

# MICHIGAN FARMER

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## Intensive Versus Extensive Farming.

THAT the English have done well in stock breeding might be judged from the fact that most of our improved breeds of domestic animals have originated with them; the Shorthorn, Hereford, Aberdeen-Angus, Galloway, Ayrshire, Guernsey, Jersey, Red Polled, and Devon cattle, for instance, all sprang into existence through the efforts of the English or Scotch breeders.

This seems surprising when we remember that the land area of Michigan is greater than that of England by nearly 7000 square miles. That so much improvement of live stock has taken place in England shows that the methods of agriculture there are extremely intensive. A man who operates eighty acres is perhaps as unusual in England, we are told, as one who operates four hundred and eighty in this state. Under English conditions, every foot of ground is made to respond to the utmost care, and farms which have been cropped for a thousand years or more are still maintaining the reputation which they have always enjoyed.

One wonders how an Englishman would behave in Michigan if he had a chance to take up all the land he wanted. Will he fall from grace as an expert maintainer of soil fertility, and "butcher the land," as some of the western ranchers have done, or will he resist the temptation to secure much land, and follow after the intensive methods of his fathers, or will he try and spread himself over a goodly acreage with a small labor supply and still maintain soil fertility?

The answer will depend on one's individuality and preference. We have in mind, however, an example of the latter procedure, in which an Englishman has gone into stock raising on a 480-acre farm with a labor supply perhaps one-fifth as great as he would

expect to find on a similar acreage in the old country. The farm is located in the hardwood slashings of Manistee county; the soil is a sandy loam; of the 480 acres, about 180 are under cultivation, and the balance used for pasture. The owner, Mr. Ed. Williams, has lived on the place for the past 40 years, and the best crop he has raised is his family of nine children, the oldest of whom are taking over the management of parts of the farm.

Raising feeder steers is Mr. Williams' principal line of pursuit. That solves the soil fertility problem, the land clearing problem, the labor problem. The soil fertility problem, because all the roughage raised on the farm is fed out and returned as manure, loses its perplexity; the labor problem, because the cattle are pas-

To be sure, nine cows could not pasture down 35 acres of wild land without help. Five years ago this field was broken up, and a crop of potatoes taken off, followed by by oats, and a seeding of grass; then came the pasture spoken of above. It did not take long for June grass to crowd out the cultivated grasses, however. "Did you know," asked Mr. Williams, plucking a bunch of the luxuriant green fodder at his feet, "that June grass and Kentucky bluegrass are one and the same? I can't understand why so many call June grass a weed, when it is the best all round pasture grass in this country. I want nothing any better."

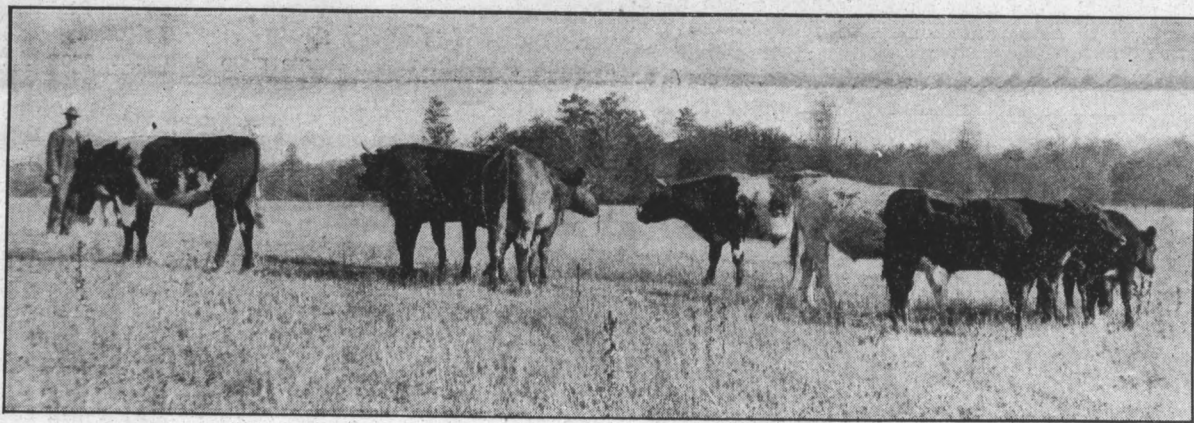
Asked what he fed in the winter, Mr. Williams again spoke up for June grass, stating that there were fre-

steers, together with a flesh covering that would tempt many to butcher the beeves without any preliminary additions of tallow. We took a photograph of one bunch of steers that had been bought up by a dealer at a lump sum—\$542.50 for seven of them, at an estimated weight of 1100 pounds each. The aim on this farm is to keep at least sixty head of cattle, and turn off about twenty every year. Nothing but Shorthorns are kept, and the sires used are among the best bred in the neighborhood.

A few of the reasons why Mr. Williams pastures so much land are: Plenty of running water on the place; land cheap and tax rate low when land unimproved; small capital required as compared to other cropping systems; small labor requirement;

land clears itself; soil increases in fertility; he has farms for his sons where they, in the future, can plow as much as they wish and carry on more intensive methods. On the whole, it seems as if the Englishman shows his level-headedness as well in Michigan farm methods as he does at home.

This example is but one of many which might be cited to show that under present conditions in



Seven Steers Sold by Ed. Williams, of Manistee Co., from New Land Pasture for the Neat Sum of \$542.50.

turing most of the farm, loses its perplexity; meanwhile the land clears itself.

To prove the latter statement, Mr. Williams took me out into his 35-acre cow pasture, where he has had nine cows all summer, and where pasturing has been the rule for the past five years. Taking hold of a stump, Mr. Williams toppled it over with one hand; it had rotted completely. "I find this method a lot cheaper than dynamite, and my land is all the time getting more fertile than would be the case were the stumps uprooted and burned," he explained.

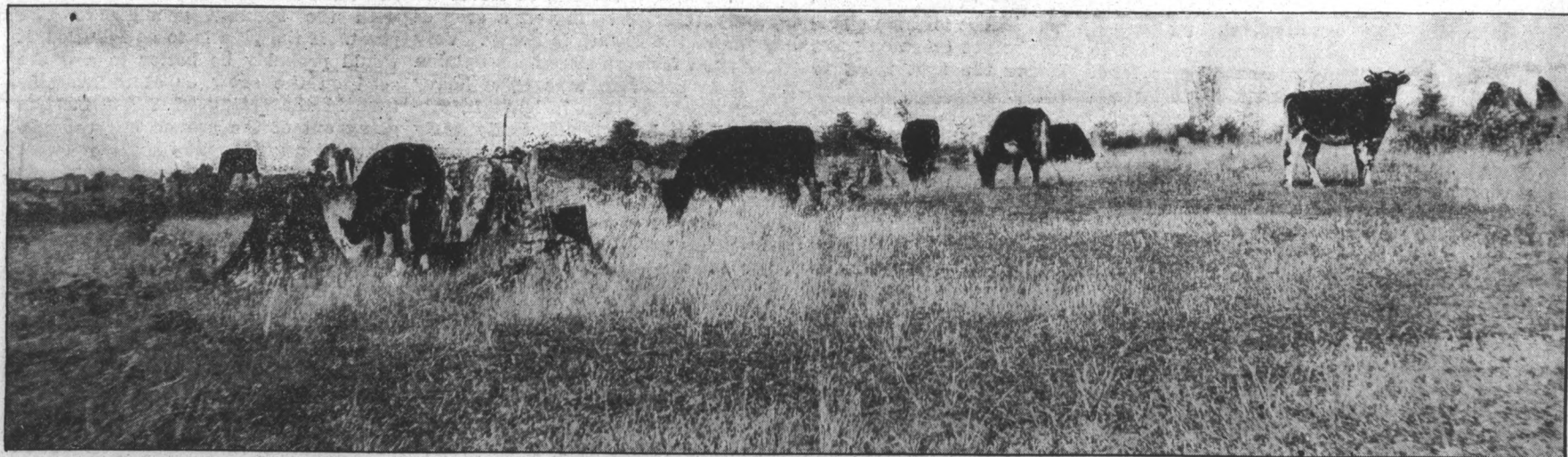
quently short periods in the winter when he could turn the cattle out to grass, and they seemed to enjoy the change of feed. He admitted that he ought to have a small silo for late summer feeding, and for supplementary feeding in the winter along with the corn, clover hay, and fodder that he was using, but expressed it as his observation that cattle had come out of his neighbor's barn in the spring looking worse after a course of silage than had his own on dry feed with June grass at favorable intervals.

Certainly Mr. Williams does put a big framework onto his two-year-old

many sections of Michigan extensive farming is better business than intensive farming, as well as to show that the man bred to intensive habits of farming may readily adapt himself to the successful practice of a very different method. This faculty of adaptation is a most important attribute of good farm management, and the man who can figure out the best system of farming to follow under the conditions which confront him has gone a long way toward the solution of the much discussed farm management problem.

Benzie Co.

E. H. BROWN.



Hardwood Stump Land Seeded to Clover and Timothy, which will be Followed by June Grass, which makes Fine Pasture while Stumps are Rotting.



## Laying Concrete Floors.

I am putting up a wall for a barn, and will let it stand over winter. Can I make the cement floor in the basement this fall and let it stand over winter, or would the ground freeze and crack it? Soil is clay and a four-inch tile is laid under the wall just below where the floor will come.—Sub.

**W**HEN one recalls the similarity between basement floors and concrete sidewalk, he will realize that perfect drainage and proper construction are sufficient insurance against damage by frost after the floor has thoroughly hardened. Exposed floors should not be laid during freezing weather, nor should a cement floor be laid until after the structure is roofed; if the floor is laid before the building has been roofed and the structure is allowed to remain incomplete during the winter, there will be no way to prevent water collecting under the floor, freezing and heaving some of the floor slabs.

Where an accumulation of water under the floor is feared, a sub-base six inches thick may be laid, consisting of broken stone from which the fine particles have been removed by screening, coarse gravel, cinders or blast furnace slag, the idea being to secure a porous material through which water will readily drain to a natural outlet.

Where the ground is firm and well drained, as it appears to be in the present case, the sub-base may be omitted and the concrete floor laid directly on the ground. The soil should be thoroughly compacted by hard ramming or rolling with a heavy roller, and should be brought to a level surface five inches below the proposed grade of the basement floor.

Forms should be made from two-inch lumber and should be five inches high. Thirty-six square feet is usually adopted as the maximum area of a single slab and six feet is the greatest dimension permissible.

In the construction of concrete floors, as in all other concrete construction, a standard brand of Portland cement should be used. Fine aggregate should consist of sand, crushed stone (free from dust) or gravel screenings, well graded from fine to coarse material just passing a screen of quarter-inch mesh. Sand should be clean, and free from foreign matter. Coarse aggregate should consist of clean, well graded gravel or broken stone, varying in size from one-quarter-inch to one and one-quarter inches. Bank run gravel should never be used without screening and remixing in the proper proportions; it usually contains an excess of fine material, rendering proportions uncertain and indefinite. If the gravel or sand contains loam, clay or other foreign matter, it should be washed before being used.

Materials should be mixed in proportions of one sack of Portland cement, two cubic feet of fine aggregate and three cubic feet of coarse aggregate. Thorough mixing of the materials cannot be too strongly emphasized. If possible, a power batch mixer should be used as machine mixing is not only cheaper than hand mixing but is more thorough and uniform. If mixing must be done by hand, the materials should be measured by use of a bottomless box holding one cubic foot, and when the required amount of sand has been spread upon a watertight mixing platform, the cement is then spread upon the sand. Square-pointed shovels are used to turn the cement and sand two or more times until the streaks of brown and gray have merged into a uniform color throughout the mass. Coarse aggregate is then shoveled on and the mixing continued, water being added during the first turning after adding coarse aggregate. Water should be added gently, preferably by spray, so as to prevent washing out the cement. Turning should continue until the mass is of uniform consistency throughout, which will usually require

at least three turnings after adding water. Mixing in the above manner will give satisfactory results, but the labor involved is considerable and on this account it is too common for those attempting it to slight the work, and thus produce imperfectly mixed concrete.

Sufficient water should be used to make the concrete of a "quaky" consistency. When placed and lightly tamped water should flush to the surface of the concrete. Steel tampers eight inches square are commonly used, but a very satisfactory tamper may be made by sawing a one-foot length from a log eight inches in diameter, fitting it with an upright handle and driving a few staples in the bottom and allowing them to project about a half inch. The staples serve the double purpose of decreasing the wear on the tamper and driving the coarse aggregate below the surface of the concrete, leaving the finer particles at the top ready for finishing with a wood float. A steel trowel should not be used as it will make the surface slippery.

In order to insure perfect joints between slabs, they should be constructed alternately. In this way slabs are allowed to remain until the cement is partially hardened before the cross-pieces are removed and the material for adjoining slabs placed. Thus each slab forms a distinct unit and unsightly cracks from uneven settlement are avoided.

As soon as the concrete has hardened sufficiently to prevent the surface from being pitted it should be covered with wet straw, damp earth or some similar covering and kept wet by being sprinkled with clean water for at least four days. The floor should be protected from use until it has thoroughly hardened.

Illinois. H. H. RICE.

