loads of letters.

I wish you were with me on our farm, picking cherries and raspberries, and maybe sometimes helping mama and I with the dishes. There is such a lot of them.

I am going to do my best this month to help raise the M. C. Fund to \$200. I think that buying this radio is the best thing we can do. I know it will please the children at the Sanatorium.

Uncle Frank, have you ever been to a circus? I was to the Greatest Show on Earth this summer. It was the Barnum & Bailey and Ringling Brothers Shows combined. It surely was great.

I can remember seeing your picture, Uncle Frank, in the Michigan Farmer. You are about five feet seven inches tall, not so very fat, dark hair, blue eyes, and very handsome. Am I right? Ha! Ha.

Oh! Horrors! I sure wish you were here now. Mama has left me all of the dishes to do. I can work out on the farm, and I like to do most of the housework, but dishes—they sure get my goat.

We have three boys and two girls staying at our place picking fruit. In the evenings we surely do have good times. The boys are doing some prank every minute. I suppose you never got into mischief when you were young, did you?

I'd send you a picture with my knickers on, and a boy and my sister if you wouldn't be shocked.

Love to Uncle Frank and all my cousins—Marguerite Kerr, R. 2, Shelby, Mich.

I'm sorry I'm not there to help with those dishes. I'll take wiping for mine. You can wash them. No, I never got into mischief when I was young. Ask my Ma.

Dear Uncle Frank and M. C.'s:

I have been a silent reader for over three years, and often-times laughed at the difference of opinions of the boys and girls. Yes, I put the boys first; I think boys belong first. They have been first in everything, even on earth, (unless it was monkeys, which Mr. Scopes tried to make us believe).

I agree with Arlene Campeau. I don't think any of the M. C.'s would go back on you, but we might be very disappointed.

Say, Uncle Frank, if I was to try to find you or send a friend to find you, where should I look—in the "Advisory Staff" or in the "Associate Editors' Staff?"

I am quite certain it would be in one. Am I right?

Oh, it's eleven bells right now, and time, I think, all respectable want-to-be M. C.'s should be in bed.—With love to all, "Peter."

Another girl with a boy's name. My name is not in the Advisory Staff, so it must be somewhere else. I just hope the M. C.'s would not go back on me if I showed my face.

Dear Uncle Frank:

I bet you did not even know who this is. Well, it is no wonder. I have done nothing but extend the time for writing, but at last the time has come.

It is very busy around here. I have to work in a dairy with an output of seventy-five gallons of milk daily, and then work on a seventy-acre farm with my father, so you can imagine that I am all in at night.

Please find enclosed a small part of a dollar for the fund.

I will say good-bye now, hoping Uncle Frank won't receive any wooden nickels.—Your loving cousin, George Van Zytveld, M. C.

I don't blame you for putting off writing if you are all in every night. It is nice to be busy all the time, but it doesn't pay to overdo. Hope you will feel like writing again.

PLAYING WITH THE IMAGINATION. ONLY TEN MINUTES TO SPARE.

Or What's a Million Dollars Or So?

C OUSINS, let's tell what we'd do with a million dollars if we had it. Of course, perhaps we'll never get that much, but it is just a day dream. And I love dreams.

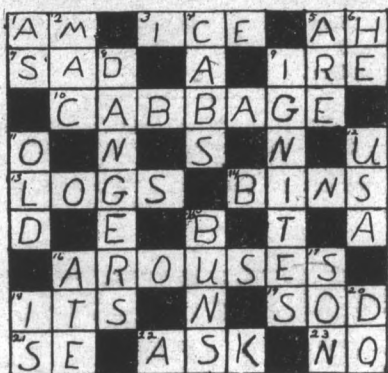
If I had a million dollars I'd keep it till I passed the voting age. Then I would have a lovely home built. I would have a yard containing a place to play base ball, foot ball, tennis, and everything dear to the heart of a boy. I'd also have a fine barn, with all kinds of pets.

"Who would live in this home?" I hear you ask. "Well, I would take all the orphan boys I could find, to live there. We would raise farm crops, fruit and flowers. Then we'd invite you, Uncle Frank, to come to dinner with us, and we'd treat you on fruit salad and apple pie. And, oh, Uncle, we'd cover you with flowers. Let's hear how someone else would use a million dollars. Best wishes, "Wild-flower."

Say, I'm going to dream about that fruit salad and apple pie, but getting covered with flowers is another thing. Please don't, because it reminds me of a funeral. I really don't think I'm a dead one, yet. Maybe you think that I would gormandize myself so with salad and pie that I would need flowers afterward.

VACATION CONTEST.

I HAVE just returned from my vacation and have had enough to furnish me with pleasant memories during the entire winter. I wonder what the Merry Circleers have done during



The Cross-word Puzzle Answer.

the summer months. Some may have taken nice trips, others probably stayed at home and worked. But, I believe most all have had some experiences which are worth telling. Therefore, this contest. Tell us, in about 250 words, or less, the interesting things you did this summer.

Ten prizes will be given; the first two, handy school pencil boxes; the next three, dictionaries; and the next five, pocket knives. All who write interesting stories of their summer's experience will get Merry Circle memberships if they are not now members of the Circle. The contest closes on October 3. Send your letters to Uncle Frank, The Michigan Farmer, Detroit, Michigan.

PUZZLE WINNERS.

MAYBE it was because of the hot weather, or perhaps the thought of starting school, that kept many from answering the last cross-word puzzle. Anyhow, it seemed that because I took a vacation all the Merry Circleers thought they would do the same. There were only forty answers to that puzzle, and only eleven had the puzzle right. Ten get prizes as follows:

Fountain Pens.

Hattie Krivak, Bannister, Mich.
Muriel Frey, Caledonia, Mich.

Dictionaries.

Alex Papp, R. 4, Carleton, Mich.
Stephanie Kobzal, Rossford, Ohio.
James Schocke, Washington, Mich.

Knives.

Ellen Van Deventer, Ithaca, Mich.
Edith Lockwood, Coldwater, Mich.
Helen Bale, R. 4, Fennville, Mich.
Geneva Kohlerberger, 309 Sheridan Avenue, Big Rapids, Mich.
Miss Clara Wright, R. 1, Mio, Mich.

(Continued from page 255).

maybe some radio nut near the junction will pick it up and tell 'em to stop the train.' Then I reads 'em your message."

During this time the amplifier, which Branton had brought back to the tower was giving forth the strains of the second opera. It fell on unhearing ears, for Branton failed to share the optimism expressed by the older man, who seemed certain that the message would be heard and the train halted. Both men looked toward the wireless.

"Stand by for important announcement," came the voice of the broadcaster again, this time breaking into the music. "The Harrisburg radio station has just received the following message from the Westinghouse plant at Pittsburgh:

"All persons living near the Midland Railway system, and particularly on the line running from Altoona to Pipestone junction, are urged to see whether they can intercept special train on way to disaster at mine. Trestle is down and wires not working. You have only a few moments to save more than a hundred lives!"

"There's your message, now, boy," cried Tompkins in triumph, "that'll get 'em. What'd I tell you?"

"It's weird," returned Branton. "I never felt before the way I do now. The special won't get to the junction for twenty minutes. And I know of a dozen people near there with radio receiving sets. It may work, Tompkins!"

In an effort to quiet his own nerves, Branton made a cup of coffee for himself and the miner. His watch showed that it was now eleven o'clock. Either the special had been saved by this time, or was beyond the reach of mortal hands. Both men, from time to time, looked appealingly at the radio amplifier, as if their very anxiety might persuade it to speak. At last they heard the voice of the announcer: "For the information of those who heard the appeal to stop the special (it said), we are happy to state that the train was halted at the junction. We have no further details. Good night."

"You done it, boy" burst out the miner.

But Branton did not speak. The strain of the past hour left him numb. He was soon alone in the tower again, as Tompkins returned to his home. The telegraph instruments were still silent.

The hours of the night passed slowly, but at last the eastern sky beyond the horizon of the hills turned from black to gray and from gray to white. The rain had stopped entirely and the coming of the sun brought faint touches of pink, which rested, in kindly fashion, on the rocks and crags of the mountains. Branton stumbled to his feet as the dawn crept through the windows of the signal tower.

He hurried down the track to the trestle, where a scene of the wildest confusion met his eyes. The track swung crazily in the air on the near side of the gorge, for the landslide had torn away the supporting timbers and braces.

Branton was eating a makeshift breakfast when he heard the whistle of a locomotive and again hurried out of the tower. On the other side of the ravine he saw an engine to which was coupled a large derrick. A flat gondola car at the end of the train was piled high with lumber, rails, and other equipment for repair work.

"Hello!" called out the engineer of the locomotive, leaving his cab and advancing along the track to the point where the break had occurred. "Hear you had some trouble?"

"Just a little," replied Branton, standing on the side of the ravine. "How long will it be before things are going again? And what's happened up at the mines? I can't make a soul answer over my wires."

"Guess we'll get the break done by night," answered the engineer. "I haven't any dope about the mine. The Division Super sent this message to you. I'll wrap it around a stone and toss it over."

The engineer folded a telegraph blank, which he took from his hat, around a pebble and threw it to Branton. The young man read the message eagerly, and then frowned in bewilderment.

"What does it mean?" he called to the engineer, who was watching him with a delighted grin.

"I don't know a thing, son," was the reply. "Don't know a thing. Well, I'll see you later."

He turned and hurried back to his locomotive. Branton opened the telegram from his chief once more.

"Listen in on the Harrisburg program tonight," (it said).

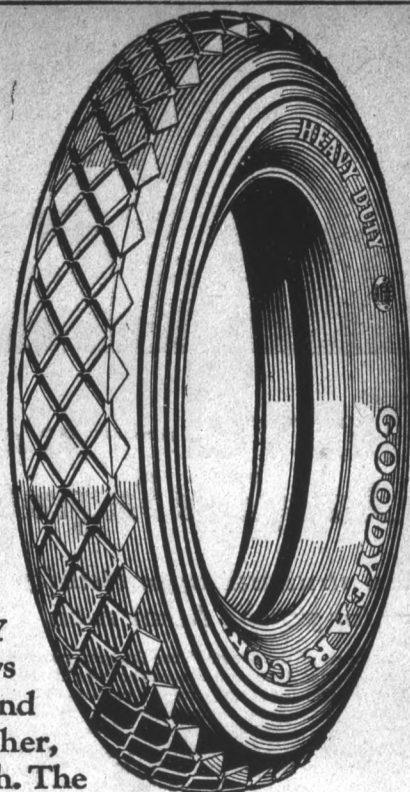
Branton, after getting a few hours' rest, returned to his post in the afternoon and was surprised when, at eight

(Continued on page 259).