### SEEDING UNPRODUCTIVE LAND TO ALFALFA.

Have 40 acres from which a bean crop has just been harvested, on the future use of which I need advice. Formerly I sowed such land to wheat, but after four failures will not try again. Would like to sow alfalfa on this land in the spring. Land is somewhat rolling. Would it do to let it lie as it is over winter, applying stable manure during the winter and then sow? Clover has failed twice on these two 20-acre fields. Would there be danger of too many weeds from applying the manure? I want to lime the land heavily in the spring. Does it need a cover crop, or should I sow it to rye and use other stubble fields which can be plowed in the spring for alfalfa?

St. Joseph Co. J. S. W.

This land probably needs lime first of all to get clover or alfalfa started. This will put the land in shape to grow crops to plow down to furnish vegetable matter. This kind of soil in such condition that it fails to grow wheat, needs, worst of all, vegetable matter—humus. But it is a slow proposition to grow humus crops on poor, sour land. Hence the first thing to do is to lime it.

If you had our kind of land you could not get it into such condition as described, so easily. Your soil is a generous one. It yields up its plant food and humus too freely. Our heavy land is stubborn and refuses to respond to the spur of tillage so readily. Your land has responded so readily to this spur of tillage that it has become temporarily exhausted. You must give it a long rest—nature's way—or you must make a cash investment to get it to yield good crops again. If you have stable manure and lime in sufficient quantities the whole thing is done. For lime will sweeten the soil and stable manure will furnish humus

material and plant food. But if you haven't stable manure so you can apply 10 to 15 tons per acre then you must plow down crops for humus and buy commercial fertilizer for plant food. I know of no other way.

If you can sow rye at once you will get some growth to plow down next spring. Feed the rye with phosphate and potash, 10-2, say, 300 pounds per acre. Plow it down next spring when one and a half feet high. Apply 3,000 pounds of ground limestone per acre or 1500 pounds of hydrated lime. Then make a good seed bed and sow it to alfalfa, using 300 to 500 pounds of 10-2 fertilizer. Inoculate the soil thoroughly with alfalfa bacteria.

I believe this will grow alfalfa and this kind of treatment will put this soil in condition to grow wheat again.

I don't think it makes so much difference just the time of year you sow alfalfa. More depends on the moisture condition than on spring, summer or fall seeding. There is greater risk on this moisture proposition on midsummer or August seeding than on early spring seeding. If you sow the field to rye this fall and plow down next spring, as suggested, conditions will probably not be right for early sowing and you must wait till June or July or August, depending on the moisture distribution.

If you desire to seed one of your stubble fields to alfalfa next spring, I would plow this field, apply lime this fall or winter or in early spring, and then seed to alfalfa in April or early May, fertilizing heavily. Four hundred or 500 pounds would be none too much fertilizer to use. If you can cover with manure this month all the better. Don't be afraid you will get the land too rich for alfalfa.

The land is probably not very weedy. If it is it ought to grow wheat or clover. But if it is weedy for the early seeding I would use a nurse crop of barley or oats, three pecks or one bushel per acre. Then clip this or cut it for hay if there is sufficient growth to pay. This will keep the weeds back until the alfalfa gets started.

I sowed some this way this spring and have a good start, only where an excessive rain washed and buried some of it so deep it never came up.

1. Sweeten the land; 2, fill it full of vegetable matter; 3, give it plenty of plant food. It will respond. It is the only way.

COLON C. LILLIE.

### FARM NOTES.

#### Cutting a New Seeding of Clover.

Can you tell me the best way to handle a heavy new clover seeding after rye? The clover is alsike and June on both of which the blossoms are ripe. Some tell me cutting it will kill the clover, others that leaving such a heavy crop on the ground will cause it to smother out. There is 23 acres of the heavy seeding so I do not like to experiment too much. Heretofore I have pastured lightly in the fall and kept the clover down, but this fall did not need the pasture.

Tuscola Co. M. I. L.

Good farmers differ widely in their opinions on the advisability of clipping back a new seeding of clover after harvest or of taking off a crop of hay where the growth is heavy. Very many good farmers are of the opinion that it is better to take off a heavy growth of clover than to leave it, provided it can be cut sufficiently early in the season so that a fair growth will again occur before winter. More often, however, the clipping is done ostensibly to prevent the weeds which grow up in the stubble from seeding. Other equally successful farmers contend that nature will not defeat her purposes by permitting even a heavy growth of clover to smother out over winter. One very successful farmer with whom the writer talked on this question this summer stated that he had always noticed that in the lower and richer places in the field where the clover got the heaviest growth af-

ter harvest were just the places where he got the heaviest crop of hay the following year. This farmer has as fine, thick and heavy a seeding of clover on his wheat stubble as the writer has ever seen, and did not seem to fear at all that it would winter-kill because of a too thick covering on the ground. After the clover has stood until this late in the season it would, in the writer's opinion, be much better to leave it on the ground over winter rather than to cut it at this late date and leave the ground bare and exposed to the winter, as the chances are that loss from winter killing would be much greater if the growth is removed at this late date than those of loss from smothering if it is left on the ground.

#### The Source and Value of Humus.

Please give us the value of humus consisting of decayed leaves and plants. Would it pay to draw it on wheat ground as a top-dressing? Is it a good plan to dump wood ashes on the manure heap?

Charlevoix Co. C. V.

The value of humus does not depend upon its source. Any kind of decaying vegetable matter is a profitable source of humus, provided it can be cheaply obtained. Nature's way of supplying humus is through dead leaves and plants which go back on the land. If material of this kind can be secured at low cost, it would undoubtedly be profitable to apply as a top-dressing for wheat. Farmers who have tried the experiment of top-dressing wheat with straw claim that just as good results were secured as where stable manure was used as a top-dressing, and leaves would be an even better material for this purpose than straw. As a source of vegetable matter to plow down, it is questionable whether this material would be as profitable, since it will generally be cheaper to grow some catch or cover crop for this purpose than to draw coarse vegetable matter onto the soil to be plowed down, as the element of labor cost is thus eliminated. It is, however, unquestionably desirable to incorporate as much humus as possible in the most of our Michigan soils.

#### Use of Wood Ashes.

It is not a good plan to dump wood ashes on the manure heap, as the lime in the ashes will, through chemical changes which occur, set free much of the available nitrogen in the manure which will escape into the air in the form of ammonia gas and be lost. Wood ashes should be applied to the surface and worked into the soil when fitting it for a crop, for best results. They are valuable for the potash and lime which they contain.

#### Seeding Sweet Clover in Rye.

I have a field of corn which I intended to seed to clover this fall, but on account of being down so bad could not. How would it be to seed to rye this fall and put sweet clover on in the spring? Of the two kinds of sweet clover, which is best for this part of the state?

Hillsdale Co. W. S. C.

Where land has not been previously seeded to sweet clover, this would not, in the writer's opinion, be a very certain method of getting a good stand since the soil might not be inoculated with the bacteria peculiar to this plant. If the plan is to be followed, it would probably be better to sow the seed on the snow or at a favorable time in the spring when the frost is going out of the ground, for the reason that a great many seeds of sweet clover are what are termed "hard" seeds, that is to say, they have such a thick shell, and this shell is so impervious to water, that the seeds will not germinate except under very favorable conditions. This early sowing would give opportunity for the seeds to become well soaked up, so that a larger proportion of them would probably germinate than would be the case if the seed was not sown until later in the spring. The white sweet clover is the most valuable variety to sow as a forage crop or soil improver.



### PROFITABLE WINTER EMPLOYMENT.

Profit does not always depend upon immediate remuneration for labor done. Any expenditure of labor which either facilitates the making of larger future profits through increasing yields or cheapens the cost of production by reducing the labor cost of future crops is a profitable investment, even though it may not bring in immediate returns. When, in addition to the accomplishment of both these desirable objects, labor is so employed that it raises the intrinsic value of the farm, it is a still better investment.

On a great many Michigan farms are to be found numerous small piles of stone, of which the neat pile shown in the accompanying cut is typical. These are generally piled without apparent system, in a majority of cases the presence of a big rock deciding the location. Clearing the cultivated fields of such stone piles is an investment of labor which may be placed in the last mentioned profitable class.

This is work which can be cheaply accomplished in the late fall and winter season. If the loose stone are all piled in one place where they will be out of the way of farm operations and the fast stone are blasted out, there will be a great saving of labor in the future cultivation of the fields, besides an added revenue from increas-

ditional income from it would meet nearly all of his expenses. There is no doubt, many hundred acres of land, which is thought to be worthless, which could be put under cultivation at small expense. Even if tilled at more expense, wouldn't it soon pay for its drainage? With more expense one could irrigate this rich land and then a dry year could do no harm.

I hope that in years to come, more of our waste land will be utilized. Acres that are not supposed to be worth anything, can be made into acres that are worth \$100 each.

Barry Co.

M. J. S.

### HANDLING SEED CORN.

There has never before been a time when more interest was shown in bigger and better crops than now. More farmers are exercising special care in the choice of seed, hoping thereby not only to improve the yield but also the crop.

From now on until all the corn is husked the best ears of corn will be watched for and kept separate for next year's seed. Those farmers, bent on improving their crop, have already gone through their fields and cut out those plants which most closely approximate their ideal. From these plants, when the ripening process is complete, the corn will be husked and those ears which come closest to the ideal will be saved for storage.



Small Piles of Stone Should be Drawn Together During the Winter Season.

ed production which will pay good interest on the investment of labor, to say nothing about the improved appearance of the farm.

Oakland Co.

A. R. FARMER.

### POSSIBILITIES OF RECLAIMED LAND.

The fact that thousands of acres of land are going to waste in the United States, can be seen by visiting Gun Marsh, a stretch of low land about ten miles long and one and one-half miles wide, which lies along the south side of Gun Lake, in Barry county.

Three years ago this land was not supposed to be worth a dollar, and now it is nearly all under cultivation. Onions and peppermint are the chief crops. We all know there is money made in the raising of peppermint and still more in onions. The profit per acre from onions averages from \$75 to \$100.

Among the first people that put the land under cultivation were Hollanders. Open ditches, mostly, serve to drain it. One man has 80 acres of onions in this year, and is trying to care for them alone. He goes over the ground when the weeds first appear, with a garden rake, which takes them all out. This lessens the labor of weeding, as it used to be done by getting down to each row with your hands and a small weeder.

The people of Gun Marsh have in the last two years averaged from 35 to 50 cents per bushel, and a small yield per acre is 300 bushels.

If every farmer, who has a stretch of low land, could improve it, the ad-

Whether or not this seed will be strong and unimpaired in vitality next May will depend very largely on the way it is handled in the drying process and in storage.

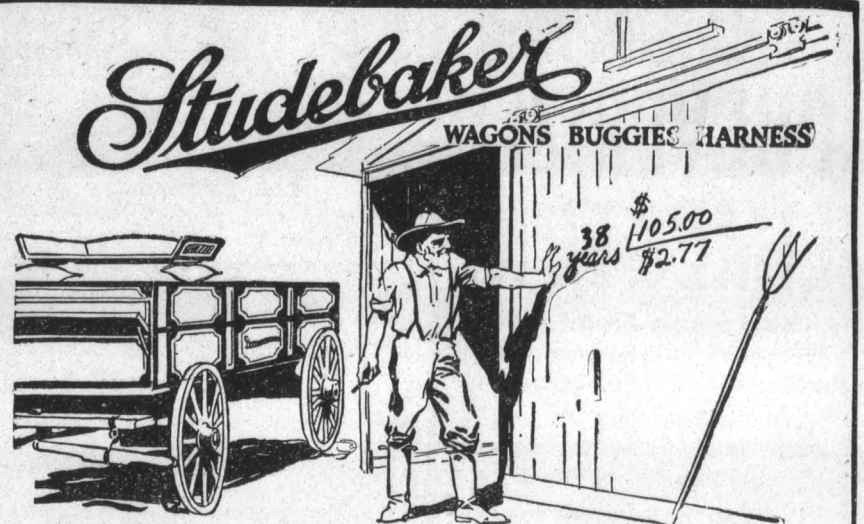
Good care consists first in carefully drying the ears, and this should be done quite rapidly. One of the best ways is to place the ears on racks which can be kept in a well ventilated building. The ears may also be stuck on nails or spikes driven into a post in the drying shed, or stuck on the pegs on the patent drying racks which are on the market. The idea in either case being to keep the ears from touching each other and to permit of a free circulation of air which carries away the moisture. When first gathered the corn may contain as much as one-fourth its weight of water; and it may be greatly injured in one day's time if allowed to freeze or to heat while kept in baskets or sacks, therefore the necessity of rapid drying. If the weather conditions are not favorable for drying, artificial heat may be used, but overheating is to be avoided.

When the corn is thoroughly dry, it should be stored in a dry room with rather uniform temperature.

In the spring, if there is any question about its vitality, the ears should be tested for germinating power. Any one of the many common methods may be used. By discarding ears which do not show strong germinating power, the farmer not only avoids a poor or uneven stand but he secures the benefit of strong, vigorous seed as the breeding basis for another crop of probably better seed corn.

Ingham Co.

H. L. BARNUM.



**Paid \$105.00 for a Studebaker wagon 38 years ago**

**IN 1876, Mr. R. F. Dewey, of Millersburg, Ind. bought a Studebaker Farm Wagon for \$105.00. Mr. Dewey writes:**

"I have a Studebaker wagon that I purchased of E. A. Welch in, Goshen in the spring of 1876. I paid \$105.00 for it. It was a high wheeled, narrow tired wagon when I got it but I later had it cut down and made into a wide tread. I am still using the wagon on my 160 acre farm, 8 1-2 miles southeast of Goshen. It has had all sorts of hard work. At present I am using it to haul cordwood."

### COST HIM \$2.77 A YEAR

Figure it out yourself. Divide the cost of the wagon, \$105.00, by thirty-eight years and you will see that Mr. Dewey has been paying in the neighborhood of \$2.77 a year for his farm wagon—or about three quarters of a cent a day.

Think of the money that this wagon has earned for Mr. Dewey and the money it will continue to earn, because every year's life added to 38, still further cuts down the cost of the wagon.

But that is the way with a Studebaker wagon. Built of air dried lumber and tested

iron they outlast other so called "Standard" farm wagons by many years. Studebaker wheels alone are a guarantee of long life. The slope shoulder spokes, the carefully pinned fellos, the inspected hubs all contribute to wearing qualities and ability to stand up under hard work.

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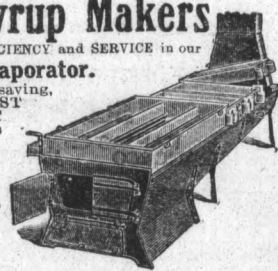
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# Horticulture.

## TILLAGE VS. SOD MULCH IN APPLE ORCHARDS.

The New York Experiment Station has made a test to determine whether the apple thrives better under tillage or in sod. The experiments were begun in 1903 in an orchard of nine and a half acres of Baldwin trees, 40 feet apart each way, set in 1877. Of these 118 are in sod and 121 under tillage.

The experiment was divided into two five-year periods. During the first period the orchard was divided in halves by a north and south line, during the second period by an east and west line. One quarter of the orchard then, has been tilled ten years; another tilled five years and then left in sod five years; the third quarter has been in sod ten years and the fourth quarter in sod five years, then tilled five years. The tilled land was plowed each spring and cultivated from four to seven times. The grass in the sod plot was usually cut once, sometimes twice. In all other operations the care was identical.

### The Results of the Test.

The average yield on the plot left in sod for ten years was 69.16 barrels per acre; on the plot tilled ten years, 116.8; difference in favor of tilled plots, 47.64 barrels per acre per year. The fruit from the sod mulch is more highly colored than that from the tilled land. The sodded fruit matures from one to three weeks earlier than the tilled fruit. The tilled fruit keeps from two to four weeks longer, however, than the sodded fruit; it is also better in quality, being crisper, more juicy and of better flavor.

The average gain in diameter of the trunks for the trees in sod for the ten-years was 2.39 inches; for the trees under tillage 3.90 inches; gain in favor of tillage 1.51 inches. The trees in sod lacked uniformity in every organ and function of which note could be taken. The uniformity of the trees under tillage in all particulars was in striking contrast. The grass had a decided effect on the wood of the trees, there being many more dead branches on the sodded trees and the new wood was not as plump or as bright in color. The leaves of the tilled trees came out three or four days earlier and remained on the trees several days longer than on the sodded trees. They were a darker, richer green, indicating greater vigor, were larger and more numerous on the tilled trees.

### The Cost of the Two Systems.

The average cost per acre of growing and harvesting apples in sod was \$51.73; under tillage \$83.48; difference in favor of sod \$31.75. Subtracting these figures from the gross return leaves a "balance" per acre for the sodded plots of \$74.31; for the tilled plots, of \$140.67, an increase in favor of tillage of \$66.36. For every dollar taken from the sodded trees, after deducting growing and harvesting expenses, the tilled trees gave \$1.89.

The effects of the change from sod to tillage were almost instantaneous. Tree and foliage were favorably affected before midsummer of the first year; and the crop, while below the normal, consisted of apples as large in size as any in the orchard, the falling off in yield being due to poor setting. The change for the worse was quite as remarkable and as immediate in the quarter of the orchard turned from tillage into sod; the average yield in this quarter was not half that of any one of the other three quarters.

### Fertilizer Beneficial.

The use of nitrate of soda in the sod plots greatly increased the vigor of the trees and was a paying investment, yet for the five-year period they

were but a trifle more than half as much as the tilled trees.

The very marked beneficial influence on the sodded trees of ground adjacent under tillage teaches that not only should apples not be grown in sod but that for the best good of the trees there should be no sod near them. Grass militates against apple growing, in several ways, such as lowering the water supply; decreasing some elements in the food supply; reducing the amount of humus; lowering the temperature of the soil; diminishing the supply of air; affecting the trees through the formation of a toxic compound.

### Test Shows Sod Not Beneficial.

There is nothing in the experiment to show that apples ever become adapted to grass. Sod may occasionally be used in making more fruitful an orchard growing too luxuriantly. Other fruits than the apple are probably harmed quite as much, or more, by sod so that the results of these experiments may be applied to peach, pear or other orchards. Hogs, sheep or cattle pastured on sodded orchards do not overcome the bad effects of the grass. Grass left as a mulch in an orchard is bad enough. Grass without the mulch is all but fatal—it makes the trees sterile and paralyzed their growth. It is only under highest tillage that apple trees succeed in nurseries and all the evidence shows that they do not behave differently when transplanted.

## STRAWBERRY MULCH.

Strawberries, like clover, heave badly in an open winter or during the alternate freezing and thawing in the early spring. Clover usually has to take its chance with the weather, but with strawberries which are grown on a much smaller scale, and are relatively more valuable, repaying amply for the labor and expense in protection. This protection may be best had by mulching.

The plants should be covered with a mulch of straw, swamp hay or a coarse manure, as soon as the ground freezes in the fall, which is usually about Thanksgiving. They should not be mulched before the ground freezes or so early that there is liable to be a continual warm season which will cause them to be smothered. The best material to use is clean straw free from weeds. If this is not available, marsh hay or swamp hay may be used, or even coarse straw horse manure. The mulch should be two to three inches deep, should cover the entire patch, and if light should be weighted down by using boards or poles to prevent its being blown away. It should remain on until the plants begin to start in the spring when it should be removed from the rows and placed between them to conserve the moisture and keep the soil from being spattered on the fruit by the spring rains.

In sections where late frosts are common, the mulch may be left on the plants for a week or more after growth would naturally start and thus delay the date of blossoming until after danger from frost has passed. It is also an easy matter when the mulch is left between the rows, to replace it on the plants if frosts threaten after they come in blossom, and thus protect them.

The strawberry plant is perfectly hardy in most northern regions, and the chief function of the mulch is to prevent heaving in the spring or during an open winter. Other secondary effects of the mulch are: 1, to delay starting in the spring; 2, to conserve moisture by shading the soil; 3, to

keep the fruit clean, and 4, to serve as ready means of protection against frosts after blossoming season.

New York. **EARL W. GAGE.**

## FALL PLANTING OF TREES.

The fall setting of trees is not a common practice in this state, though it has strong supporters among fruit growers, nurserymen, and fruit experts. The nursery people urge it because it relieves them of work in the rush season in the spring. Some fruit growers believe the practice a good one because it relieves them of work in the spring and gives them a better selection of stock.

The scientific reasons advanced for fall planting are that the earth becomes thoroughly packed around the roots during the winter, and therefore they are quickly able to absorb the plant food, which is a favorable factor for early growth. The tree which gets an early start in spring has a good chance of passing through the drouths of summer without injury.

One objection to fall planting is that the nurseryman usually has to strip the trees of their foliage prematurely in order to get them ready for fall delivery. This prevents the tree from properly hardening its wood, which is naturally not good for the tree.

Another common objection is that the trees are susceptible to freezing at the roots and crowns. This is especially true on loose soils where the trees have been carelessly set, or where they have been shaken by the winter winds. The nurseries usually have much better facilities for keeping the newly dug trees through the first winter than the grower. When fall-set trees become frozen, the grower has no opportunity for redress. Spring planting is, therefore, the safer course. However, if for any reason fall planting should still be advantageous, care must be taken to get as thoroughly ripened trees as possible. In setting, the earth should be pressed around the roots, and the trees mounded to about six inches above the ground, so as to keep them well anchored against the winter winds.

Fall is the most advantageous time for transplanting older trees. Shade and fruit trees over four years old can be reset at no better time. The chief reason for this is that it is practically impossible to properly firm the earth around the roots of the older trees; air pockets will invariably be left. These will cause a drying out of the roots, which will greatly lessen the chances of the tree going through the dry season. By transplanting in fall the earth gets quite thoroughly settled around the roots by the time the trees start growing in the spring. Mounding the trees with earth is especially important when transplanting old trees.

## MEETING OF VEGETABLE GROWERS.

The Seventh Annual Convention of the Vegetable Growers' Association of America, met in Horticultural Hall, Philadelphia, October 6-9. The Philadelphia Vegetable Growers' Association made the local arrangements for entertainment which was done to the satisfaction and delight of all. The convention was the largest and best in recent years, having an average attendance of over 300, representing 26 states. The splendid display of products, seeds, implements, etc., of interest to vegetable growers received careful attention.

The chief subject for discussion on the program was marketing. All the phases of marketing relating to vegetable growing, were taken up, co-operation being given special attention. "Seed Improvement," and "The Improvement of Soils" were subjects which also created considerable interest. Dr. Orton, of the Department of Agriculture, led in seed improvement discussion, devoting most of his time to the selection of seed potatoes. Prof. Jacob Lipman, of the New Jersey Experiment Station, handled the soil subject, and Prof. Clyde King, of the University of Pennsylvania, led in the discussion of the marketing questions.



## Live Stock.

### SMUTTY WHEAT.

The present question confronting many Michigan farmers is, "What will we do with our smutty wheat?"

Farmers as a general rule, feed wheat sparingly. As a matter of fact, the reason why wheat is not fed more universally, is the price at which it is sold. Wheat in this part of Van Buren county was badly affected by smut, consequently many farmers have unsalable wheat.

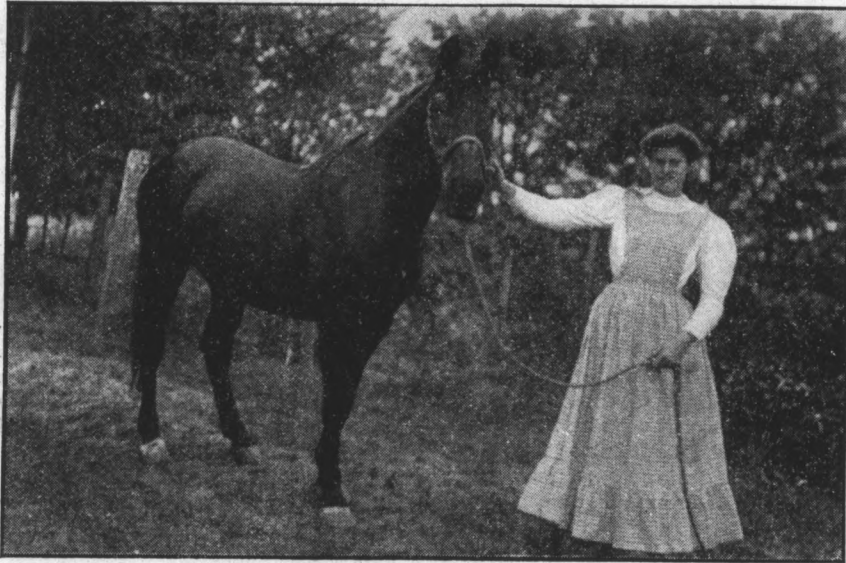
To obtain the greatest results from the least amount of feed, the wise dairyman studies his cows and feeds a balanced ration. How many farmers study their hogs and feed a balanced ration for the same results? It is a well established fact that where hogs are successfully and economically grown, we find a good herd of dairy cows in the foreground. Each taken separately, the hog has Old Brindle beat a mile.

Experience has proven that a hog to be economically grown, should be provided with good forage and a grain ration of two per cent of his weight,

other will be getting a start that will give them some nice feeding when they get back to it. If there is no such extra pasture then we should begin feeding some grain. Before now we have been feeding oats by the first of October. This puts the sheep up in nice trim for the coming confinement. I like oats best of all grain for sheep, as it gives the sheep strength, it has all the elements for growth, and makes bone and muscle. While only a small amount each day is needed to carry the flock along, yet that little amount should not be omitted.

It is just the right season of the year now to mate the sexes where early lambs are desired. Ewes bred in October will drop lambs about the corresponding days of the next March.

But before mating the sexes we should cull out all the old ewes that are on the decline, and no lambs should be bred. We can easily stunt our lambs by putting on them the serious duty of motherhood before they are matured. We should use only rams of full blood and vigor, as well as ewes that are thrifty. If we fol-



"Flora"—36-year-old Family Horse Owned by Lewis Sumner, Washtenaw Co.

and when so provided will make daily gains of one pound to every two pounds of grain consumed.

A hog weighing 100 pounds requires two pounds of grain in addition to what forage he gets, and it is an indisputable fact, that good forage and 60 pounds of wheat will produce 30 pounds of pork. Giving the forage credit for 15 pounds of pork we have 15 pounds to the credit of the wheat, and hogs at \$8.50 per cwt. we have \$1.27½ per bushel for that smutty wheat.

With hogs anywhere around the 8c zone, and wheat less than \$1, in the writer's opinion, "feed the wheat."

Van Buren Co. VAN V. RYNO.

### FALL CARE OF SHEEP.

The next few weeks are critical ones in the life of sheep. The success with them another year will be largely determined by the manner in which they enter the winter months. If they make the beginning of winter, poor in flesh, weak in bodily health and strength, it will be almost impossible to get them up in better condition before spring. For this reason it behooves us to see to it that every sheep, and especially the ewes that are expected to bear lambs, is in good shape for the winter season.