Goodyear HEAVY DUTY Cord Tires, for passenger cars, buses and trucks, are available from Goodyear Dealers in the following sizes:

30 x 3 1/2 (Cl.)	30 x 5 (S.S.)
32 x 4 (S.S.)	33 x 4 1/2 "
33 x 4 "	33 x 5 "
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GOODYEAR

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Of Howell

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August 30, 1925

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Assets:

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Dec. 31, 1918.....	69,424.91
Dec. 31, 1921.....	137,392.51
Dec. 31, 1924.....	565,225.96
Aug. 31, 1925.....	726,277.94

Since its organization in 1915, the company has paid 33,141 claims, a total of \$2,659,408.33, and has saved its policyholders many millions of dollars. The company is carrying over 58,000 policies and has a state-wide organization of agents and adjusters, enabling the company to give its policyholders the benefit of quantity insurance. It numbers among its policyholders two members of the Supreme Court, Ex-Governor Rich, and many of the Circuit Judges, lawyers, bankers, business men and farmers in all parts of Michigan.

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The Davey Tree Expert Company,
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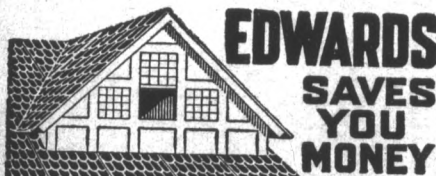
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A brass hose connection furnished with pump allows attachment of hose at spout, and considerable pressure is obtained in case of fire. This is an important feature for farm building. This feature also enables washing of cars, etc.

Fits Any Well

and is easily installed. E-Z Pumps have been built for years and proven entirely satisfactory. Ask for prices and literature, stating requirements. Inquiries invited from hardware dealers, etc.

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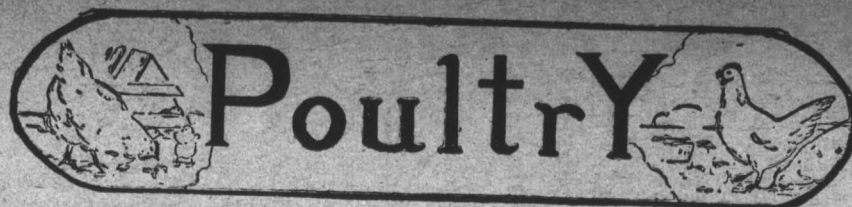
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Poultry

HENS UNDER LIGHTS NEED LOTS OF FEED.

HENS made to hit on all six in winter by the use of artificial light, must be given a long fall vacation, and extra food. Otherwise, they won't stand the strain, and artificial lighting will not only fall short of its possibilities in stimulating winter production, but may actually prove disastrous.

This is the main finding of Prof. G. S. Vickers, of the Ohio State University, reviewing practical findings on poultry house illumination. Another finding is that when lights are turned on in the fall and off in the spring, this should be done gradually so as to avoid throwing the flock into molt.

"The whole idea of illumination is to make hens eat more food by making their day longer," the writer states. "The more they eat, the more they'll lay. But to force production without supplying additional food is to defeat the sole purpose of lighting."

"Hens should be rested well into midwinter before the lights are turned on. Pullets may be started under the lights in November. Lights on both hens and pullets should be turned off about April 1."

"Just how far can we afford to force the flock in winter by lights? An exact answer is impossible, but experience seems to show that about fifty per cent production is the limit of safety."

FATTENING COCKERELS.

I have some little roosters which I would like to get fat quick. What would be best to feed them? I have them separate from the other chickens. They are five weeks old and weigh three-quarters of a pound each. I have been feeding ground grain and mash. Would it be better to keep on with that, or change to a wet mash? If so, what kind?—J. S.

You can obtain fair results in fattening poultry by confining the birds and feeding a sloppy mash of cornmeal and sour milk. An ideal fattening ration recommended by the Cornell Station consists of fifty pounds of cornmeal, twenty pounds of white wheat middlings, and ten pounds of ground heavy oats. This is made into a batter with skim-milk or buttermilk, using a quart of milk to a quart of mash.

Better results in fattening are usually obtained with the wet mash. The sloppy mash is easier for the birds to eat, and induces a greater consumption of feed. Two feeds per day from ten days to two weeks is the usual method of fattening. If confined on heavy rations for a longer period, there is a danger that some of the birds will go off-feed and make no further gain in weight.

HENS DISLIKE RYE.

I would like to inquire if it is harmful to feed rye to chickens—old and young? If it is safe, would it improve the rye any to soak it over night, or to have it ground up and bake it like a johnny cake?—F. B.

Poultry do not seem to relish rye and it usually pays best to sell this grain and buy grains that they like better. There is little economy in trying to use grains they dislike, as egg production and growth depend on heavy feed consumption.

Some poultrymen claim that rye has a tendency to cause bowel trouble. The hens will eat rye when ground and mixed in the mash. I do not think soaked rye would be relished more than the hard grain. I have placed small heaps of rye on the range beside small heaps of wheat, and in every case both the old and young stock

would clean up the wheat and leave the rye for several days. It certainly would not have paid to starve them into eating rye.

Even at present prices I had rather trade rye for wheat and have less wheat, or invest the rye money in corn and oats. The poultry seem to do better when no attempt is made to feed rye.

GALL ENLARGED.

Can you tell me what to do for my chicks? The gall becomes enlarged to twice the usual size.—J. S.

Birds are subject to inflammation of the bile ducts and all troubles in the gall are probably present, along with some form of liver trouble. Some kinds of poisoning might cause such conditions. Liver trouble and other ailments of that kind are difficult to treat except by prevention. This consists in keeping vigorous stock on a balanced ration. Then if losses occur, they can be charged up to the normal death rate in a flock of poultry which cannot be prevented in spite of the best of management.

PROBABLY TUBERCULOSIS.

We have lost about fifty hens this summer. Some would go lame before they died. I killed a well one and its insides were all covered with yellow lumps. There was one sick afterwards and I killed her and made an examination. She was the same as the other one. Some say they have tuberculosis. If so, what is the cure for it? Will it give the disease to anyone who eats a chicken that was laying, yet had insides like this?—Mrs. R. H.

The hens probably had tuberculosis, although a laboratory examination is

considered necessary to definitely determine that fact. Avian tuberculosis cannot be cured. There seems little probability of the avian tuberculosis spreading to human beings who have eaten properly cooked meat. However, there is a natural prejudice against eating poultry meat unless the carcass is in perfect condition, and it seems safest to discard other kinds.

When tuberculosis is present in a flock, the best method is to have a veterinarian inspect the birds and pass on their fitness for market. He can make recommendations after handling the birds and noting their condition.

THIN WHITE LEGHORNS.

I have a flock of White Leghorn chickens (young), which have been doing nicely until a week ago. They become light, and on some the combs become purple and they soon die. They have been picking up quite a little wheat, and I wonder if this has been a cause.—W. D.

When growing chicks feather out and thrive for several months, and then become thin and die, the trouble may be due to errors in feeding, coccidiosis, worms, or overcrowding in the brooder house, and trampling by older stock.

Perform a postmortem on the chicks that die, and note the condition of the internal organs. Wheat is a good growing feed for chicks if it is clean, hard grain. Mouldy or spoiled wheat is a very dangerous feed and will cause chicks to die.

Large flocks of brooder chicks usually range close to home and the hoppers of balanced dry mash are needed to keep them all growing. The number of bugs and worms per chick is rather limited when a small range is used by large flock of growing poultry.

J. N. Harris, an apiarist of Gratiot county, will harvest over twenty tons of honey this year from his 600 swarms of bees, located within a radius of five or six miles from St. Louis.



Doings In Woodland

Bruin, Brownie and Rolly Play Barber Shop

THE adventures of the three Woodland Wanderers were leading them into a country that was much warmer than Woodland, where they had always lived. In fact, now it really was hot. But Bruin, Rolly Rabbit and Brownie were determined to reach Happy Land in spite of the hot weather or other handicaps. On this particular morning,



Rolly and Brownie Cut Off Bruin's Shaggy Hair.

that I am telling you about, it was warmer than usual.

"Oh, whew!" sighed Rolly, "but it's warm." And, "Oh, whew! Whew!" sighed Brownie, "but it's awful warm." "Oh, whew, whew, whew!" sighed big Bruin, "but it's getting warmer," and he brushed a trickle of sweat from his forehead.

"I know what we will do," said Bruin as a twinkle came into his eye. "Let's play Barber Billy."

"I don't know how to play the game," said Brownie.

"I'll show you," answered Bruin. "Will it make us any cooler?" asked Rolly Rabbit.

"I think it will," said Bruin. At that they were right ready to play the game and Bruin produced two pairs of scissors from his pocket. Rolly Rabbit and Brownie were somewhat surprised at this.

"Now the one who is 'it' must sit on that big rock there," said Bruin, pointing to one near.

"I'll be 'it' first," said Rolly, and he hopped upon the rock.

Then Bruin showed Brownie what he was to do. Rolly squirmed a little, but he really enjoyed being 'it.' After five minutes he hopped down from the rock where he had been sitting, and he was a queer looking rabbit. With the scissors, Bruin and Brownie had cut his shaggy hair. Playing Barber Billy had really made him cooler, Rolly thought.

"Ho! Ho! Ho!" sang Rolly as he hopped about. "I really believe the weather has changed. It seems so much cooler."

Next Bruin was "it" and sat in the barber chair while Rolly and Brownie played they were Barber Billy, and clipped off Bruin's long shaggy hair. Brownie came next and he squirmed and wiggled to the right and to the left, but after a time they had Brownie all barbered, too.

And their Barber Billy game over, they skipped off toward Happy Land again, ever so much cooler than before.

Beef Production in Michigan

(Continued from page 243).

duces fat very readily. Barley may be substituted when it is somewhat cheaper. Oats may form part of the ration, but oats alone are not so desirable as a fattening feed except when very cheap. Rye is not very satisfactory except in small quantities. Barley and rye must be ground, and oats should be, except for feeding calves under one year old.

Corn is usually fed as broken ear corn, corn and cob meal, or shelled corn. Grinding does not usually pay if hogs are allowed to work over the droppings. In fact, cattle feeders consider hogs as part of the necessary "equipment." Shock corn is fed successfully by many farmers, especially to older cattle. If a generous supply of legume hay is available, two-year-old steers weighing 800 pounds or more will do very well on shock corn and hay. Even heavy calves have made good use of shock corn as part of the ration.

A full feed of corn will, of course, produce a quicker finish, and unless corn is very high in price, as compared with the roughages, a good heavy feed shows the most profit. If silage is being fed and it is desired to limit the corn somewhat, experimental results show the most profit when little or no corn is fed during the early part of the period, and a full feed is given during the latter part. Cheap gains are made by the thin animal on rough feeds, and the finish is put on at the last with corn. In fact, more profit was made with an unlimited allowance of silage, with the addition of linseed or cottonseed meal and clover hay, and no corn, than when a half feed of corn was allowed throughout the feeding period. Purdue University and the University of Missouri obtained very similar results on this point.