Generally the pastures will be found a little short at this season of the year, and this works against the welfare of the sheep. I like to always have two pastures so that I can alternate from one to the other. Sheep as well as other animals, like such a change, and it is good for them. While they are eating down one pasture the

lowed this rule we would soon build our flocks up to better things than we have ever known.

Texas.

A. M. LATHAM.

### FEEDERS' PROBLEMS.

#### Sweet Clover as a Forage Crop.

I would like to know the feeding value of sweet clover, and it is very hard to induce cattle or sheep to eat it. On what kind of soil does it thrive the best?

Cheboygan Co.

C. LeD.

Sweet clover cut at the proper stage has a high feeding value, resembling alfalfa in this, as it does in appearance. Cattle and sheep do not eat it as readily at the start as is the case with other hay, owing to the peculiar aroma of the plant, but those who have tried it out thoroughly claim that they soon become accustomed to it and eat it as readily as they do clover or alfalfa hay. The same is possibly true with the use of the plant as a pasture for live stock, yet the writer's limited experience would seem to indicate that it is not unpalatable to live stock. Some colts and hogs which have been running in an alfalfa field this summer in which there was a light sprinkling of sweet clover have apparently eaten the sweet clover as readily as they have the alfalfa, as it is very rare indeed, to find a sweet clover plant in this field which has not been bitten off by the stock, although the alfalfa pasture is abundant. There is every evidence that sweet clover has a value as a forage crop which has not been accorded it by the average farmer, who has long considered it nothing but a weed.



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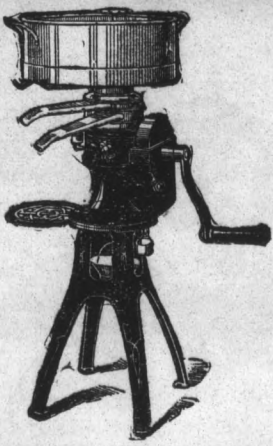
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# Dairy.

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## THE HOME OF THE HOLSTEIN-FRIESIAN.

On the evening of October 4, during the sessions of the seventh annual sale of Holstein cattle by the Michigan Breeders' Consignment Sale Company at Detroit, a special meeting of the breeders was held, at which time Prof. Anderson, of the M. A. C., gave an address on his observations and travels through northern Holland, the home of the Holstein-Friesian cattle.

### Dairying Maintains Soil Fertility.

The province of Friesland and adjacent territory were described, with particular reference to the black and white cattle. This province is about the size of two average Michigan counties. For advantages in comparison, Prof. Anderson used the counties of Ingham and Livingston to represent the size of this division of Holland. History informs us that from the beginning of the Christian era, this section of Europe was given to the production of cattle and the historian Motley tells of oxen weighing over 2,000 pounds, and of the large amount of butter and cheese made back in the seventeenth century.

This long period of devotion to the dairy business gives increased interest because of the excellent condition of the land today and the unusual crop production, which consists almost entirely of roughage and pasture; thus proving beyond question the advantages of the dairying business as a way of maintaining soil efficiency.

### Registered Cattle.

The breeders of Friesland started a herd brood in 1879. In one of the books registering pedigreed stock it was necessary that the animals not only have proper ancestry but also that they score 70 per cent of a perfect score. The limited territory covered made it possible for the judges of the association to go out and see the cattle to be entered. In this herd book were registered 18,576 black and white cows, 6,728 black and white bulls, 267 red and white cows and 105 red and white bulls. In another book animals whose ancestry was not well known, could be registered, providing the individuals scored at least 75 per cent of a perfect score. This recognized a large number of excellent cattle that would have been barred from the other book and there were 12,173 black and white cows, 1,629 black and white bulls, 620 red and white cows and 144 red and white bulls. This gives a total of 31,645 registered cows and 8,608 bulls, or a grand total in round numbers of 40,000 Holstein-Friesian cattle registered in the province.

During the same time there was registered in the United States 317,495 animals belonging to this breed. Because of the large territory covered here it is impossible for the officials of the association to see every animal registered, as is done in Friesland, and for this reason there are some inferior animals that get into the books, but allowing for these it is apparent that the amount of registered stock in this country greatly outnumbered that held in the little province of Friesland. It is estimated that of the number on the books of the American association, 220,000 are living today.

### Recommends Buying at Home.

While the professor found the stock in the native habitat of the breed remarkably uniform in type he could see no reason for breeders in this country going across the water to secure foundation stock. As the Yankee has developed the American thoroughbred and given certain characteristic

qualities to other breeds of live stock, so has he impressed his work upon Holstein-Friesian cattle, and because of this it would appear that it might not only be of no advantage to go abroad to buy breeding animals to start a herd, but it would likely be a distinct advantage to buy animals that have already acquired some of the American characteristics.

To show how the American has taken the lead in matters pertaining to the development of this breed, it is but fair to state that a herd book was started in this country seven years before the Holland people began to compile theirs, and also that the originators of the breed are just now introducing the advanced registry system which is meeting the same objections there that it did here some years past.

### Tests Improve the Herd.

Notwithstanding the fact that there may be instances where the test system of selecting animals for this advanced registration has worked harm to individual animals, it was the opinion of Prof. Anderson that great good had come of it and that it was putting the breed on a better production basis.

By way of illustrating the number of dairy cows kept on the land in Friesland it was shown that for every 100 acres of land in the entire province there was an average of 30 dairy cows. If as many cows were put in the counties of Ingham and Livingston, which are about equal in size to this province, then one-third of all the cows in the state of Michigan would be needed. At present there are in these two counties one-fourteenth of all the cows of the state, or in other words, there are about seven and one-half cows per every 100 acres.

Illustrating further, the large numbers of dairy cows kept in these old countries, the speaker stated that on the island of Jersey there are 11,000 cows on an area the size of one and one-half townships, or 32 cows for every 100 acres of land, and on the island of Guernsey which has an area of about 16 square miles, there are about 6,000 cows, or 52 cows per every 100 acres. These deductions do not allow for the space occupied by towns and cities, streets and roads, but every portion of the countries is taken in the average. On the other hand it should be kept in mind that dairying is carried on almost to the exclusion of other branches of agriculture.

### A Good Investment.

From the impressions gathered during this tour and from observations and experiences, Prof. Anderson gave it as his opinion that money put in good dairy live stock is one of the best investments one can make along agricultural lines. And as to the Holstein-Friesian cattle, he believes that the amateur breeder of this state would start with greater safety and more advantages if he sought his supplies from this country, and not only from this country, but because of the generally superior health of the dairy cows of Michigan compared with that of the animals of outside states, and the adaptation of these animals to conditions here, he would be more apt to begin right if he bought foundation stock from out of the excellent herds owned right here in this state.

## SECRETARY HOUSTON AT THE DAIRY SHOW.

The National Dairy Show, which is now being held at the International Stock Amphitheatre in Chicago, will have Hon. David F. Houston, Secretary of Agriculture, as a guest on Monday, October 26. At that time he will deliver an address and it is expected that he will have something of importance to say regarding his work. The show is most valuable as an educational feature to all interested in dairying.



## THE PRODUCTION OF CLEAN MILK.

Every owner of a dairy herd should consider it his duty to himself and to the community to keep only healthy cows, supply them with wholesome feed and keep them in clean, comfortable quarters. He will also find it the most profitable. The milkers and all who handle the milk should realize that they have in their charge a food which is easily contaminated; and should therefore take all reasonable precautions to prevent the milk from becoming a source of danger to themselves and others. The consumer should understand that clean, safe milk is worth more and costs more to produce than milk which contains dirt and disease germs and should therefore be willing to pay more for it than for dirty milk, which is dear at any price.

## What Clean Milk Is.

What is clean milk? The scientist would exclude milk which contains foreign matter or any bacteria whatever. For ordinary purposes, the Department of Agriculture says, clean milk is that which is obtained from healthy cows, is free from dirt, and contains only a small number of bacteria, none of which are of a disease-producing nature. By exercising proper care, the number of bacteria which gets into the milk during the process of milking, is small, but these will increase rapidly if the milk is not kept cool until used. If fresh milk contains a large number of bacteria, it indicates that the milk has become contaminated during the process of milking, although in some cases many of the bacteria may come from an infected udder. If milk contains large numbers of bacteria when it reaches the consumer, either it is not fresh, has come from a diseased cow, or has otherwise been contaminated, or it has not been kept cool. Milk from a diseased cow, from one about to calve, or from one that has very recently calved, possesses abnormal qualities, and though it may not always be dangerous to use, it can not be considered as clean milk and should not be used as such.

## Dangers of Impure Milk.

While no one cares to use a food which is not produced and handled under sanitary conditions, everyone is more concerned in the danger of contracting disease which may be communicated through the agency of impure milk. Serious diseases—typhoid fever, septic sore throat, and other ailments have been disseminated through the milk supply. The cleaner the milk, the longer it will keep good and sweet. But clean milk not only benefits the consumer, but the milk producer will find many ways in which he himself is benefited by producing clean milk. Tuberculin testing, for example, is not only a safeguard to the purity of the milk supply for the consumer, but is a means of assisting the producer to protect his herd against future ravages of tuberculosis. Most producers of market milk have experienced the chagrin of having a shipment of milk refused or returned because it reached the market sour, tainted, or otherwise in poor condition. Delivering sour or tainted milk usually results in losing the confidence of the dealer, or if it is delivered direct to the consumer, it means the loss of good customers.

Summing up, then, the essential factors in producing a clean, safe milk, we find—clean, healthy cows kept in clean, light, well-ventilated stables; stables so constructed as to be easily cleaned; a clean, well-drained barnyard; clean utensils, thoroughly sterilized; clean, healthy milkers that milk with dry hands; a small-top milking pail; immediate cooling of the milk to 50 degrees F., or lower; storage of milk at a low temperature until delivered; a separate house for handling the milk; an abundant supply of pure water.

## THE MONEY VALUE OF ENSILAGE.

Will you kindly give me your opinion as to the value of corn ensilage per ton in the silo, where the corn would run 100 bushels to the acre? Also, what would be the value of corn in silo where it would run 80 bushels to the acre; and what silage corn would be worth per ton running perhaps 50 to 60 bushels to the acre?

Livingston Co. J. B. C.  
After the corn crop matures (ripens) the stalks deteriorate in food value because they become, in a large measure, indigestible, much of the starch changes to cellulose tissue, or woody fibre, in which state it is not capable of being dissolved by the digestive fluids and hence passes through the animal unchanged. But if the plant is cut before the ear thoroughly ripens, much of this starch is digestible. Now my opinion is that if the corn crop is cut at the proper time for silage, namely, when the ears are nicely glazed, the stalks are just as digestible as the ears, and pound for pound have as much food value. I don't think corn should be ripe when ensiled. Perhaps we can not always harvest it at just the proper time, but if we do then one part of the plant is practically as digestible and as valuable as another.

## Plant Silage Corn Closely for Economical Results.

This doctrine may seem strange to some and possibly I am wrong, but I have formed my opinion from feeding silage for more than 20 years. If you plant corn so thick that it does not ear very well when you come to feed this corn you get just as good results as when it is planted so thin that a maximum yield of ears is obtained. That is, a feed of 40 lbs., say, of one kind of silage is as valuable as 40 lbs. of the other. Hence, if you can get more tons per acre by planting thickly, you get more food value per acre regardless of the ear.

Therefore, ton for ton, I would pay no more for silage made from corn heavily eared than from corn that was not so heavily eared. It is tons of digestible corn plant that we want in silage, not ears. Understand, I am not advocating immature corn silage. I want the corn plant fairly mature, but by no means dead ripe, because if it is dead ripe a large per cent of it has become indigestible. Timothy should be cut before the seed ripens. If you make hay out of oats or barley it should be when the grain is in the milk. If the grain is allowed to fully develop, the balance of the plant is straw and largely indigestible. The chemist says it contains a large per cent of crude fibre, which means the same thing.

## The Cash Value of Silage.

What corn silage is worth per ton is a difficult thing to tell. It is not all of the same value, no more than hay is. Quality cuts an important figure here as well as anywhere else, and quality depends largely on the stage of development of the corn plant when ensiled. You can get a great deal better results from a ton of hay cut at its period of growth when the plant is most palatable and most digestible than when it is left until dead ripe. The same theory holds good with the corn plant. In our cow testing associations we call silage worth \$3.50 per ton, and then it is the cheapest food we can get. I heard Prof. Hecker say once at a farmers' meeting that good corn silage was worth \$6 per ton compared with other feeds, but of course, silage, to get its greatest food value, must be fed in combination with other foods and not alone. Most of our agricultural scientists say silage is worth, ton for ton, one-third as much as timothy hay.

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A trial offer of the Michigan Farmer to NEW SUBSCRIBERS of eight months for only 25 cents. This offer will be open for a few weeks only. Tell your friends.

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If your business is worth following at all, it is worth following right. You ought to follow it in a business way. You—and you alone—are entitled to all the profit there is in it. And you know as well as we do that it isn't good business to sell cream at a loss to a non-producing middleman when it is easier and safer to sell to a high-grade and reliable market like the **Blue Valley Creamery Company** which is able and willing to pay you every penny of profit you are entitled to.

One can of your cream shipped to a Blue Valley Creamery will establish your business connection and after that you have nothing to worry about. Your relations thereafter are with the best Creamery System in the world, and they cannot fail to be profitable and satisfactory. It is one thing to produce Cream and another to sell it to good advantage.