Unless a good supply of first-class legume hay is allowed, it pays well to add the protein supplement. The usual standard is two and one-half pounds of linseed or cottonseed meal per thousand pounds of live weight per day. There is little choice between old process linseed meal and forty-one per cent cottonseed meal at the same price per ton when used for fattening cattle. If no silage is fed, linseed meal is a little more desirable.

Even with silage and protein supplement, the steer relishes some form of dry roughage. The cheaper kinds, such as oat straw, bean straw, corn stover or mixed hay, give very good results in that case. However, when the hay forms the entire roughage and no silage is fed, the legume hays are far superior to these non-protein roughages.

Kinds of Cattle to Feed.

The selection of cattle for feeding purposes depends upon several factors. Good to choice quality two-year-old steers can usually be bought cheaper per hundred pounds than can choice calves. They will also make larger daily gains and attain a desirable market finish more quickly. They will also consume larger quantities of roughage in proportion to the grain feed required than will the calves. On the other hand, choice quality calves will make more gains per hundred pounds of feed consumed than will the older cattle. More calves may be cared for in the same space, and an equal investment in calves will convert more feed into beef than will the older cattle. Common grades of calves usually will not fatten satisfactorily at so young an age. There is usually a broader market demand for lighter cattle than for those weighing above 1,250 pounds. Calves can be marketed over a longer period of time more profitably than can older cattle, due to their ability to continue to grow and gain. When the older cattle are

finished for market they cease to gain and lose their bloom if held on feed.

Yearling cattle average between the calves and the two-year-old steers in all the above points. There is probably less demand for yearlings as feeders than for either of the other kinds, so that they can often be bought at a reasonable price on the market.

Choice calves fed at the Michigan State Agricultural Experiment Station during the past two winters made very satisfactory gains and returned a profit above feed costs. The average daily gain made by calves self-fed on grain was 2.39 pounds, and for those fed a lighter grain ration, 2.30 pounds, each lot receiving linseed meal, corn silage and alfalfa hay. When the linseed meal was omitted from the limited grain lot, a similar group of calves made a gain of 2.13 pounds per day. These two lots showed a net profit above feed cost of \$2.98 per calf, while the self-fed lot returned a profit of fifty-seven cents. During the past winter when corn was rather high-priced the self-fed calves returned \$1.20 per bushel for the corn eaten, and the other two lots \$1.40 and \$1.47 respectively per bushel.

TEN MINUTES TO SPARE.

(Continued from page 257).

o'clock, the engineer, the foreman of the wrecking crew, and a number of the workmen appeared at the tower.

"We laid a little foot-bridge across the busted part of the trestle," explained the engineer. "We want to hear this radio stuff. Got her wound up yet?"

"Come on in," smiled Branton, "she's wound up all right. Hello, Tompkins; you here, too?"

"Stand by for news dispatches from Harrisburg," ordered the voice of the broadcaster from the amplifier which Branton had again attached, this time so that his audience could listen in. The little circle of men leaned forward eagerly.

"Philadelphia, March 29 (began the dispatch). A special train, with more than a hundred people on board, was saved last night when a farmer living near Tower W at the Pipestone junction of the Midland Railway, heard an appeal on his radio set to warn the engineer that a trestle on the branch ahead had been torn away by a landslide.

"In a statement issued from his offices here today, E. H. Merriam, president of the Midland system, declared that the credit should go to Howard Branton, a youthful signalman.

"One of the worst storms in the history of the state swept through the Allegheny Mountains last night. Branton, having been told by wire that a special was being hurried to the mine, was on guard. He—"

"Hey, what'd you cut her out for?" came from Tompkins, as the voice suddenly stopped. "What's the big idea? It was just gettin' excitin'."

"I know most of the rest myself," returned Branton, his face crimson. "But what did the relief workers do? Did they get to the mine? And where did the newspaper get all that stuff?"

"I told 'em some of it," admitted Tompkins. "I got so blamed curious about the fellers at the mine that I called up a newspaper office at Johnstown this mornin'. The editor tells me that the relief squads continued the trip by auto after the train was stopped, and that most of the miners was safe. Then he made me tell him what you done. The boys fixin' the trestle said I wasn't to let on."

The audience then filed slowly out of the door and back to the work of repairing the trestle. Branton was alone again—confused but happy and glad. After all, his chance had come and he had made good. He wondered whether Susan had heard, Susan of the brown eyes. Maybe she had just been listening in. Possibly promotion would follow, and possibly she would not think that he was so slow. His thoughts were interrupted by the click of the telegraph, the wires having been repaired. His own call sounded.

"Proud and happy," (came the message). "Heard it all. When will I see you? Susan."

"Can I send a return message?" he asked the operator.

"Sure," came the telegraphic answer. "Coming first furlough," (he clicked off).

THE END.

WHY.....

CHEAPER GAINS
1

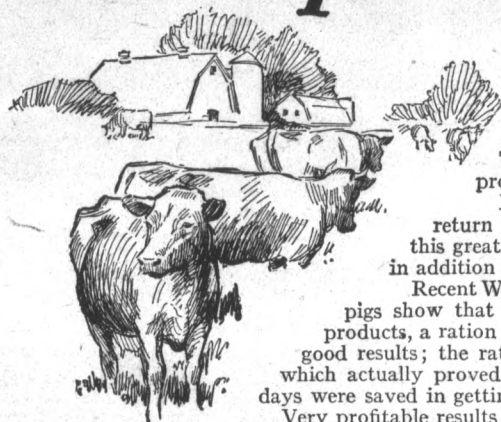
PRIME CONDITION
2

MANURIAL VALUE
3

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② PRIME CONDITION

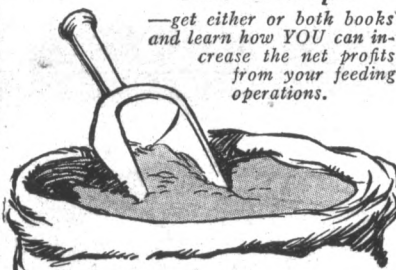
As Prof. Morrison, author with W. A. Henry of "Feeds and Feeding," says: "The effect on livestock of a judicious use of Linseed Meal is soon apparent in a thrifty appearance, a sleek, oily coat, and a good 'handling' quality of the flesh." It is slightly laxative and has tonic and regulating effects.

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Town.....

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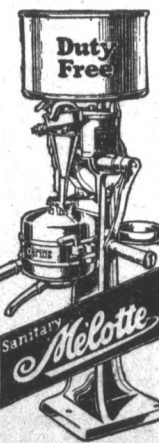
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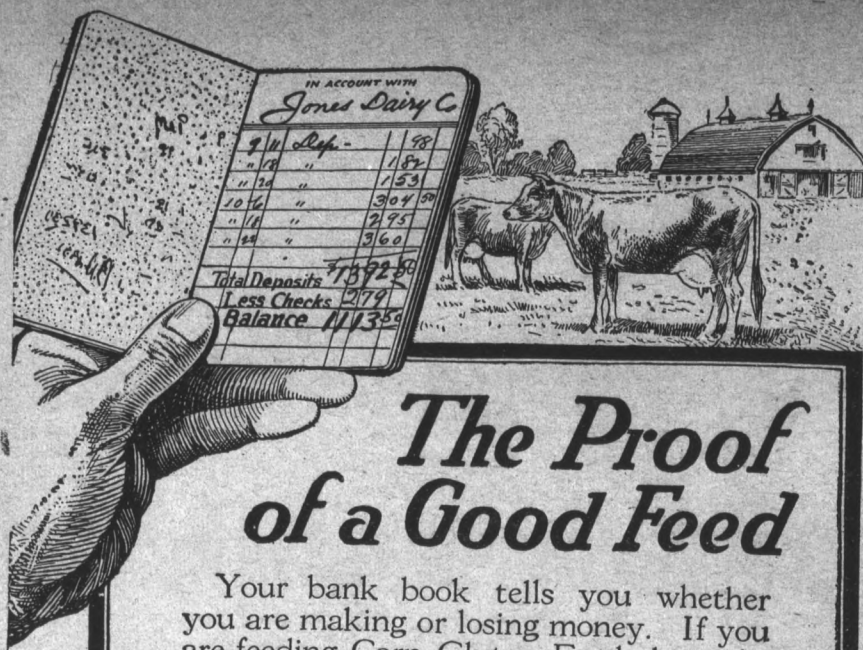
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The Proof of a Good Feed

Your bank book tells you whether you are making or losing money. If you are feeding Corn Gluten Feed the right way your bank account should be growing.

Many cow testing associations are making their best records with Corn Gluten Feed in the ration. The following report by the Cow Testing Association of Big Bend, Wisconsin is typical of many.

Fifteen cows that freshened in the Fall were fed until December 31st without any Corn Gluten Feed. Their average milk yield for December was 643.1 pounds and average butterfat 3.74% per cow.

On January first they were put on a Corn Gluten Feed ration with the following results:

Jan.—average per cow—milk, 889.6 lbs—fat 3.78%
Feb.—" " " " 811.6 " " 3.57%
March—" " " " 1144.1 " " 3.86%

Nearly twice as much milk in March as in December. The cows were fresher in December, but they didn't have any Corn Gluten Feed. That's the reason why they couldn't do their best.

Whether you are feeding for milk, beef or pork you should get better results at lower cost by feeding Corn Gluten Feed. Get it from your dealer. If you buy a mixed feed be sure it contains Corn Gluten Feed.

Our Bulletin No. 2 gives you the newest and best ideas on feeding for profit. The tested rations in this book will make you more money this winter. Write for a free copy.

Associated Corn Products Manufacturers
Feed Research Department
Hugh G. Van Pelt, Director
208 South La Salle St., Chicago, Ill.

No. 11

Feed Grinding

Lowest Cost. New Principle. Grinds any feed—any degree of fineness. Uses Fordson or equal power. "Jay Bee"

HUMDINGER CRUSHER—GRINDER—PULVERIZER

Material saver. Manganese steel hammer strike material only. No heat. No friction. Grinds any grain, hay, corn fodder. Write for low price and catalog. Open territory, dealers, salesmen, J. B. SEDBERRY, Inc., 228 Hickory Street, Utica, N. Y. 826 Exchange Avenue, Chicago

COSTS LESS TO BUILD

Have permanent buildings of Glazed Tile. The first cost is no more and the tremendous saving in paint, repairs and upkeep is all in favor of

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GLAZED TILE BUILDINGS

Solve the building problem for all time with beautiful, everlasting tile. Suitable for houses, barns, hog and hen houses, garages—any building. Estimates Free. WRITE FOR FREE BOOK on permanent farm buildings, including our Tile and Wood Silos.

KALAMAZOO TANK & SILO CO.
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Glazed Building Tile

Wear the Genuine

FISH BRAND SLICKER

TOWER'S FISH BRAND

The Rainy Day Pal
THE BEST SINCE 1836
7th MEN, WOMEN & CHILDREN
A. J. TOWER CO.
BOSTON

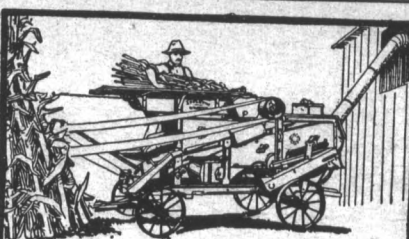
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Complete READY TO MILK WHEN YOU GET IT \$35

Send for complete literature! 18 to 40 cows an hour—easy. Costs nothing to install. Easy to clean. Milks the human way—easy on the cows. 30 Days Trial—10 Year Guarantee—Cash or Easy Terms—a year to pay. Write for FREE BOOK, "How to Judge Cows".

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Husk Your Corn Better and Quicker

The pioneer still leads. As in the past Appleton Huskers and Shredders are guaranteed to do more and better work than any others, size for size. Don't experiment. Choose a husker that for more than 25 years has demonstrated its superiority in the field.

All-Feature Husker

Interchangeable heads. Improved flexible swiveling blower. Alemite Oiling System. Efficient Corn Saver. Clean Husking. Minimum Shelling. Thorough separating and cleaning. Big capacity.

Save all your Crop!

Stop wasting stover that will nearly double the feed and fertilizer value of your corn crop. Send for free illustrated husker catalog showing how the Appleton increases your corn profits and soon pays for itself. Address nearest branch.

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HUSKERS AND SHREDDERS



FEED THE EXTRA FIFTEEN PER CENT.

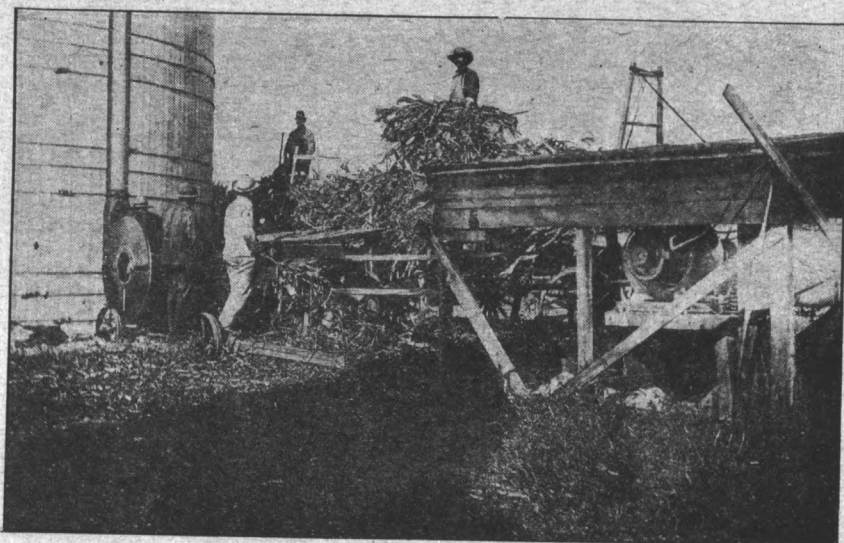
LAST fall I was visiting with a farmer who had been able to educate six boys, and sent one through the university, on an eighty-acre sand-farm. I was very much interested in his methods and asked him how he was able to do what he was doing and had already done.

He reluctantly told me that there were no "push button" methods in making money in the farm business these days and that his success was due to the fact that he always fed the last fifteen per cent. He further told me that what money he had saved was profit from his hens and cows.

Since there were many other farmers in the community who had not done as well with more favorable op-

fat. Yet in a recent article in a Holstein breed paper there was considerable bragging done because Holstein milk was making headway in certain New Jersey towns against the richer Guernsey milk. Then towards the end of the article the secret was revealed. The competing Guernsey milk soured quickly while the Holstein milk remained sweet a long time. To my notion it was not so much the lack of fat in the Holstein milk which turned the trick as the care with which it was produced.

Therefore, in trying to build up a market milk trade, by means of direct delivery to the housewife, the first consideration is sanitation every step of the production way. Clean, sweet, wholesome milk, complying with legal butterfat requirements, will hold its own on any market, regardless of the



Silo Filling Days Are Busy Days, But When Over, the Corn Crop is Entirely Out of the Way. These Farmers Use Electric Power.

portunities, I persistently asked for his specific methods, and what he did and what he meant by the last fifteen per cent.

Since there was plenty of fried chicken left over from dinner, and being anxious to see his exact manner of caring for the farm animals, I remained until feeding time. He gave the milk cows a large pile of clover hay, a quart of oats, and a half gallon of shorts and middlings, and two ears of shelled corn. He milked three high-grade Jerseys and carried to the house nine gallons of milk.

After milking we went to the poultry house, where 250 high standard Barred Rocks were being managed and fed according to the latest scientific information from his state agricultural college. "This," he said, "is my method and I am making money. Feed the last fifteen per cent, as the first eighty-five per cent is used for maintenance." —I. H.

BREED MILK RIVALRY.

IT appears as if the dairy breeds have buried their differences enough to agree upon a general policy of encouraging the 305 day official test. That is a long step forward in the interest of harmony, and the better development of the whole dairy breeding business. But in the matter of rivalry in promoting the sale of the milk of the respective breeds, there is far from being accord.

Dairy breed enthusiasts forget that the general public is not much interested in the conflicting claims of the breed propagandists. Milk is milk to them, with two exceptions. The housewife notices whether the milk sours easily, indicating unclean milk; and she notices the depth or lack of depth of cream line.

Some dairymen believe that the whole milk question is one of butter-

breed of cows from which it is produced.

Of course, with milk produced under equal conditions, and with the price disparity not too great, the Guernsey and Jersey brethren may have a little the advantage. The cream line does count for milk used for general table and beverage purposes. Advocates of the lower testing milk, it seems, lay too much stress upon the "relatively greater digestibility of their milk." Individual cases modify all general rules, and if the fond parents of a baby are feeding Jersey milk, and the infant's stomach retains and digests the milk, there is not much chance of the parents switching to Holstein milk. If the baby is thriving on Holstein milk, the parents are not apt to risk complications by changing to Jersey. The diet of the modern infant is so closely supervised by physicians that breed appeals to the mother are partially wasted.

Just as there is a place for the flivver and the high priced eight-cylinder automobile, so is there a place for the two types of milk. There are a certain number of people who will continue to demand a luxury milk, while the vast percentage of our city population will have to get along with the general utility milk. If the breeds begin throwing stones at each other's milk, the consumer is apt to become confused, and suspicious of all milk.

The best way to boost the consumption of all brands of milk is to persuade the producers of the necessity of producing this milk under the most sanitary conditions possible. I personally don't care much for milk which has not been produced right, but when I know that the milk is clean, and processed right, I can drink it by the quart. I think many of the city consumers feel just like that.—W. A. Freehoff.

LEADING COWS OF DIFFERENT AGES.

A PURE-BRED Guernsey in the Marquette-Alger Cow Testing Association ranks highest for the year in the two-year-old class. This cow is owned by J. B. Duetsch and produced 588 pounds of butter-fat and 11,446 pounds of milk. John C. Butth, of the Kent-West-Alpine, and T. C. Tiedebohl, of the Van Buren-North Cow Testing Association, owns the second and third high cows in this class. These are pure-bred Holsteins and produced 547.2 pounds of butter-fat and 16,358 pounds of milk, and 504.6 pounds of butter-fat and 12,511 pounds of milk respectively. Other cows in this age class are owned as follows: Wm. Godfrey, pure-bred Jersey of the Allegan-Central; J. C. Coleman, Clinton-Shiawassee; C. H. Shafley, Clinton-North; T. C. Tiedebohl, Van Buren-North, all with pure-bred Holsteins; J. B. Duetsch, Marquette-Alger; P. S. & C. Faye Myers, of the Genesee No. 1 with pure-bred Guernseys, and R. A. Ferrall, of the Kent-Alto with a pure-bred Jersey.

COUNTY CROP REPORTS.

Ottawa Co., Sept. 8.—The yields of grains were as follows: Wheat, 25 bushels; oats, 35 bushels; barley, 20 bushels. Potatoes look good; corn promises to yield heavy; fodder is exceptionally good; corn will mature in ten days of good weather; had about one to one and one-half tons of second crop clover. Very little over normal seeding of wheat and rye. Pastures are real good just now. Some hay is being sold. Old baled timothy \$15@20. New clover sells for \$20@22. Second crop for \$16@18. Very little wheat being sold.—F. C. H.

Wexford Co., Sept. 7.—Oats are yielding about twenty bushels per acre. Pickles a poor crop; not much corn will ripen; potatoes below the average; early potatoes hurt by dry weather; late potatoes will make 80 per cent of a crop; pasture short. Butter-fat 42c; eggs 30c. There will be about an average crop of rye sown. Not much wheat in this county.—G. A. E.

Missaukee Co., Sept. 7.—Hay less than one-half crop. We have just had a fine rain after being dry so long. It will help all fall crops which are looking good now. Early potatoes are a light crop. Pastures are dried up and cows have fallen away one-half in the flow of milk. Oats are yielding on an average of twenty-five bushels per acre. No wheat sown as yet; most wheat will be sown late. The usual acreage of fall grain will be sown. Wheat is \$1.45; rye 80c; potatoes \$1.25 per hundred.—H. E. N.

Lake Co., Sept. 10.—The usual acreage of wheat and rye are being sown. It is very dry, and it is hard work to plow and drag clay grounds. Pasture is very poor. Oats yielded from twenty to forty bushels per acre. Wheat that was early sown threshed about an average of fifteen to thirty bushels per acre.—Z. B.

NEED NO LEGISLATION.

FARMERS are the only group who have ever asked the government to control their business. In all efforts looking toward human betterment, no other class or group of people has ever voluntarily asked the government to take them by the neck and regulate their marketing activities. Industry and labor have both opposed government interference. The only legislation labor has asked for from congress was to be freed from the anti-trust law which labor organizations helped to pass. Government control would be justified only when the farmers became extortionate in their dealings with the consumers. And the consumers can be depended upon to take care of their own interests without the assistance of the producers.

Why are the farmers asking for a board to be created to control them, when no one else has ever asked for it? Any board that might be appointed by the President would be semi-political. It could be expected to be responsive to the politicians in power. The farmers are in a minority, therefore the board would be reasonably certain to give the larger share of its attention to the demands of the majority—the consumers.