Ship a can of cream to the Blue Valley Creamery Company today and try it out as a market. Pay particular attention to the money you save and the extra profit you make. And always remember that you are shipping to a reliable firm that has the highest standing possible in business circles. You have nothing to lose by such a trial. You have everything to gain. And it is the very simplest thing in the world to do. All you have to do is to direct the can to us and ship it on any passenger or express train that stops at your station.

Remember this, farmers and dairymen—the smart business man always seeks the most reliable and profitable market. You farmers are business men and you ought to follow the teachings of good business. Quit fooling with the cream buyer and ship your cream to us. Begin today and start at once reckoning your increased profits.

### How to Ship Your Cream to a Blue Valley Creamery

#### OUR GUARANTEE

You take no risk in shipping your can of cream to a Blue Valley Creamery. You are sure of the money for your cream and our binding guarantee insures the return of your empty can. No farmer has ever failed to get his pay for his can of cream during all the years we have been in business. We are proud, and we think justly so, of this record and it is worth a great deal to the farmer who is looking for a high price cream market and one that is at the same time reliable.

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Cream is always shipped by baggage or express and low shipping rates have been fixed for 5, 8 and 10 gallon cans. The shipping charge includes the return of your empty can. Ask your local express agent or railroad agent about rates to our nearest creamery. If he can't give you the rates just drop us a postal card and we will see that he is informed. Our wagons meet all trains. Ship on any train that carries express or baggage.

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BLUE VALLEY CREAMERY CO.

BLUE VALLEY CREAMERY CO., X-141  
Gentlemen:—Send me Free, copy of "The Fable of the Cow."

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# The Michigan Farmer

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DETROIT, OCT. 24, 1914.

## A FEW LEADING ARTICLES OF THE WEEK.

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## CURRENT COMMENT.

**The National Improvement and Vegetable Bankers.**—At its meeting held in Chicago during the last days of September, addressed an open letter to American bankers giving its views on the present business situation and the steps which bankers should take to improve it. Oddly enough, all of the six recommendations made had a direct reference to agriculture. Most of these recommendations were points well taken, particularly the final one, which advised bankers to discourage all speculation but encourage the expansion of legitimate business in rural communities by a reasonable extension of credit.

Doubtless this organization, the members of which depend for their chief patronage on the farmers of the country, have a larger appreciation of the importance of promoting better and more diversified agriculture and better business methods in distribution than many other classes of business men, yet each year sees a greater number of business men of all classes who appreciate the fact that a prosperous agriculture is the key to national prosperity in a business way, hence the general tendency to look to the farmers as a national asset which will tide the country over almost any

period of threatened general business depression.

## Constitutional Amendment by Initiative.

Among the amendments to the constitution of Michigan proposed by the Legislature and adopted by a vote of the electors at the general election held in April, 1913, was one providing for the proposal of amendments to the constitution by petition of not less than ten per cent of the legal voters of the state. In addition to the amendments to the constitution proposed by the Legislature for submission at the coming general election in November, of which mention has been made in recent issues, another amendment to the constitution will at the same time be submitted which was proposed by petition under the provisions of this recently adopted constitutional provision. This is a proposed amendment to article twelve of the constitution by adding a new section thereto, to be known as section 10, and to read as follows:

Section 10. The Legislature shall provide by law for the incorporation, regulation and supervision of fraternal beneficiary societies, with the power to issue death benefit certificates, which law shall require that such societies, in order to be incorporated, or to do business within the state, must have:

(a) A representative or a democratic form of self government, including the fixing of its own rates, and the election of its officers, with provisions for the recall of officers by a majority vote of the membership, upon petition of not greater than 15 per cent of the membership;

(b) Provisions for initiating changes in Constitution or Laws upon petition of 10 per cent of the membership, and for a referendum vote of the membership upon any changes in the Constitution or Laws, upon petition of the same percentage;

(c) Provisions requiring the officers, upon demand of five local branches, to furnish complete mailing lists of members for use in connection with the exercise of the Initiative, Referendum or Recall.

No law shall be valid which shall require any such society;

(a) to create a legal reserve fund, or to be valued or collect assessments upon any basis of rates which will in operation collect an amount annually in excess of the average mortality cost per one thousand dollars (\$1,000) insurance in force of successful legal reserve insurance companies of fifty years' experience, in addition to the necessary expenses of such societies; or

(b) to have a lodge system or ritual.

All fraternal beneficiary societies authorized to do business in this State on March 1, 1914, may continue to do such business until the Legislature shall pass law in compliance with the foregoing provisions; provided that no such society may continue to do business for more than one year after this section shall go into effect, unless its Constitution and Laws shall comply with this section; provided, however, that any such society organized under laws of any other state may provide that as to business within this State the foregoing provisions shall govern, and that as to such business the vote of the majority of its members in this state shall be binding, in which case all liabilities accruing on Michigan business may be made payable from assessments on Michigan members.

At the request of Commissioner of Insurance Winship, Attorney General Fellows recently rendered an official opinion regarding the meaning of the amendment and the practical effect of same if adopted, concerning which it appears there is a wide difference of opinion. His opinion is too voluminous to be reproduced in these columns. Briefly stated, its main points are as follows: That fraternal beneficiary societies would not necessarily be limited to the issuing of death benefit certificates, which alone are mentioned in the amendment, but that in the absence of more specific limitations the Legislature might enact a law providing for the issuing of old age, disability and other benefits as well; that in the absence of special limitation to that end fraternal beneficiary societies might, at their discretion, maintain both a lodge system and a ritual, although they could not

be compelled to do so by law; that grave difficulty would be encountered by societies of other states in doing business in Michigan under the provisions of this section, and vice versa, because of a discrepancy in state laws governing the conduct of such business; that the amendment, as drawn, seems, and probably is in violation of the federal constitution, to preclude any fraternal beneficiary society organized after March 1, 1914, from continuing its business after the adoption of the amendment, and that the adoption of the amendment would nullify the power of the state or its officials "to intervene in case fraternal beneficiary societies are not levying assessments sufficient to meet the obligations and to take necessary action looking to the adjustment of pecuniary difficulties," although fraternal organizations would not be prevented from voluntarily levying assessments in excess of the limit imposed by this amendment.

In voting upon this proposed amendment to the constitution, the first to be proposed by the direct or "initiative" method, careful consideration should be given to its text. Under the plan of amending the constitution through proposals initiated by petition, the proposed amendment is, of course, framed by partisans, or persons having some special object in view, and in the desire to make certain of accomplishing the object the tendency naturally is to undertake to incorporate into the fundamental law provisions which are more properly a subject for legislative consideration than for constitutional enactment. Regardless of the merits of the objects sought, this appears to be a most valid objection to the adoption of the above amendment. It seeks to amend the article of our constitution relating to corporations by the addition of a section which is almost, if not quite, as voluminous as the entire article of nine sections as it now stands, and, instead of simply defining the limitations within which the Legislature may act regarding this question, it defines the course which the Legislature must take whether that course may or may not seem expedient after a full and careful investigation of the proposition. This is, in our opinion, a dangerous proposition, and one which should be discouraged at the outset of the use of the initiative in Michigan.

As to the merits of the proposed amendment, other than the point above criticised, we will not presume to advise the reader, but will confine our comment to a statement of apparently related facts which seem to have a bearing on the situation. The petition proposing this amendment is said to have been signed by some 110,000 policy holders in fraternal beneficiary societies. So far as we have been able to gather, the proposed amendment is supported principally by the members of one such society, and is being opposed just as vigorously by other similar organizations. The last Legislature passed a new law relating to the organization and conduct of such societies, at certain sections of which certain provisions of this proposed amendment to the constitution are apparently aimed. Space will not permit us to touch upon these statutory provisions, which are said to conform closely to those in force in other states, nor does their careful perusal indicate that they would aid the layman to any great extent in deciding whether or not to support this amendment. We take it for granted that the law was given careful consideration by the Legislature, particularly by the committees which passed upon its provisions, and that all who were interested in fraternal beneficiary societies had a fair chance to be heard during its consideration. If the law is not just or adequate there is opportunity for its amendment at an early date, either through securing action by the Legislature, or by

the same process of initiative used in presenting this proposed amendment to the constitution.

## HAPPENINGS OF THE WEEK.

### Foreign.

**The European War.**—Severe fighting has continued throughout the past week. In the western theatre of war some changes have occurred. The Germans have withdrawn some of their strength from the left wing, and sent them into Belgium to again threaten France from the north, with Paris as the objective point, the same as they did in the earlier days of the war. Bruges and Ostend on the coast have been occupied by the Germans. The Allies' lines are greatly strengthened and a decisive battle is considered imminent in western Belgium; the latest reports from this section state that the German right wing has been driven back about 19 miles during the past four days. In northeastern France the Allies are fighting desperately to prevent the establishing of siege guns near Verdun, Toul and Belfort. The Germans and Russians have met about 25 miles west of Warsaw in Poland. All indications are that a prolonged battle will occur in that region. Fully three million soldiers are said to be engaged on the line of battle along the Vistula and south into Galicia. In the south Serbia has been successful in several engagements with the Austrians, particularly in Bosnia. No important news has come from the fighting between Japanese and Germans in eastern China.

The British press seems to be dissatisfied with the close censorship being kept over war information, and a move has been taken to ask the ministry to substitute journalists as censors instead of British officers.

Trouble along the Mexican border near Naco, Arizona, has not been settled. The wounded in the battle between the troops of Gen. Carranza and rebels have been brought to the American side by permission of the government at Washington.

Plans are completed for an expedition to South America to study plant and animal life along the east slopes of the Andes. The expedition will be under the supervision of Leo E. Miller, who was with the Roosevelt party that toured South America a year or so ago.

The Mexican government is much concerned over the demands by the Indians in the state of Sonora that government officials return them their land, much of which is now owned by foreigners. Disorders are feared.

Italy has reduced by one-half the customs duties on wheat, corn, oats and other cereals. The reduction is to be in force for five months.

### National.

The American Board of Commissioners of Foreign Missions held their 105th annual meeting in Detroit last week.

Prof. Hugo Munsterberg, of Harvard University, has tendered his resignation, following the offer of Major Weiner, of the British army, of \$10,000,000 to the institution, providing Prof. Munsterberg be ousted for his pro-German opinions expressed since the European war began. There is little likelihood that the famous teacher's resignation will be accepted by the corporation.

The third lock at the Soo canal opens for traffic October 21.

Since the European war began concerns in Chicago have sold to the belligerent nations \$150,000,000 worth of provisions and other supplies. These sales aggregate one-half of our European debt at the beginning of the war.

The effort of United States Senators from cotton growing states to secure federal legislation for the relief of cotton producers seems to have failed. Since these senators attempted to hold up the deficiency tax bill until they secured favorable legislation for bonds to hold cotton, the way is now clear for the passage of the deficiency bill. It is expected that Congress will adjourn Wednesday or Thursday of this week.

Standardization trials of the battleship New York are being made off the coast of Maine this week.

The naval collier Jason has been selected by Secretary of the Navy Daniels to carry Christmas gifts from the children of America to the children of war-stricken Europe. The ship sails November 10.

In an unusually closely contested game the U. of M. foot ball team defeated the M. A. C. eleven at East Lansing last Saturday, by the narrow score of 3-0. Two years ago the game between these two teams was a tie, neither side scoring, while last year the score stood 12-7 in favor of M. A. C. Thus for the three years the score stands M. A. C. 12 and U. of M. 10. It is estimated there were 12,000 people present to witness Saturday's contest.



# Magazine Section

LITERATURE  
POETRY  
HISTORY and  
INFORMATION

MICHIGAN FARMER  
AND LIVE STOCK  
PUBLISHED WEEKLY  
JOURNAL  
ESTABLISHED 1843

The FARM BOY  
and GIRL  
SCIENTIFIC and  
MECHANICAL

This Magazine Section forms a part of our paper every week. Every article is written especially for it, and does not appear elsewhere.

## By the Light of the Jack-o'-Lanterns.

By LUCILE A. HOWELL.

I TOLD Zan when we passed t'other night comin' from meetin' ef'n that ole rail fence was jes' taken out from afore that hedge, your place would be the prettiest sight along this road," stated Mrs. Harrington's visitor one morning late in October.

Mrs. Harrington smiled in a half-hearted way. That rail fence had been a bone of contention for some time.

"He's going to take it down right away," she prevaricated. "Looks like he never gits time. The hedge does look right pretty. It's grown so well but I've had to work awful hard to get a start. I'm glad you come over, Mrs. Whitney, an' I wish you'd stay awhile longer." She watched the woman until the fast falling twilight swallowed her, then she turned and went slowly through the house and out onto the back porch. A tall spare man in blue overalls sat on the edge of the porch floor rubbing the barrel of a shot gun.

"Jonas," she began as she sank into a chair close by, "you've promised an' promised an' put me off time after time about that ole rail fence out there in front until I've plumb lost patience with you. I worked like a nigger to git that hedge set out an' I've stayed by it an' carried water fur it an' trimmed it until now it's gettin' to be a credit to the place if you only had ambition enough to git out there an' haul them old rails away. You know your mother's a comin' next month an' I hate it terrible fur the place to look so run down an' neglected when she gits here, fur the Lord knows I try hard enough to keep things up. It does look like you could do that much."

The man held the gun to the disappearing sun and looked carefully through the shining barrel.

"Now, Marthy, 'tain't no use fur you to have that all over agin. I've tole you that I'll tear that ole fence down an' drag it off jest the first chance I git. Every time I lay off to do it I have a bad spell an' have to give it up, but I've a'ready promised you that the first chance I git when I'm feelin' equal to it, why down she comes. I would do it tomorrow only—" he paused and scratched his head reflectively. "Oh, yes, I have to take that fore wagon wheel to town an' have a new tire welded on. I knew they was so'thin' I had laid off to do."