For this reason, if for no other, farmers generally would be justified in opposing every effort to control their business by a federal government agency. Looking first to their own interests, they will closely scrutinize the commission's cooperative

marketing board bill, the Dickinson bill, and every other measure that would create a board or commission to control their cooperative marketing associations.

JARDINE TO DECIDE PACKERS' MERGER.

SECRETARY JARDINE must make a decision on the legality of the merger of the Armour and Norris packing interests. Attorney-General Sargeant, to whom the secretary referred the matter, has been advised that congress specifically gave to the secretary of agriculture full power of administration of the packers and stockyards act, and has turned the matter back to Secretary Jardine for further consideration. There is nothing left for the secretary to do but decide the case one way or another.

PEOPLE HEALTHIER.

PEOPLER are taking better care of their health, or the season has been unusually favorable to good health, according to Surgeon-General Hugh S. Cummings, of the United States Public Health Service, who reports that the death rate in this country for the first seven months of this year was lower than the average for the last five years. A marked decline is noted in cases of diphtheria, while infantile paralysis is apparently on the increase.

ONTONAGON LEADS.

THE July report of Mr. J. G. Wells, dairy specialist for the Michigan State College in the peninsula, shows that Ontonagon county ranked first among cow testing associations of the district. In this association each cow produced an average of 696 pounds of milk and 30.1 pounds of butter-fat. On the basis of average production, the rank of the associations was as follows: Ontonagon, Chippewa, Dickinson, North Delta, Marquette, Houghton, North Menominee and South Menominee.

VETERINARY.

Congested Udder.—Cow came fresh four weeks ago, udder swelled, veterinary opened swelling, bloody water came out. Is her milk fit for use? W. J. C., Climax, Mich.—Give her a half-ounce of fluid extract of phytolacca in drinking water three times a day; do not use milk until she gets well.

Poisoned.—I have two pigs three months old with sores on head which suppurate. Another pig suffered from similar ailment last spring, and died. J. F. P., Eaton Rapids, Mich.—First, apply hydrogen peroxide to remove pus, then paint sores with tincture of iodine. Treat the pigs daily. Doubtless their heads were injured, then sores became infected.

Articular Rheumatism.—Have a two-year-old ewe which seems to be affected in both hock joints. E. B. S., Woodville, Mich.—Paint hock joint with tincture of iodine three times a week, give her five grains of sodium salicylate at a dose two or three times a day. Don't forget to examine her feet, for some or all of her soreness may be located there.

Shoulder Lameness.—I have a lame horse and believe the trouble is in the shoulder. Please tell me what I shall do for her. C. H., Manchester, Mich.—Before treating a case of lameness, locate the trouble, then apply equal parts of turpentine, aqua ammonia, raw linseed oil, daily.

Ophthalmia.—Have a young mare that first had trouble in one eye; this eye has partially cleared, now the other eye is clouded a little. A. W. G., Chelsea, Mich.—Dissolve a teaspoonful of boric acid in quarter pint of clean water, apply to eyes three times daily.

Catarrh—Brain Trouble.—Two days after I bought a fourteen-year-old horse his legs stocked, swelling appeared under belly, and mucus ran from both nostrils. He has a fine appetite. I also have a twelve-year-old horse which is inclined to move in a circle, always going to the left. I work him. I. C., Winters, Mich.—Dissolve quarter-pound of baking soda in half gallon of tepid water, wash out nostrils twice a day; give him one-half ounce of Fowler's Solution at a dose in drinking water three times daily. Give your twelve-year-old horse a half-dram of potassium iodide at a dose two or three times a day. His bowels should be kept open.

Sweeny.—Our six-year-old mare has a bad case of sweeny. The injections of medicine our veterinary is applying fails to do him much good. F. A. P., Harbor Beach, Mich.—Atrophy of the muscles, following severe sprain, will be benefited by counter-irritation; rest the animal, if lame, but as soon as she walks sound, walking exercise will do her good. Doubtless your veterinary is treating the case properly, and

if you will be patient, she will perhaps recover. Recovery in such cases is never speedy. She should be well fed.

Fruit prospects show little change since last month. Apples have suffered from drouth in states south of Maryland and Kentucky, and prospects have declined somewhat in the northwest. The total apple crop is estimated at 162,000,000 bushels, or about ten per cent less than the quantity produced last year, but a large part of the crop is in the commercial sections and the quality is unusually good.



PLENTY of work for the horses right now. Don't let minor ailments put them out of commission this fall. Keep them fit with Gombault's Caustic Balsam. Apply it yourself. Known everywhere for 41 years as the reliable remedy for Spavin, Capped Hock, Curb, Splint, Laryngitis, Thoroughpin, Quittor, Wind Galls, Poll Evil, Sprains, Fistula, Muscular Inflammation, Barb Wire Cuts, Calk Wounds.

Won't scar or discolor the hair. Far more effective than firing. Keep it handy—always. Get your bottle to-day—\$2.00 at all druggists, or direct from us upon receipt of price. The Lawrence-Williams Company, Cleveland, Ohio.

GOOD FOR HUMANS, TOO
GOMBAULT'S
Caustic
BALSAM

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FOR SALE—Reg. Guernsey Bull Calf
Sire by Lone Pine Ranger whose dam has an A. R. record of 17,644.2 lbs. Milk, 936.6 lbs. Fat. No Females for Sale. Write J. M. Williams, North Adams; Gilmore Brothers, Camden, Mich.

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

For Sale Reg. Guernsey Cows, Bulls and Bull Calves. A. R. Record May Rose Breeding. JOHN EBELS, R. 2, Holland, Mich.

2-Year-Old Guernsey Bull Reg. No. 98125, price \$150. Heifer or cow. Write or phone 116 F 21. ROY TRAYNOR, R. No. 2, Flushing, Mich.

Guernseys Some real bargains in registered cows and heifers, one young bull. W. W. Burdick, Williamston, Mich.

High Herd Production Means Profit

The quickest and cheapest way to breed high production into your herd is to use the right kind of herd sire.

Michigan State Herds have 14 sires in service whose dams average 1067.5 lbs. butter and 24,599.8 lbs. milk in a year. The cows in these herds are high producers. During the past year 824 cows in Michigan State Herds averaged 10,188.7 lbs. each.

Use a sire bred by Michigan State Herds to insure high production in your herd.



Bureau of Animal Industry
Dept. C
Lansing, Michigan

Double Dispersion Sale

75 Registered Holstein Cattle 75

George Barnes & J. I. Van Keuren
Howell, Michigan

Thursday, October 8, 1925

Two Herd Sires from high record dams. 4 young bulls from dams with large yearly records. 4 cows with large yearly records. 18 with C. T. A. records. 20 cows due in Oct. and Nov. A granddaughter of Mabel Segis Korn-dyke. 20 daughters of Maple Plane King Johanna. 5 daughters of Fayne Hengerveld Pontiac, who is a full brother to a former World's record cow. 2 granddaughters of May Walker Ollie Homestead (The American yearly record butter Champion).

Livingston County is on the Accredited T. B. List.

For Catalogs, Address F. J. Fishbeck, Howell, Mich.

Holstein Cows and Young Bulls

When buying a young bull, secure one bred for greater production and better type. We have them of desirable conformation out of cows with very creditable records. Also a few young cows safe in calf and with records up to 25 lbs. as Jr. 3-yr.-old. Send for extended pedigrees.

Lakefield Farm, Clarkston, Mich.

FOR SALE

17 Head Registered Holsteins, 8 cows due this fall, 4 2-year-olds due this fall, 5 yearling heifers. The cows have good records in the Coleman Union Cow Testing Association. JOHN STERLING, R. No. 1, Beaverton, Mich.

Registered Holstein cows and heifers fresh and some to freshen soon. Good producers and richly bred. Priced to sell. Satisfaction guaranteed. B. B. REAVEY, Akron, Mich.

Holstein Bull calf 34-lb. breeding, white, \$80, satisfaction or money back. B. E. KIES, Hillsdale, Mich.

FOR SALE Registered Herefords, one herd bull, seven cows with calves. R. W. BAKER, Marine City, Mich.

FINANCIAL KING JERSEYS

For sale, young bull ready for service, also a few bull calves, from Register of Merit cows. COLDWATER JERSEY FARM, Coldwater, Mich.

Jerseys For Sale Bulls ready for service, also a few females. All from R. of M. dams. Accredited herd. Smith & Parker, R. D. No. 4, Howell, Mich.

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

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

Shorthorns Best of quality and breeding. Bulls, cows and heifers for sale. BIDWELL, STOCK FARM, Box D, Tecumseh, Mich.

WILDWOOD FARM

FOR SALE—Six splendid young cows and two heifers. Also two bull calves, 8 mos. old. All of best milking ancestry. Beland & Beland, Tecumseh, Mich.

FOR SALE Brown Swiss Bulls, serviceable age or younger. A. A. Feldkamp, Manchester, Mich.

HOGS

DUROCS March farrow, long and prolific strain. Sire's litter mated. Grand Champ, Jr. Gilt, Mich. State Fair 1923. Sired by twice Grand Champ, at International. Satisfaction or money back. Later fall pigs. Write B. E. KIES, Hillsdale, Mich.

DUROCS

Bred Sows
Spring Boars
Shropshire Rams
LAKEFIELD FARMS, Clarkston, Mich.

REGISTERED O. I. C. GILTS
ready for breeding for fall farrow. Boars ready for service. Also some extra good spring pigs, both sex. All stock shipped on approval. FRED W. KENNEDY, R. No. 2, Plymouth, Mich.

Big Type Chester Whites—Real spring boars with size and quality. A few good gilts. LUCIAN HILL, Tekonsha, Mich.

Chester Whites March boars of quality at reasonable prices. F. W. Alexander, Vassar, Mich.

FRANCISCO FARM

Poland-Chinas and Shorthorns
Get a boar from us and get a good one. Or a bred heifer worth the money. Only the best suits us: We suit you. P. P. POPE, Mt. Pleasant, Mich.

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

SHEEP

Thousands of Breeding Ewes
Lambs and Wool much more than pay for them in 12 months. (100%).

World Shortage of Sheep

Car lots only. Yearlings to matured ewes. No old ones. Send stamp for "The Golden Hoof." Resume of the Sheep situation.

George M. Wilber, Marysville, Ohio

Shropshires 10 yearling rams and a few ram lambs, priced at \$20 to \$30 each. C. J. THOMPSON, Rockford, Mich.

SHROPSHIRE

Yearling Rams
Ram Lambs
Lakefield Farms, Clarkston, Mich.

Entire Flock Two Hampshire Rams, 113 Ewes with 132 lambs. M. A. CAIN, Hillman, Mich.

(Additional Stock Ads. on Page 263).



THE LATEST MARKET REPORTS



GRAIN QUOTATIONS

Tuesday, September 15.

Wheat.
Detroit.—No. 1 red \$1.68; No. 2 red \$1.67; No. 2 white \$1.68; No. 2 mixed \$1.67.