Mrs. Harrington sighed and her face sunk into her upturned palms. Jonas Harrington had never been blessed with an over supply of ambition and at some remote period a very accommodating doctor had cautioned him against any violent exercise on account of some chronic heart trouble with which he was supposed to suffer. From that time on he had gradually shirked his duties on the farm. A tenant who lived on the place relieved him of most of the actual labor and when work followed too closely on his heels he could always depend upon his obliging heart to pick that propitious moment for a "spell." All of the managing of the farm and the planning and a large part of the work had fallen on his wife's shoulders until she had grown to look on him as an apology of a helpmate.

"What 're you goin' to do with your gun?" she asked listlessly.

"I heerd a coon hollerin' down in the corn las' night an' I thought meb-be ef'n me an' the Whitney boys went down there tonight we could git it."

"Now look a here, Jonas Harrington," there was fire in her black eyes and her tone was sharp. "If you're able to follow a dog all over that twenty-acre corn field tonight after a little old coon you can tear down that fence tomorrow. If I didn't have this felon on my hand I'd 've done it long ago myself but I've got to go to town

sun. She had left her driver as she passed the Whitney home and her arm ached in it's cramped position as she tried to steady the ungainly wheel on the back of the buggy. As the horse turned in at the barnyard gate she drew up on the reins and stopped.

"Just about as I expected," she said, her mouth set in a determined line. "I might have known better. He could have just as well taken this old wheel to town himself." For there in front of her pretty green hedge still crawled the dilapidated rail fence with aggravating regularity, its corners over-

"How long you been sick?" she asked.

"Ever since you left," he groaned. "After you was gone I started out to begin on that fence an' it struck me. I tell you I thought I was dead, Marthy. Afore I could lift one rail off I jes' had to lay down there in the shade 'till I could sorter git easy an' git to the house. I jest thought shore you'd find me dead in the bed when you got here."

Mrs. Harrington took off her hat and deliberately folded her best skirt over the back of a chair. Constant repetition of these scenes had dulled her nerves until she had long since ceased to be ruffled by his "spells."

"I'll make you a mustard plaster. That usually helps you more'n anything," she called from the kitchen. "Started to take down the fence," she sneered. "It's a wonder his heart didn't plumb stop beatin' if he ever took a notion like that."

Under his wife's strenuous ministrations Jonas soon began to recover and was soon able to hobble out on the porch, being careful to first assure himself that she had already unharnessed the horse and turned him in to pasture.

"I was certainly hopin' I'd find that fence all cleaned away when I got home," she began again as she set the table for supper. "I got a letter in town today from your mother an' she's comin' the first of November an' here tomorrow's the last of October. But they ain't no chance now an' she'll just have to take things as they are. If I didn't have this felon on my hand I wouldn't ask no odds of any man that ever breathed."

Jonas, propped in a rocker on the porch, heard and heeded.

"You say maw's a comin' the first?" he asked after a few minutes of silence.

"Yes, that's what the letter said," came the weary answer from the dining-room.

"An' tomorrow's the last day of this month, you say. Then today's the thirtieth, ain't it?"

"That's what it is," she agreed, "but that don't make a bit o' difference. You've let the whole summer pass by so it ain't no time to begin to think about it now. Come on an' eat your supper while it's hot."

All the while that Jonas was storing away a remarkably hearty supper for a dying man his usually inactive brain was propounding a tremendous scheme, upon the success of which depended his peace and quiet and undisturbed repose for several months to come. While Mrs. Harrington was clearing away the dishes he hunted his old felt hat and wobbled out on the porch.

"I'm a goin' to walk down to Whitney's fur a few minutes," he called back. "Mebbe the air'll make me feel stronger."

He found the three Whitney boys sitting flat on the floor of the back porch busily cutting grotesque faces in the hollowed shells of yellow pumpkins. Jonas stood and watched them a few minutes in silence.

"Where's your pap?" he inquired at last.

The eldest of the three boys, a big

"It was Long After all Good Citizens were in Bed and Asleep."

tomorrow to have this dressed an' I grown with ragweed and burdock diligently scattering their seed with promise of a bumper crop in the future. The horse walked on to the watering trough and stopped and whinnied.

"Jonas," she called but not Jonas appeared.

"Where on earth is that man now," she wondered.

"Jonas," she called from the doorway, and this time there was a faint response from her bedroom. Here she found him stretched out on the bed, his head swathed in a white rag and the camphor bottle in his hand.

"Is that you, Marthy?" he gasped in a voice so weak she could scarcely hear him. "It's a good thing you got here in time fur I guess my time is come. I've had the awfulest spell I ever lived through. I never thought I'd be here when you got home." He rolled over on the bed and gave a weak gasp. "Seems like every breath will be my last," he moaned. "I like to a died afore I ever got to the bed."

Mrs. Harrington eyed him suspiciously.

Mebbe," he assented mentally, but he was very careful to make no audible reply.

Late in the afternoon of the next day Mrs. Harrington drove slowly up the dusty road toward home in the scorching heat of a glaring October



strapping fellow of sixteen, looked up from his work and whetted his knife on his boot top.

"Why, howdy, Mr. Harrington. I didn't know you was here. Dad took the colts down to the east meadow but I see him comin' up the lane. Have a chair up on the porch an' he'll be here in a few minutes."

Jonas laboriously climbed the steps and slid into the proffered chair with a grunt.

"Makin' jack-o'-lanterns?" he inquired.

"Gettin' ready fur tonight," one volunteered. "We aimed to get these all done this afternoon but we didn't finish diggin' potatoes. We'll have 'em made before dark, though."

Mr. Whitney came through the barn yard gate and hung a bridle on the shed door.

"Why, hello there, Jonas, are you seein' to it that they git those punkin faces made right? How're you feelin' these days?"

Jonas shifted uneasily in his chair.

"Jest sort o' so-so. I had a terrible bad spell this afternoon while Marthy was in town. Like to a died, I tell you, an' seems like I can't git over it. An' I've got a hard night ahead o' me, too," he added mysteriously.

Mr. Whitney sat down on the top step.

"Why, what's to disturb your rest tonight?" he asked.

Jonas sighed deeply.

"Well, you know this is hallowe'en," he averred. "Seein' these boys making these punkin faces reminds me of it all the more. An' I've got it straight from a certain party that ought to know," he bent low and his voice dropped almost to a whisper, "that the boys from the Cross Roads are aimin' to come to my place tonight an' carry off the fence in front of the house. I don't know how true 'tis, but I feel like I'll have to sit up an' guard all night er at least 'til the danger is past anyway. I'd hate it terrible to have that fence tore down."

Mr. Whitney laughed loudly and the boys exchanged knowing winks.

"I don't believe I'd worry, Jonas, if I was you," his neighbor advised him. "They ain't a goin' to come up this far. I wouldn't lose any sleep over that."

"You never kin tell what a gang o' boys 'll do an' I don't look fur nothin' else but to have to protect my property with arms tonight, an' they may be some blood shed."

After Jonas had dragged down the steps and started back toward home the Whitney boys held an earnest consultation with their heads close together.

"He'll think it's the Cross Roads boys," John, the middle sized boy, urged. "He'll never suspect us."

"But he said he was goin' to fight," little Ben argued. "S'pose he'd shoot us dead."

"You needn't be scared about that," John assured him. "You know he ain't never goin' to stay awake to watch, is he, Frank?"

"Course he won't," the eldest assented. "He's too lazy, an' besides he wouldn't care if we tore down the house so we left him a bed to lay on. Stop your gigglin', Ben, an' git your punkin an' come on. The Newman boys is goin' to be waitin' down at the pasture gate at dark an' the moon will be up afore long."

Long after all good citizens were in bed and asleep that night, several skulking figures could be discerned in the dim moonlight congregated in the broad white road in front of the Harrington farm. Two of the band separated themselves from their companions and, slipping through the hedge, were soon lost in the darkness of the shady lawn. The rest of the boys waited in silence until these two scouts again appeared in the moonlight.

"Everything's quiet," whispered John Whitney. "We listened under

the window an' we could hear him a snorin' like a traction engine. I told you he couldn't stay awake if he thought Gabriel was a comin'."

"All ready, then, boys," Frank gave the word. "All work as quick and as quiet as you can," and the procession strung out down the road and soon each one was slipping a rail from the fence that wriggled along in front of the Harrington home.

Frank paused with a rail over his shoulder and motioned the rest to his side.

"Boys," he whispered cautiously, "let's do a good deed tonight as well as having our fun. The Widow Johnson that's just moved on the Kelly farm ain't got no stove wood at all. S'pose we just pile these rails down there in her wood yard. Old Jonas don't need 'em, he's got no end o' wood corded up out back there now, an' she'll never know where they came from an' he'll never have energy enough to git out an' hunt 'em. He thinks it's the Cross Roads boys that took 'em."

This suggestion pleased the boys wonderfully and in the dim light of the waning moon these silent prowlers carried rail after rail until, when the sun rose next morning it shone

upon only the zigzag trail of ragweed and dock, disclosing the former path of the old rail fence.

Jonas slept on, peacefully unaware of the success of his plot. He was suddenly awakened from his dreaming by the voice of his wife, who rushed into the room, breathless with excitement.

"Jonas." She shook him into a state of consciousness. "Don't you know, the boys tore down our fence last night."

"What fence?" he mumbled sleepily. "The rail fence out in front."

"What boys?"

"I don't know what boys. Last night was hallowe'en you know, an' they's no tellin' who it was."

"You say it was." He smiled in his pillow.

"But, Jonas, they've carried the rails off," she complained as she investigated further. "Get up there this minute an' see where they are. I was goin' to have you split 'em all up this fall. They'd made fine wood. An' now they's no tellin' where they are."

"Thank the Lord," responded Jonas fervently as he turned over and pulled the cover up around his neck. "If they've only hid 'em where she'll never find 'em."

## Winston of the Prairie

BY HAROLD BINDLOSS.

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### Synopsis of Previous Chapters.

Farmer Winston, having failed as a homesteader and driven to desperation, accepts a proposal to simulate Lance Courthorne, an adventurer; through the consummation of which Courthorne and his pals, after a struggle with the police, during which Trooper Shannon is killed by Courthorne, who leaves evidence pointing to Winston as the murderer, are able to smuggle through some illegal distillery products. The scene shifts to Silverdale, a settlement founded by Colonel Barrington, to which Maud Barrington, his niece and ward, has just returned after a visit to Montreal. Her questions elicit the information that the Colonel is worried over a fall in wheat prices, especially in the face of his advice to her to hold her share of that commodity; and also over the coming advent of Lance Courthorne, Miss Barrington's cousin, to Silverdale to claim his share of his father's estate. Maud Barrington learns more of her cousin's unsavory past. Winston, in the meantime, pushes on to Montana, is held for Courthorne by an officer of the government patrol, who discloses to him the belief on the part of the police that Winston is the murderer of Shannon.

### CHAPTER VII.—(Concluded).

They sat down to a meal that was barbaric in its simplicity and abundance, for men live and eat in Homeric fashion in the Northwest, and when the green tea was finished and the officer pushed the whisky across, his guest laughed as he filled his glass.

"Here's better fortune to farmer Winston!" he said.

The officer stared at him. "No, sir," he said. "If the old folks taught me right, Winston's in—"

A curious smile flickered in the farmer's eyes. "No," he said, slowly. "He was tolerably near it once or twice when he was alive, and, because of what he went through then, there may be something better in store for him."

His companion appeared astonished, but said nothing further until he brought out the cards. They played for an hour beside the snapping stove, and then, when Winston flung a trump away, the officer groaned.

"I guess," he said disgustedly, "you're not well tonight or something is worrying you."

Winston looked up with a little twinkle in his eyes. "I don't know that there's very much wrong with me."

"Then," said the officer decisively, "if the boys down at Regent know enough to remember what trumps are, you're not Lance Courthorne. Now, after what I'd heard of you, I'd have put up fifty dollars for the pleasure of watching your game—and it's not worth ten cents when I've seen it."

Winston laughed. "Sit down and talk," he said. "One isn't always in his usual form, and there are folks who get famous easily."

They talked until nearly midnight, sitting close to the stove, while a doleful wind that moaned without drove

the dust of snow pattering against the windows, and the shadows grew darker in the corners of the great log-walled room each time the icy draughts set the lamp flickering. Then the officer, rising, expressed the feelings of his guest as he said, "It's a forsaken country, and I'm thankful one can sleep and forget it."

He had, however, an honorable calling, and a welcome from friend and kinsman awaiting him when he went east again, to revel in the life of the cities, but the man who followed him silently to the sleeping-room had nothing but a half-instinctive assurance that the future could not well be harder or more lonely than the past had been. Still, farmer Winston was a man of courage with a quiet belief in himself, and in ten minutes he was fast asleep.

When he came down to breakfast his host was already seated with a bundle of letters before him, and one addressed to Courthorne lay unopened by Winston's plate. The officer nodded when he saw him.

"The trooper has come in with the mail, and your friends in Canada are not going to worry you," he said. "Now, if you feel like staying here a few days, it would be a favor to me."

Winston had in the meanwhile opened the envelope. He knew that when once the decision was made, there could only be peril in half-measures, and his eyes grew thoughtful as he read. The letter had been written by a Winnipeg lawyer from a little town not very far away, and requested Courthorne to meet and confer with him respecting certain suggestions made by a Colonel Barrington. Winston decided to take the risk.