Chicago.—Sept at \$1.50 1/4 @ 1.50 1/2; December \$1.50 1/4 @ 1.50 1/2; May \$1.53 1/2 @ 1.53 3/4.

Toledo.—Wheat \$1.86 @ 1.87.

Corn.
Detroit.—No. 2 yellow \$1.04; No. 3 yellow \$1.03.

Chicago.—Sept. at 94 1/2 c; December 83 1/2 c; May 87 1/2 c.

Old Oats

Detroit.—No. 2 white 49c; No. 3 46c.

New Oats

Detroit.—No. 2 white at 43c; No. 3 white 41c.

Chicago.—Sept. 38 1/2 c; December at 41 1/2 c; May 45 1/2 c.

Rye

Detroit.—No. 2, \$1.03.

Chicago.—Sept. at 87 1/2 c; December 92 1/2 c; May 97 1/2 c.

Toledo.—\$1.00.

Beans

Detroit.—(Old) immediate and prompt shipment \$4.40; (New) \$4.50 @ 4.55.

Chicago.—Navy, fancy, \$6.50; red kidneys \$12 @ 12.50.

New York.—Choice pea at \$5 @ 5.50; red kidneys \$11 @ 11.50.

Barley

Malting 81c; feeding 76c.

Seeds

Detroit.—October red clover \$14.80; timothy \$3.60.

Buckwheat

Detroit.—\$2.20 @ 2.25.

Hay

Detroit.—No. 1 timothy \$24.50 @ 25; standard \$24 @ 24.50; No. 1 light clover mixed \$24 @ 24.50; No. 2 timothy \$22 @ 23.

No. 1 clover mixed \$20 @ 21; No. 1 clover \$18 @ 20; wheat and oat straw at \$11.50 @ 12; rye straw \$12 @ 13.

Feeds

Detroit.—Bran at \$33 @ 34; standard middlings \$36; fine middlings at \$41; cracked corn \$45; coarse cornmeal at \$43; chop \$37 per ton in carlots.

Small Fruit—Prices at Chicago

Blueberries.—Michigan, fancy, 16-qt. cases \$5.

Plums.—Michigan, 16 qt., \$1.

Pears.—Clapp's Favorite at \$1.75 @ 2; Duchess \$1.50 @ 1.75; Sugar pears \$1.50.

Peaches.—Crates of six baskets \$2 @ 2.25.

Huckleberries.—Michigan fancy, 16 qts., \$4.25.

WHEAT

After following a gradual downward trend for a month, the wheat market made a determined effort to turn in the past week. An unexpectedly large estimate on spring wheat stimulated renewed speculative efforts to depress prices, however, and finally brought on liquidation. Cash demand has continued about equal to the receipts, so that there has been no special weakness from pressure of the actual grain.

The September 1 estimate of the spring wheat crop was 284,000,000 bushels, or an increase of 21,000,000 bushels over a month previous. This makes a total wheat crop estimate of 700,000,000 bushels. The Canadian crop estimate was 392,000,000, so that there are 38,000,000 bushels more in North America than expected a month ago, with a possibility of a further gain when the final estimates are made.

RYE

Rye continues to be an "under dog," as receipts are in excess of milling needs, and exports are small. Its present discount of over 60 cents below wheat seems to be about enough. The combined yield in countries producing 78 per cent of the world crop, outside of Russia, is 36 per cent greater than last year.

CORN

Damage to the corn crop was confirmed by the official forecast of 2,885,000,000 bushels on September 1. Most of the loss shown was in South Dakota. Further injury was done after that date, but in the last few days rains have ended the drought over a wide area. Receipts of old corn dropped off last week and buyers have been obliged to bid up. The southern states, both east and west, are short of feeds and have been buying. Some Pacific Coast demand appeared at Omaha, one sale of a moderate quantity for export via the Gulf was reported, and indus-

tries have been taking fair amounts. The trend of prices for old corn remains uncertain, but the damage to the crop, declining receipts, and the broadening demand pave the way for strength until new crop is available in quantity.

OATS

The oats situation is gaining in strength. While the last report showed another huge increase in the visible supply, the primary receipts are falling off readily, and the rate of accumulation will undoubtedly slow down. The commercial demand is active as the price is at a big discount under corn, and the scarcity of rough feeds is turning buyers to oats, because of their cheapness.

The September 1 crop estimate was 1,462,000,000 bushels, against 1,387,000,000 bushels a month ago, and 1,542,000,000 bushels harvested last year.

SEEDS

The seed market improved last week. Clover prices are believed by some dealers to discount the reported shortage, but recent drought has been hard on spring seedings. Prices to the growers for timothy are the highest since the 1920 crop. Average prices in important districts as reported by the department of agriculture are \$6.95 compared with \$5.80 last year, \$5.45 two years ago, and \$4.10 three years ago.

FEEDS

Feed prices do not advance. Wheat feeds are in ample supply and more than sufficient for the demand. Demand for corn feeds is light, but prices held unchanged last week.

POULTRY AND EGGS

Egg prices gained last week. Receipts are only slowly decreasing from week to week, and advices from the country indicate conditions are favorable for a good fall lay. Excessive heat in the past week has affected the quality, however, and the offerings of fancy graded stock have been sharply reduced. Storage stocks have been making a more rapid reduction lately, but the output from the four markets does not approach last year. So long as fresh receipts hold up, and storage stocks are not drawn upon in larger volume, prices will probably continue to hang around the present level, even

though a seasonal advance is in order.

Chicago.—Eggs, miscellaneous 30 @ 31c; dirties 20 @ 25c; checks 20 @ 25c; fresh firsts 30 @ 32 1/2 c; ordinary firsts at 28 @ 29c. Live poultry, hens at 27c; springers 26c; roosters 17 1/2 c; ducks 23c; geese 17c; turkeys 20c.

Detroit.—Eggs, fresh candled and graded 31 @ 33c. Live poultry, broilers 28 @ 30c; heavy hens 28c; light hens 21c; roosters 16 @ 17c; geese 16 @ 18c; ducks 24c; turkeys 25c.

BUTTER

The butter market remains in a strong position despite the high prices, but some reaction from the recent sharp advance would not be surprising. Receipts are declining, and further sharp reductions in the make are expected, due to the extremely hot weather. The short supply of fresh butter resulted in the use of nearly 150,000 pounds of storage butter last week. The outlook for the fall butter production indicates a lighter supply than previously anticipated. Pastures have been badly hurt by drought and high temperatures, and conditions are less favorable to milk production.

Prices on 92-score creamery were: Chicago 45c; New York 47 1/2 c. Fresh creamery in Detroit sells for 42 @ 45c per pound in tubs.

POTATOES

Potato markets were unsettled last week, with demand curtailed by hot weather. The movement to market, which usually reaches its peak in October, when digging of the main crop is most active, is gradually gaining. Receipts last week were much larger than a year ago, but present prices are higher than last year. Northern round whites, U. S. No. 1, were quoted at \$1.80 @ 2 per 100 pounds, sacked, at Chicago. A crop of 344,000,000 bushels was estimated by the department of agriculture from the September 1 condition. This compares with a crop of 455,000,000 bushels harvested last year, and a five-year average of 418,000,000 bushels.

BEANS

Fear of damage as a result of heavy rains caused a small advance in bean prices in the last two days. C. H. P. whites are quoted at \$4.70 per 100 pounds, f. o. b. Michigan, with dark reds at \$8.50. The rains have not done much harm, thus far, however, as the ground was dry enough to soak up much water, and they will prevent ex-

cessive shelling and splitting in threshing. Early reports show pickage of around eight per cent. Demand is fair in the south but slow elsewhere.

WOOL

Wool trade sentiment is mostly optimistic, although there is some uncertainty as to whether the large new clip in the southern hemisphere will be absorbed by buyers without a moderate decline in the world price level. However, British and Continental stocks of wool are low, so that the demand may easily broaden to take care of this fresh supply, especially since Australian prices are already 25 per cent lower than they were late last fall. Domestic goods trade is healthy and mills continue to take a fair volume of raw wool from dealers. In the first seven months of 1925, consumption of wool by reporting mills was 304,000,000 pounds, against 298,000,000 pounds last year. Net imports, including carpet wool, were 210,000,000 pounds, against 165,000,000 pounds in the same period in 1924.

DETROIT CITY MARKET

Offerings were liberal and the demand for most stuff was fairly good. Peaches were in ready demand. Plums and first-class pears were ready sellers, and good-sized, well-colored apples were cleaned up early. Medlocre stuff was taken slowly. A few grapes were in, but the demand for them was limited. First-class cantaloupes had easy sale, and there was a good demand for watermelons. Carrots was the leading feature in the vegetable lines. Good wax beans brought higher prices, while cauliflower, tomatoes, spinach and peppers were cheaper. The demand for celery was fair. Cabbage, cucumbers and pickles sold slowly.

Prices were: Apples \$1 @ 2.75 a bu; crabapples \$1.75 @ 3 bu; elderberries \$1 @ 1.25 bu; grapes \$3 @ 4.50 bu; cantaloupes, No. 1, \$1 @ 1.75 bu; pears 50c @ 3 bu; peaches \$2.50 @ 6.50 bu; plums \$3 @ 3.50 bu; beets 60 @ 65c per dozen bunches; wax beans \$1.50 @ 2.25 bu; green beans \$1 @ 1.75 bu; carrots \$1.50 @ 2.25 bu; cabbage 75c @ \$1 bu; lima beans 35 @ 40c qt; cucumbers, slicers 40 @ 50c bu; dills \$1 @ 2 bu; gherkins \$2 @ 3.50 bu; leaf lettuce 50 @ 60c bu; green onions 60 @ 65c dozen bunches; dry onions \$1.75 @ 2 bu; pickling onions \$3 @ 5 bu; potatoes \$1 @ 1.35 bu; round radishes 40 @ 50c dozen bunches; long radishes 50 @ 80c per dozen bunches; turnips 50c dozen bunches; spinach 75c @ \$1 bu; tomatoes 75 @ 90c bu; celery 35 @ 65c dozen; summer squash 50c bu; winter squash \$1 @ 1.50 bu; eggs, wholesale 38 @ 40c; retail 45 @ 50c; colored springers, retail 30 @ 32c; Leghorn springers, retail 28 @ 30c; ducks, retail at 30c; dressed poultry, hens 30 @ 38c; springers 45 @ 50c.

GRAND RAPIDS

With many farm flocks going into a complete body molt, and egg production decreasing sharply, egg prices in Grand Rapids have swung into an advance, retailers now competing for stocks at 35c per dozen. Poultry receipts continue liberal and the market weak. Butter-fat was about steady at 46c a pound. Home-canning operations strengthened the market on fruit this week, prices ranging: Peaches, Elbertas and Engles \$3 @ 3.50 bu; Proflics \$2.50; Crawford \$3; Kalamazoo \$2.25 @ 2.50; Hales \$4 @ 5 bu; plums, Lombards \$1 bu; Pond Seedlings \$1 @ 1.25 bu; grapes \$2.50 @ 2.75 bu; apples, Wealthy 50 @ 75c bu; Wolf Rivers 60 @ 75c bu; Strawberry \$1 @ 2 a bu; Pound Sweet \$1 @ 1.25 bu; crabapples \$1.25 @ 1.75 bu; cantaloupes, best \$1 @ 1.75 bu; watermelons \$1.75 @ 2.50 per doz; tomatoes 50c @ 1.25 bu; potatoes 90c @ 1.15 bu; onions \$1 @ 1.35 bu; celery 15 @ 50c dozen; head lettuce 75c box; cabbage, turnips, bagas and beets 50 @ 75c bu; wax beans 75c @ \$1 bu.

WILL STUDY CORN BORER.

THE corn borer is increasing in numbers so rapidly in Monroe county that a meeting has been arranged for all farmers and extension people in southeastern Michigan for September 24, meeting at the post office in Monroe at 1:00 p. m. From this point a trip will be made to various fields in the eastern half of Monroe county, showing just what the insect is doing, what the damage is, and the proper measures to take to control the increase in number another year. Every farmer in southeastern Michigan is invited to attend. A complete crop loss within three years is inevitable unless something is done.

Live Stock Market Service

Tuesday, September 15.

CHICAGO

Hogs

Receipts 3,000. Market steady to stronger than Monday's average; active and 15c higher; big packers are doing little; bulk of better grade 160-225-lb. weights \$13.55 @ 13.50; top at \$13.60; majority desirable 240-350-lb. butchers \$12.50 @ 13.20; bulk of packing sows at \$11 @ 11.50; a few strong weight slaughter pigs \$13 down.

Cattle

Receipts 9,000. Market on fed steers and yearlings steady to strong; yearlings in most active demand; grain-fed steers strong; best weighty steers \$16.25; light yearlings \$15 and up; three loads of yearling heifers at \$13; 15 loads of big western grassers; several loads at \$7.50 @ 8.75; packers and feeders strong to higher; good Wyomings to feeders and vealers at \$7.75 @ 8.50; top firm; vealers up \$14 @ 14.50.

Sheep and Lambs

Receipts 13,000. Market on desirable fat lambs scarce; bulk of western roughs; few early sales of fat native lambs \$15 @ 16; some held higher; feeding lambs steady; desirable fat native ewes \$6 @ 7.50; better grade of feeding lambs \$15.50 @ 16; few weighty kind and come-backs downward to \$14.50 and below.

DETROIT

Cattle

Receipts 1,200. Market steady. Good to choice yearlings dry fed \$10.50 @ 11.25. Best heavy steers, dry-fed 9.75 @ 10.75. Handyweight butchers 7.75 @ 8.75. Mixed steers and heifers 6.25 @ 7.25. Handy light butchers 5.25 @ 6.25. Light butchers 4.25 @ 5.00. Best cows 5.00 @ 5.50. Butcher cows 4.25 @ 4.75.

Common cows 3.00 @ 3.50. Canners 2.50 @ 3.75. Choice bulls, dry-fed 5.00 @ 5.50. Heavy bologna bulls 4.50 @ 5.00. Stock bulls 3.50 @ 4.75. Feeders 6.25 @ 7.00. Stockers 5.00 @ 6.00. Milkers and springers \$45.00 @ 90.00.

Veal Calves

Receipts 390. Market 50c @ \$1 higher. Best \$15.50 @ 16.00. Others 4.50 @ 11.00.

Sheep and Lambs

Receipts 2,530. Market steady. Best \$15.50 @ 16.00. Fair lambs \$13.00 @ 14.50. Fair and good sheep 6.00 @ 7.50. Culls and common 2.00 @ 4.50. Light and common 8.00 @ 11.25. Heavy sheep 4.50 @ 5.00. Buck lambs 12.50 @ 14.00.

Hogs

Receipts 4,800. Market steady. Roughs 11.00. Heavies 12.50 @ 13.00. Mixed and yorkers 13.90. Pigs 13.25. Stags 8.00. Light lights 13.50.

BUFFALO

Hogs

Receipts 5,000. Market is closing steady; heavy \$13.75 @ 14; medium \$14 @ 14.50; light weight \$14 @ 14.25; light lights \$13.75 @ 14.25; pigs \$13.75; packing sows and roughs \$11.25 @ 11.50.

Cattle

Receipts 150. Market steady. Sheep and Lambs. Receipts 500. Best lambs \$16; best ewes \$5 @ 7.50.

Calves

Receipts 300. Top at \$16.

STATE FAIR NOTES.

(Continued from page 250).

The family was a resident of Detroit, and the children were fully developed, all having brown eyes, the same as the father and mother.

Crowds were attracted to this exhibit by the flashes of red lights on the sign at the entrance. These lights were timed so that one flashed every forty-eight seconds, signifying the birth of a child in the United States destined to die before eight years of age. Another flashed every fifty seconds for the birth of a child destined to go to jail or an asylum because of abnormality. A small boy of twelve stood watching this sign, and grasping the meaning as best his childish mind could. As the second light flashed he remarked, "Gosh, there goes another feller into the bughouse."

The third light flashed every sixteen seconds, when a person is born in the United States. Another light told the story that every seven and one-half minutes a high-grade person is born in the United States who will do creative work. Four per cent of all Americans belong in this class.

We spent some time with the exhibit of the United States Department of Agriculture. From the extensive resources of the department it was possible here to find in small compass why a dairyman should use a good bull in his herd; how he could secure such a bull at even less outlay than a scrub may now be costing; what precautions will bring clean milk; how it is that pure-bred dairy cattle have added a half billion dollars of value to the dairy herds of the country; the definiteness with which one gets satisfactory results when he proportions out good feed in sufficient amounts to good cows; the managerial requirements for getting the maximum of feed from the pasture lot; and the steps necessary to produce good calves. These charts and graphs and pictures were thought-provoking, and no doubt will be helpful in making good dairymen better, and in lifting some poor dairyman out of the ruts.

CASH PRIZES FOR STANDARD GRADE POTATOES.

To bring to the attention of growers, and to the public, the importance of knowing what constitutes Michigan's standard grades for potatoes, the State Department of Agriculture is offering, at the West Michigan Potato Show at Greenville, October 29-31, four cash prizes—\$40, \$30, \$20 and \$10—as premiums to growers entering exhibits of six packages of potatoes, so prepared as to represent the four standard grades. The judges of the exhibit will be men familiar with the handling and grading of potatoes. The field-run sample must accompany the exhibit in order that the judges may know from what material the grading samples were taken.

THUMB TO HAVE POTATO SHOW.

To stimulate the production of a higher type of potato, the first potato show planned for the Thumb district will be held at Mayville, Tuscola county, November 11-13. The Michigan State College and the State Department of Agriculture are cooperating in putting on the show and program. The premium list is now being prepared and approximately \$750 will be offered as prizes. Special attention, in awarding these prizes, will be given to table stock. Ernest Haas, of Mayville, is secretary, and John W. Simms, of Caro, is manager of this new enterprise.

CONDITION OF CORN, BEANS AND POTATOES.

THE weather during August was nearly ideal throughout the southern half of the state for the growth and development of all field crops. Hay and pastures made decided gains. Exceedingly dry weather prevailed in the Upper Peninsula and northern portion of the Southern Peninsula, which caused a marked deterioration in potatoes and other growing crops. In that region, the rainfall ranges from eight to twelve inches below the seasonal average, while in the southern counties the deficiency since January 1 ranges from three to five inches, according to the September report issued by L. Whitney Watkins, commissioner of agriculture, and Verne H. Church, United States Agricultural Statistician. The fruit crops are light, although apples and pears made some improvement during the month.

Corn.—The crop is in good condition throughout the southern half of the state although, in some sections, the effect of dry weather was becoming apparent at the close of the month. There is a heavy growth of fodder,

and much of it is well-eared. Drought in the northern districts caused firing and the yield there will be considerably shortened as a result. The estimated production is 65,666,000 bushels, as compared with 43,836,000 last year. The condition is rated at ninety-one per cent, six per cent better than on August 1, twelve per cent above the average, and twenty-seven per cent better than on the same date last year. The crop is maturing slowly, but will be safe from frost damage within a few days.

Potatoes.—The outlook improved during August in the southern half of the state but declined from fifteen to twenty points in the northern half. This reduces the state average four per cent, which is approximately the same as the average decline for the month, hence causes but slight change in the forecasted production. The present prospect is for a crop of 26,529,000 bushels, as compared with 38,252,000 last year.

Beans.—The condition is somewhat variable. In some sections the prospect is excellent, while in others, blight and anthracnose have lowered the yield and quality. Early matured fields are generally yielding well, but owing to extremely dry weather, are splitting badly. The average condition on September 1 was eighty-two per cent, fourteen per cent better than last year, and eight per cent above the average. The decline of six per cent during August was close to the average, and changes the forecast but slightly from that of one month ago. With normal conditions to the end of the season, the crop will aggregate 7,289,000 bushels.

FEDERAL CROP REPORT.

THE general crop situation shows no improvement since last month, according to the report issued by the United States Department of Agriculture. Taking all crops together the outlook is still for yields per acre substantially below the average of recent years.

During August, corn suffered from drought in the south, and in much of the corn belt. There was some improvement elsewhere, but the forecast for the United States has been reduced about two per cent. The present forecast is for nearly 2,900,000,000 bushels, or about an average crop.

The bean crop is expected to be the largest since 1914. A very large increase was planted and a fairly good yield is expected. Few other crops are up to their usual average. The potato crop is estimated at 344,000,000 bushels, which would be the smallest crop since 1919.

Eggs. Etc.—Small consignments from very attractive prices NOW. Prompt returns always. Refer to Dun or Bradstreet. Ship us your next case. ZENITH BUTTER & EGG CO., 170 Duane St., New York, N. Y.

HOGS

Hampshires For Sale nice spring and fall Boars. Choice bred gilts, 12th year. JOHN W. SNYDER, R. 4, St. Johns, Mich.

HORSES

FARMERS ATTENTION! We have some extra good Percheron and Belgian Stallions of size and quality. International & State Fair prize winners. If your locality is in need of a good Stallion, you can easily secure one on our breeding association—service fee plan. FRED G. STEVENS Co., Inc., Brookridge, Mich.