"I'm sorry, but I have got to go into Annerly at once," he said.

"Then," said the officer, "I'll drive

you. I've got some stores to get down there."

They started after breakfast, but it was dusk next day when they reached the little town, and Winston walked quietly into a private room of the wooden hotel, where a middle-aged man with a shrewd face sat waiting him. The big nicked lamp flickered in the draughts that found their way in, and Winston was glad of it, though he was outwardly very collected. The stubborn patience and self-control with which he had faced the loss of his wheat crops and frozen stock stood him in good stead now. He fancied the lawyer seemed a trifle astonished at his appearance, and sat down wondering whether he had previously spoken to Courthorne, until the question was answered for him.

"Although I have never had the pleasure of meeting you before, I have acted as Colonel Barrington's legal adviser ever since he settled at Silverdale, and am, therefore, well posted as to his affairs, which are, of course, connected with those of your own family," said the lawyer. "We can accordingly talk with greater freedom, and I hope without the acerbity which in your recent communications somewhat annoyed the Colonel."

"Well," said Winston, who had never heard of Colonel Barrington, "I am ready to listen."

The lawyer drummed on the table. "It might be best to come to the point at once," he said. "Colonel Barrington does not deem it convenient that you should settle at Silverdale, and would be prepared to offer you a reasonable sum to relinquish your claim."

"My claim?" said Winston, who remembered having heard of the Silverdale colony which lay several hundred miles away.

"Of course," said the lawyer. "The legacy lately left you by Roger Courthorne. I have brought you a schedule of the wheat in store, and amounts due to you on various sales made. You will also find the acreage, stock, and implements detailed at a well-known appraiser's valuation, which you could, of course, confirm, and Colonel Barrington would hand you a check for half the total now. He, however, asks four years to pay the balance in, which would carry bank interest in the meanwhile."

Winston, who was glad of the excuse, spent at least ten minutes studying the paper, and realized that it referred to a large and well-appointed farm, though it occurred to him that

(Continued on page 356).

### HARVEST TIME.

BY J. A. KAISER.

'Tis harvest time: ripe are the fields of wheat:

The heads hang heavy 'neath the weight of grain—  
A waving, nodding mass of gold, replete  
And goodly to behold, o'er hill and plain.

'Tis harvest time; the quail calls to her young,  
And half-grown rabbits, through the summer day,  
Lie hid the thicket of the grain among,  
Or startled by the reaper, dart away.

Along the fence the alders are in bloom,  
And berries ripen in the summer sun;  
And tasseling corn in rustling fields doth loom  
Above the hedge and fence of green and dun.

At early morn the farmer goes afield  
And 'neath the burning sun, 'mid sweat and grime,  
He reaps the riches that the soil doth yield—  
The well-earned bounty of the harvest time.

'Tis harvest time in life for you and me,  
And as we toil and sweat o'er hill and plain,  
Let not the weeds and chaff our harvest be,  
But well-filled sheaves of ripened, golden grain.



## A Hallowe'en Frolic

BY JANET THOMAS VAN OSDEL.

**H**ALLOWE'EN parties are always successful, for who could be stiff at a joyful frolic? And what but stiffness could keep a crowd of young people from having a good time? But Judith Pace's Hallowe'en party last year was such an unusually sociable affair that others may wish to take some hints from it.

Judith had never given a party, she was a comparatively new girl in the neighborhood and she had little money. But she was working in almost virgin territory so far as her kind of party was concerned for thus far the only social entertainment the young people of Kims' Corners had enjoyed were "surprises" (which never surprised anyone) to which each girl brought a cake or sandwiches or pickles and each boy brought a girl. Arrived at their destination the young people ranged themselves around the wall, the girls on one side, the boys on the other, looked bashful until later on when the games were started. The games consisted of postoffice, clap-in and clap-out, lead man, and others of that style. Judith had attended several of these affairs. She hated kissing games and she didn't see why a jolly, good time could not be had without them. So she decided to try it out at a Hallowe'en affair.

Instead of telephoning a couple of days before the evening she had set, Judith sent around her invitations two weeks ahead. Judith isn't much of an artist, but she managed to cut paper pumpkins out of a sheet of yellow paper and with black ink she pictured on these goo-goo eyes and immense mouths filled with a row of saw teeth. On the reverse side of these jack-o'-lantern faces she wrote the following: "This month, on the thirty-first night, Soon after early candle light, Take the road that leads to Paces Till you meet two grinning faces, Pass between them, then go a rod, And there you stop till time to nod."

The grinning faces were two jack-o'-lanterns, one placed on each of the driveway posts at the entrance to the Pace farm. A trifle more than a rod from this is the Pace barn and here at the barn door two more grinning faces lighted the guests, for the frolic was to be on the barn floor. The barn was dimly lit with jack-o'-lanterns. The dim light showed two grotesque figures at the doorway (Judith and her brother, draped in white with paper bags cut into masks for their heads), which extended clammy hands (kid gloves filled with wet sand) to welcome the guests, meantime muttering in guttural tones, "As we are now, you soon will be." This caused such shrieks and screams and delightful shivers that there wasn't any ice left to break, for it set everybody talking to everybody else. As soon as the guests had received their greeting a little hobgoblin (Judith's little brother dressed in one of his white, flannel-ette sleeping suits, made with feet and hood attached, and wearing a white mask) popped in front of them and led them to a table on which were two piles of paper bags. The bags were of two sizes and each bore the date of some month in the corner. To each girl the hobgoblin presented one of the smaller sacks and to each boy one of the larger, while he chanted in funny, high-pitched voice:

"To find your fate  
Just match the date  
Writ on the bag.  
Haste! Do not lag!"

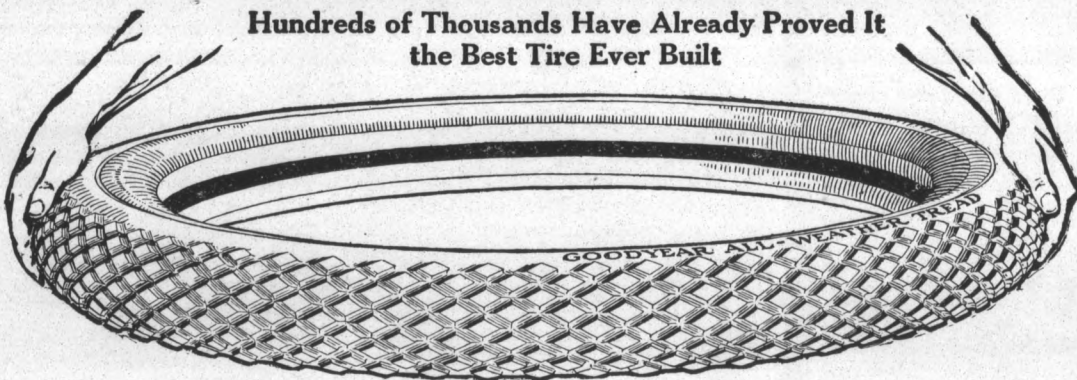
This caused a quick scurrying for partners and by the time the last guests had arrived all the others had drawn partners by the dates on the paper bags.

Then a light was turned on to illuminate one corner of the barn and the guests were instructed that each was to make for his or her partner a mask from the paper bag. Ten minutes was allowed for the task, which was made easy by the scissors, string

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and soft crayon that were provided. Eyes, mouth, nose and sometimes ears were cut out, heavy eyebrows arched in all sorts of impossible ways, whiskers, bangs and so on, added with the crayon and in some cases the corners of the bags were tied up into funny ears. A paper sack filled with chocolate mice was given as a prize to the one who made the mask that was voted by the company to be the most grotesque. The guests donned the masks and wore them until the refreshments were served. Just the sight of one another kept them all in roars of laughter. But they laughed still more when the apple contest began.

By means of a darning needle new twine had been run through big red apples and the apples were suspended from a rafter. There were ten of these apples. Groups of ten, with their hands tied behind them, were given five minutes in which to take a bite out of the apples. Out of thirty-five people only five succeeded in getting a bite from an apple, so this eating contest was more amusing than filling.

Then came the fortunes. As soon as the apple contest was ended the electric light was turned off and only the dim light of the lanterns remained. Then there was discovered in the dimmest corner of the barn an old witch (Judith's mother dressed in old black garments and wearing a black mask and a high peaked black cap) stirring something in a big black kettle and muttering in true witch style "Black spirits and white Red spirits and gray Mingle, mingle, mingle, You that may."

As the guests gathered 'round her she stooped every now and then and picked up a piece of paper from the kettle and handed it to the nearest one. On each slip was written some quotation (a number from Shakespeare and the Proverbs) which might happen to fit anyone. A number proved so "pat" as to seem almost uncanny. For instance, there was Jacob Buck who all his life had been noted for the ill luck that came his way until the previous week when he had fallen heir to a goodly sum of money. His slip read, "It's a long lane that has no turning." The belle of the district drew

"She's beautiful; and therefore to be wooed; She is a woman; therefore to be won." A woman in the forties who was always the jolliest of the crowd received

"Age cannot wither her nor custom stale Her infinite variety."

The young man who aimed to be the Beau Brummel of the countryside knows there is truth in the witch's cauldron, since he drew

"The glass of fashion and the mould of form The observed of all observers."

Of course, the quotations were not all so apt, but on the whole a deal of merriment was stirred up by the witch.

Then the masks were removed and the refreshments served. Judith and her mother do all the work themselves so they couldn't bake a number of cakes for such a crowd of people, and besides Judith knew that every other party had piles of cakes, so she didn't want them at hers. Instead she had baked six dozen rolls, eight loaves of brown bread and eight dozen doughnuts. Then she had baked two big crocks of beans, regular Boston style, for twenty-four hours. Her father had promised her a cask of the sweetest cider every drawn, and he was true to his promise. About eleven o'clock the beans were brought out to the barn and set on a table, the rolls, sliced brown bread, butter and doughnuts set beside them. Then came a pile of plates, cups, glasses, knives, forks and paper napkins. The cask of cider was rolled in and a big pot of steaming coffee and a pitcher of cream appeared. Then the guests were told to help themselves and they

did, squatting on the floor or perched wherever they could find a convenient spot, while they ate. Well, no one was dull for a single second that evening and they still talk of Judith's party.

Incidentally, the kissing games have disappeared from the gatherings in that neighborhood, which goes to show how readily young people will take to a safe, jolly way of spending their evenings once they are shown how.

## WINSTON OF THE PRAIRIE.

(Continued from page 354).

the crop was a good deal smaller than it should have been. He noticed this as it were, instinctively, for his brain was otherwise very busy.

"Colonel Barrington seems somewhat anxious to get rid of me," he said. "You see, this land is mine by right."

"Yes," said the lawyer. "Colonel Barrington does not dispute it, though I am of the opinion that he might have done so under one clause of the will. I do not think we need discuss his motives."

Winston moistened his lips with his tongue, and his lips quivered a little. He had hitherto been an honest man, and now it was impossible for him to take the money. It, however, appeared equally impossible to reveal his identity and escape the halter, and he felt that the dead man had wronged him horribly. He was entitled to safety by way of compensation, for by passing as Courthorne he would avoid recognition as Winston.

"Still I do not know how I have offended Colonel Barrington," he said.

"I would sooner," said the lawyer, "not go into that. It is, I fancy, fifteen years since Colonel Barrington saw you, but he desired me to find means of tracing your Canadian record, and did not seem pleased with it. Nor, at the risk of offending you, could I deem him unduly prejudiced."

"In fact," said Winston dryly, "this man who has not seen me for fifteen years is desirous of withholding what is mine from me at almost any cost."

The lawyer nodded. "There is nothing to be gained by endeavoring to controvert it. Colonel Barrington is also, as you know, a somewhat determined gentleman."

Winston laughed, for he was essentially a stubborn man, and felt little kindness towards any one connected with Courthorne, as the Colonel evidently was.

"I fancy I am not entirely unlike him in that respect," he said. "What you have told me makes me the more determined to follow my own inclination. Is there anyone else at Silverdale prejudiced against me?"

The lawyer fell into the trap. "Miss Barrington, of course, takes her brother's view, and her niece would scarcely go counter to them. She must have been a very young girl when she last saw you, but from what I know of her character I should expect her to support the Colonel."

"Well," said Winston, "I want to think over the thing. We will talk again tomorrow. You would require me to establish my identity, anyway?"

"The fact that a famous inquiry agent has traced your movements down to a week or two ago, and told me where to find you, will render that simple," said the lawyer dryly.

Winston sat up late that night turning over the papers the lawyer left him, and thinking hard. It was evident that in the meanwhile he must pass as Courthorne, but as the thought of taking the money revolted him, the next step led to the occupation of the dead man's property. The assumption of it would apparently do nobody a wrong, while he felt that Courthorne had taken so much from him that the farm at Silverdale would be a very small reparation. It was not, he saw, a great inheritance, but



## "Knowing"

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one that in the right hands could be made profitable, and Winston, who had fought a plucky fight with obsolete and worthless implements and in different teams, felt that he could do a great deal with what was, as it were, thrust upon him at Silverdale. It was not avarice that tempted him, though he knew he was tempted now, but a longing to find a fair outlet for his energies, and show what, once given the chance that most men had, he could do. He had stunted himself and toiled almost as a beast of burden, but now he could use his brains in place of wringing the last effort out of overtaxed muscle. He had also during the long struggle lost to some extent his clearness of vision, and only saw himself as a lonely man fighting for his own hand with fate against him. Now, when prosperity was offered him, it seemed but folly to stand aside when he could stretch out a strong hand and take it.