CLASSIFIED ADVERTISING

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

REAL ESTATE

FLORIDA—It is summer time the year round in Florida. St. Petersburg, "The Sunshine City," is a pleasant place in which to live. It is a substantial, progressive, fast growing and beautiful section of Florida. Property bought where city improvements are being made, and where homes are being built, is a safe investment that will yield good returns. I represent an old established company and sell lots within the city limits of St. Petersburg where the city is building new schools, roads and Street Railway lines. Bank references as to financial standing and business methods of company, sent on request. H. Thorburn, 243 2nd Avenue North, St. Petersburg, Florida.

WANTED—To hear from owner of farm for sale, for fall delivery. O. Hawley, Baldwin, Wis.

Registered Jersey Cattle Auction Sale At Brookwater Farm Friday, September 25, '25

To settle the estate of D. C. Goodspeed. Forty head of high class registered Jerseys from high producing strains and from the popular blood lines of Island breeding. Will sell at your price. Federal accredited herd No. 79370. For catalog address

Tom Dempsey, Sale Manager
Westerville, Ohio

SHEEP

400 BREEDING EWES

For sale, 1 to 5 years old, mostly black-faced, good size and good condition. Postal address, ALMOND B. CHAPMAN & SON, South Rockwood, Mich. Telephone New-400. 23 Miles South of Detroit.

Delaine Rams Both Polled and Horned for HOUSEMAN BROS., R. 4, Albion, Mich.

DELAINE RAMS fine ones. Photos free. F. H. Russell, Box 20, Wakarusa, Ohio.

Breeding Ewes For Sale Good large Delaines & Shropshires. V. B. FURNISS, Nashville, Mich.

The Old Reliable Angus Home Stock Farm, of Davison, Mich.

is offering for sale a few choice Karakule ram lambs of the right fur bearing kind. Use a Karakule on native ewes. Turn your dead lamb loss to profit. Ask us; we will tell you how.

Registered Hampshire Yearling Rams. Call or write CLARK HAIRE RANCH, West Branch, Mich. Charles Post, Manager.

Karakules For Sale 2 1-year ewes, 1 ewe lamb, 1 1-year ram, 1 2-year ram. \$500.00 for bunch. L. R. Kune, Adrian, Mich.

Merino and Delaine Rams, combining size, long staple, heavy fleeces, quality. Write S. H. Sanders, R. No. 2, Ashtabula, Ohio.

OXFORDS rams, yearlings and ram lambs. Registered. H. W. MANN, Danville, Mich.

OXFORD RAMS—25 years' breeding, the best, priced to sell. Shipped on approval. Write or phone. Wm. Van Sickle, Deckerville, Mich.

For Sale Oxford yearlings and ram lambs, registered. The kind that please. Geo. T. Abbott, Palms, Mich. Tel. Deckerville, 78-3.

Rambouillet Rams Extra fine large yearlings, from ram shearing thirty pounds. H. W. HART, R. 2, Greenville, Mich. Phone Grattan, Mich.

SHROPSHIRE RAMS One 2-yr. Wardwell stock ram. Yearlings and lambs, priced right. D. Chapman & Son, So. Rockwood, Mich.

Twin Lake Stock Farm offers registered Shropshire Rams, one 3-yr., also 5 yearlings. W. E. JENKS, Belding, Michigan.

Breeding Ewes For Sale 150 head, mixed ages per head. C. A. Palmer, Belding, Michigan.

40 head registered yearling Shropshire ewes, a few yearling rams, also ewe and ram lambs. Quality and price right. Flock established 1890. C. LEMON & SONS, Dexter, Mich.

The Maples Shropshires One 2-yr. stock ram, also ewes. C. R. LELAND, R. 5, Ann Arbor, Mich.

Shropshires the woolly type. 15 yearlings, 35 ram lambs. DAN BOOHER, R. No. 4, Ewart, Mich.

FOR SALE—3 farms, extra good buildings, fences and land. Write for descriptions, Floyd Lova, Howell, Mich.

WANTED FARMS

WANTED—POULTRY FARM—Will lease with option to buy. Must have buildings for not less than one thousand birds. Home and poultry houses must be in good repair. Small acreage desirable. Give full details, including location, rental, price, etc. Address Box 27-B, Michigan Farmer, Detroit, Mich.

MISCELLANEOUS

OLD MONEY WANTED—Will pay Fifty Dollars for nickel of 1913 with Liberty head, (no Buffalo). We pay cash premiums for all rare coins. Send 4c for Large Coin Folder. May mean much profit to you. Numismatic Co., Dept. M, Ft. Worth, Texas.

HAY—Timothy, clover and mixed—also alfalfa. Quality guaranteed. Ask for delivered prices. Harry D. Gates Company, Jackson, Mich.

ALL WOOL KNITTING YARN for sale from manufacturer at great bargain. Samples free. H. A. Bartlett, Harmony, Maine.

PET STOCK

LAKE LAND FUR EXCHANGE, Salem, Mich., (25 miles west of Detroit). The world's most famous breeds of tree, den and trailing hounds. Trained, partly trained and untrained pups, all ages. Imported, registered and pedigree stock. Ship on trial anywhere. Send for complete description. Photo group ten cents.

I SPECIALIZE IN RAISING FERRETS—30 years' experience. September prices, males, \$3.25 each; females, \$3.50 each. One dozen, \$35. Yearling females, \$4.00 each. Special rat catchers \$5.00 each. Yearling males \$4.00. Will ship C. O. D. Instruction book free. Levi Farnsworth, New London, Ohio.

FOR SALE—Wolf gray police pups, whelped May 30th from imported sire. Beautiful specimens, priced low. Homestead Kennels, Saranac, Mich.

FERRETS—Your choice of young or old, white or brown. Instruction book free. Thos. Sellers, New London, Ohio.

HUNDRED HUNTING HOUNDS cheap. Fur finders. Catalogue, Kaskaskennels, F 183, Herrick, Ill.

AIREDALE PUPPIES—Pedigreed. Fine farm dogs. Cheap. Wm. C. Brown, R. 2, Battle Creek, Mich.

GERMAN POLICE PUPS FOR SALE—Prices reasonable. Dr. R. E. Bergman, Cassopolis, Mich.

PEDIGREED WHITE COLLIE PUPPIES, Farmers' prices. John Telfer, Henderson, Mich.

FOR SALE—Black & tan hounds, males \$10, females \$7.00. Harold Blackmer, Buttertut, Mich.

TOBACCO

LOOK HERE! Guaranteed, fragrant, mellow, rich, homespun tobacco. Five pounds chewing, \$1.50; smoking, \$1.25. Samples, 10c. Clark's River Plantation, 190, Hazel, Kentucky.

HOMESPUN TOBACCO—Chewing five lbs. \$1.50; ten \$2.50; smoking five lbs. \$1.25; ten \$2; cigars, \$2 for 50, guaranteed, pay when received, pipe free. Roy Carlton, Maxon Mills, Kentucky.

LEAF TOBACCO—Chewing, 5 lbs. \$1.50; ten, \$2.50; smoking, 5 lbs. \$1.25; ten, \$2. Guaranteed. Pay when received. Pipe free. Albert Ford, Paducah, Ky.

HOMESPUN TOBACCO, Chewing 5 lbs. \$1.50; 10, \$2.50. Smoking 5 lbs. \$1.25; 10, \$2. Mild 10, \$1.50. Pay when received. F. Gupton, Bardwell, Kentucky.

POULTRY

PURE 200-EGG STRAIN White Rock Cockerels, \$3 up. Fully guaranteed. Sent on approval. Exceptional values for early orders. Woodroad Place, Buchanan, Mich.

COCKERELS—Pullets; Rocks, Reds, Leghorns, Turkeys, Geese and Ducks. Send for prices. State Farms Association, Kalamazoo, Mich.

TANCRED WHITE LEGHORNS, Buff Orpingtons, Barred Rocks. State Fair Winners. Fenner Bailey, Montgomery, Mich.

SHIP US YOUR FAT HENS and fresh eggs every Tuesday. Write for a quotation. East Coast Poultry Co., 1360 Division St., Detroit, Mich.

500 SINGLE COMB White Leghorn hens, pullets. John Hass, Bettendorf, Iowa.

S. C. BUFF LEGHORN COCKERELS—Prices reasonable. Willard Webster, Bath, Mich.

BABY CHICKS

SUPERIOR CHICKS—9c up. 12 varieties. Heavy layers. Delivery guaranteed. Postpaid. Bank references. Catalogue free. Superior Hatchery, Box 886, Windsor, Mo.

SEEDS AND NURSERY STOCK

SEED WHEAT FOR SALE—Michigan No. 1, a heavy yielding beardless red wheat, and American Banner, a beardless white variety; both produced under the finest conditions, and thoroughly cleaned and graded. We are the largest growers of wheat in the state, and use the best seed obtainable. Write at once for prices. Godfredson Farms, Ypsilanti, Mich.

ALSIKE AND TIMOTHY MIXED SEED, \$4.95 bushel. Alfalfa, clovers, timothy, rye, barley, native seeds. Write for price list. Fulghum Seed Co., Lorain, Ohio.

REGISTERED American Banner Seed Wheat, a high yielding white variety. Fairview Farm, R. No. 4, Jackson, Mich.

AGENTS WANTED

MICHIGAN MEN with sales ability and well known through county, can make large income weekly selling guaranteed Motor and Tractor Oil in drums and half-drums on thirty-day terms to farmers and preferred dealers. Must have auto. State age. Will arrange interview. We ship direct from nearby branches. Division Manager, Lock Box 135, Saginaw, Mich.

EASY TO SELL GROCERIES, Paints, Lubricating Oils, from samples to consumers in towns and country. Prices meet all competition. No capital or experience necessary. Profitable, steady work. Commission advanced. Satisfaction guaranteed. 53 years in business. Write Lovern & Browne Co., Wholesale Grocers, 1776 So. State St., Chicago, Ill.

FREE TRIP TO CALIFORNIA. Get three good responsible farmers to go with you to inspect California state approved lands. Opportunity for one good man in each community to join largest land selling organization in U. S. Write for details. Herman Jans, 1195 Transportation Bldg., Chicago, Ill.

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.

A Michigan Farmer-Liner Gets Results. Try One.

Ford

Important Changes

*Added Beauty and Utility—
Closed Cars In Colors—
No Increase In Price . . .*

All-steel bodies on Tudor Sedan, Coupe and open cars. Bodies and chassis both lowered. Larger, more attractive fenders, affording greater protection. New improved transmission and rear axle brakes on all types. One-piece ventilating windshield on closed cars; double ventilating type on open cars. Curtains

opening with all doors on Touring car and Runabout. Closed cars in colors, with upholstery of finer quality to harmonize, and nicked radiator shells. Many other refinements now add to the beauty and quality of these cars. See your nearest Authorized Ford Dealer today for complete details.

Ford Motor Company
Detroit, Michigan

Ask The Nearest

No change in Fordson price. It is now possible to buy a Fordson with implements on attractive terms. Ask about the new Fordson payment plan.

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