During the last hour he sat almost motionless, the issue hung in the balance, and he laid himself down still undecided. Still, he had lived long in primitive fashion in close touch with the soil and sank, as most men would not have done, into restful sleep. The sun hung red above the rim of the prairie when he awakened, and going down to breakfast found the lawyer waiting for him.

"You can tell Colonel Barrington I'm coming to Silverdale," he said.

The lawyer looked at him curiously. "Would there be any use in asking you to reconsider?"

Winston laughed. "No," he said. "Now, I rather like the way you talked to me, and if it wouldn't be disloyalty to the Colonel, I should be pleased if you would undertake to put me in due possession of my property."

He said nothing further, and the lawyer sat down to write Colonel Barrington.

"Mr. Courthorne proves obdurate," he said. "He is, however, by no means the type of man I expected to find, and I venture to surmise that you will eventually discover him to be a less undesirable addition to Silverdale than you are at present inclined to fancy."

#### CHAPTER VIII.

Winston Comes to Silverdale.

THERE was warmth and brightness in the cedar-boarded general room of Silverdale Grange and most of the company gathered there basked in it contentedly after their drive through the bitter night. Those who came from the homesteads lying farthest out had risked frost-nipped hands and feet, for when Colonel Barrington had held a levee at the Grange nobody felt equal to refusing his invitation. Neither scorching heat nor utter cold might excuse compliance with the wishes of the founder of Silverdale, and it was not until Dane, the big middle-aged bachelor, had spoken very plainly, that he consented to receive his guests in time of biting frost, dressed otherwise than as they would have appeared in England.

Dane was the one man in the settlement who dare remonstrate with its ruler, but it was a painful astonishment to the latter when he said in answer to one invitation, "I have never been frost-bitten, sir, and I stand the cold well, but one or two of the lads are weak in the chest, and this climate was never intended for bare-shouldered women. Hence, if I come I shall dress myself to suit it."

Colonel Barrington stared at him for almost a minute, and then shook his head. "Have it your own way," he said. "Understand that in itself I care very little for dress, but it is only by holding fast to every traditional nicety we can prevent ourselves sinking into western barbarism, and I am horribly afraid of the thin end of the wedge."

Dane having gained his point said nothing further, for he was one of the

wise and silent men who know when to stop, and that evening he sat in a corner watching his leader thoughtfully, for there was anxiety in the Colonel's face. Barrington sat silent near the ample hearth whose heat would scarcely have kept water from freezing but for the big stove, and disdaining the dispensation made his guests, he was clad conventionally, though the smooth black fabric clung about him more tightly than it had once been intended to do. His sister stood, with the stamp of a not wholly vanished beauty still clinging to her gentle face, talking to one or two matrons from outlying farms, and his niece by a little table turning over eastern photographs with a few young girls. She, too, wore black in deference to the Colonel's taste, which was somber, and the garment she had laughed at as a compromise left uncovered a narrow strip of ivory shoulder and enhanced the polished whiteness of her neck. A slender string of pearls gleamed softly on the satiny skin, but Maud Barrington wore no other adornment, and did not need it. She had inherited the Courthorne comeliness, and the Barringtons she sprang from on her father's side had always borne the stamp of distinction.

A young girl sat at the piano singing in a thin reedy voice, while an English lad waited with the ill-concealed jealousy of a too officious companion to turn over the music by her side. Other men, mostly young, with weather-bronzed faces, picturesque in embroidered deerskin or velvet lounge jackets, were scattered about the room, and all were waiting for the eight o'clock dinner, which replaced the usual prairie supper at Silverdale. They were growers of wheat who combined a good deal of amusement with a little, not very profitable, farming, and most of them possessed a large share of insular English pride and a somewhat depleted exchequer.

Presently Dane crossed over, and sat down by Colonel Barrington. "You are silent, sir, and not looking very well tonight," he said.

Barrington nodded gravely, for he had a respect for the one man who occasionally spoke plain truth to him. "The fact is, I'm growing old," he said, and then added, with what was only an apparent lack of connection, "Wheat is down three cents, and money tighter than ever."

Dane looked thoughtful, and noticed the older man's glance in his niece's direction, as he said, "I am afraid there are difficult times before us."

(Continued next week.)

#### LACK OF FEAR AMONG BIRDS.

BY ORIN E. CROOKER.

Birds in the deep wilderness often show little or no fear of men. Mr. John K. Lord, naturalist of the British division of the Northwest Boundary Survey, has told of a pair of barn swallows which visited his camp in British Columbia. A small shanty built of poles was in constant use as a blacksmith shop. The birds chose a nesting site directly over the anvil and paid no attention to the swinging hammer, the showers of sparks or the constant noise. Mr. Lord relates that he frequently stood on the anvil when it was not in use and watched the birds build their nest—so near that their feathers often brushed his face. The swallows reared their brood in this nest, seemingly as unconcerned as though the shed had been occupied by cattle.

The same naturalist also tells of the fondness for human society exhibited by the Alaskan Gray Jay. The Alaskan Indians never have harmed the bird and it shows perfect absence of fear of men. In cold weather Mr. Lord has seen it hop to a place near the camp fire, ruffle its feathers and warm itself without evidently giving any concern to those who busied themselves in the immediate vicinity.



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## Woman and Her Needs At Home and Elsewhere

### First Helps to Beauty.

FEMININE readers of this department have frequently complained bitterly to my face and behind my back that I am always lecturing the women and never saying anything to the men, that I always take the man's viewpoint, and never throw the searchlight on his failings. There is an old saying that it takes a thief to catch a thief, and that is my sole excuse for playing up the weaknesses of womankind. Being a woman myself I know my own shortcomings, and those of my sex, better than any other subject, hence my unwelcome admonitions to woman to mend her ways.

However, husbands have their failings, and a cheery country friend of mine pointed out one common one recently, their total blindness to work they might do about the house without in any way lowering their masculine dignity. She's a very practical person, this woman, as you will see. It was just after the morning meal and her husband had stopped to kiss her as he left the house.

"Kisses are all very well," she remarked calmly, "but I'd rather you'd show your love for me by carrying out that swill pail. And don't forget that the woodbox is empty, and I'll need at least four pails of water this morning, probably five or six."

"It's bad policy to talk about family jars," she said as, after her husband had departed, "but as this one has ceased to rankle, I'm going to tell you. It may help straighten out some other domestic tangles. Do you remember how thin and cranky I used to be? Always scolding and always tired." She glanced complacently at her plump form, reflected in the mirror. "Oh, yes, I was. You needn't be polite and say I wasn't. I was always nagging. More than that, I was jealous."

"We had a neighbor then who was plump and pretty and smiley and always ready for a good time, and Fred used to think she was about right. So she was," added my friend honestly, "though I wouldn't admit it then. I didn't like Fred's open admiration, though I never said anything. One morning when I was particularly tired and cross, he said jokingly:

"What's the reason you can't be pretty and good-natured like Mrs. Smith? She isn't scolding all the time. You used to be pretty, too, but you've got thin and wrinkled and you never give a fellow a decent word."

"I had just picked up a heavy swill pail to carry out doors, and I put it down right where I stood, and exploded. 'Why am I not pretty and good-natured?' I repeated, 'why are you a great big lazy loafer, sitting around while your wife feeds your hogs and carries in wood and water? Mr. Smith empties the swill pails for his wife. He carries in all the water and fills the woodbox and takes care of the hens, and churns and runs the washing machine and does all the dishes on Sunday. Any woman could be pretty if she wasn't worked to death and had time to friz her hair and powder up ever yday. You carry out that pail and fill the reservoir and go out and split that wood you're leaving for me, and I'll go to my room and dress up."

"And that's exactly what I did. I slammed out of the kitchen and into my bedroom and spent one whomp hour combing my hair in different

ways and rubbing my cheeks with a piece of bath towel to try to get them pink. When I went out Fred had fed the hogs but he had not brought in either wood or water, so I left the dishes and went back to look over my clothes and see if I could fix them over so they'd look more like Mrs. Smith's. When the men came up to dinner the kitchen and dining-room were exactly as they left them in the morning. Fred was in an awful rage.

"What's the matter here?" he demanded, "Why isn't dinner ready?"

"I can't work without wood and water," I replied, "And besides, I've been so busy studying up how to be pretty like Mrs. Smith I haven't had time for cooking."

"The hired man grinned and bolted for the woodpile, and Fred took two pails and started for the well. I took my time about getting dinner. Believe me, I didn't hurry and get excited and cross. I was just as slow as I could be and as icily sweet as ice cream. Fred wasn't sweet, though, he was too mad to see the joke, but the hired man had a fine time.

"The next morning Fred started out as usual without doing one thing.

"Don't forget I've got to have time to make myself pretty and agreeable," I reminded him. So that morning he

saw to it that there was wood and water enough for the morning. He was some time learning his lesson, though, and there were several late meals before he got broken to the new scheme of doing things. But I stood by my guns, and most of the time kept from nagging, though I did fall by the wayside on occasions. You see the result. I've put on 20 pounds of flesh, and I can really smile without an effort. I never lift a pail of water nor empty a tub nor carry in even a chip, and Fred turns all the mattresses and has discovered that he can give me an hour every washday for running the washing machine just as well as not. Last week I overheard him telling one of the neighbors that any man who let his wife carry in wood or water should be drummed out of the community. He has completely forgotten that for ten years I was the official burden bearer for this family.

"Husbands are all right when they are properly trained," she concluded reflectively. "Men boast that they are the stronger sex, and we women need protection and shelter, and then most of them take off their boots and toast their feet by the fires we've built and kept going. If they are the stronger, which I'm willing to grant, let them use some of their strength in saving us steps and back aches. A heaped-up woodbox would mean more to most wives than any number of kisses."

DEBORAH.

### October in the Garden—By L. H. COBB.

OCTOBER is the month of chilly nights, fine tea-rose blooms, first frosts, and apple picking. We are apt to be giving more attention to our winter supplies than we are to the future of our flower or vegetable garden. We had better remember them, though, for a lot of our success next season depends on it.

If you are going to plant any peonies this year now is the time to do it, for early in the fall is the best time for them. Peonies have become so popular of recent years that no garden is considered complete without them. No flower is more satisfactory in the farm garden. Our grandmothers loved the "pineys" and had their great clumps of the plain colors. Now we have so many shades and forms that it is hard to make a selection, and yet the old-fashioned double whites, pinks, and reds are almost as pretty as the prettiest. We have earlies and lates now that extend the blooming season considerably, so we can have the great blooms up to the first of June. If you do not know enough about the varieties you can safely leave the selection to the florist if you buy of a reliable concern. Tell them just what you want in the way of colors in general, and whether you want all very double or assorted in this respect. Some of the prettiest flowers I ever saw were almost single, with heavy outside petals and a mass of finely cut petals toward the center.

Hyacinths, tulips, narcissus and jonquil bulbs, and many other spring flowering bulbs of less importance should be planted now so they can begin rooting before freezing weather. These bulbs root all winter whenever the ground is not frozen, and the flowers are much prettier if they can have a good long rooting season. The fall rains have put the ground in fine shape, and you will not be disappointed in the results. For cemetery

planting nothing can equal these bulbs. They are hardy and sure to bloom freely. It is hard to get flowers to bloom in the cemetery as a usual thing, but I have had no trouble with bulbs.

If some of your tuberose have not bloomed you can take them up now and pot them for blooming in the house in winter. If you do not want to have them blooming in the house you can dig them after the frost has killed the tops and dry them well and put away until spring. Tuberose bulbs are very susceptible to frost, and if the hearts are injured they will not bloom.

Cut back the geraniums until there are no long soft growths. The short stubby shoots should be left, and as many leaves as possible on them, but long soft canes will not break well, and there will not be an even growth. These plants should bloom well toward spring if not kept too dark. They make the very best summer bloomers for next year, especially if kept pretty dry and allowed to become almost dormant.

Often there are some nice compact annual plants that will make good bloomers for the window in winter. Licotiana, snap-dragon, verbena, ageratu, petunia, pinks of various sorts, and almost any other plant that you like can be taken up and potted if it is done carefully. Mignonette is very hard to transplant and the tops must be cut back some and the roots kept as whole as possible.

Late in the fall is a good time to sow the seeds of such hardy vegetables as you want to start early in the spring, but they should be sown so late there will be no danger of their starting this fall. Radishes, lettuce, mustard, spinach, and set onions may be thus planted, and if the onions or spinach do start they will not be likely to be injured by the winter. I have



had onions grow all winter, and make a fine lot of small bulbs for early use long before those planted in the spring were ready. Parsley can be sown thus also, but is not so apt to succeed as it is so slow to grow and the seed is more easily destroyed.

If the garden is so it can be done conveniently it is a good plan to sow a cover crop for the winter. Rye is a good crop for this purpose and the green growth plowed under in the spring will benefit the soil. If you can pasture it by turning your hens upon it it will help fill the egg basket.

There is no better time to make out your order for such fruit trees and plants as you will need, for you have it in mind now. It is a good time to plant them just before it freezes up, and you will need to get your order out now to have the stock ready. Even if you do not plant until spring it is best to get the trees in the fall and heel them in good and "have them ready to plant just when you can do the work best. If you order for spring delivery your stock is stored in cellars and shipped so early that there is grave danger of having them frozen on the way. Freezing is of little damage if they are thawed out right, but if thawed quickly they will be ruined. If you get trees frozen, either place them in a cool place in the box until thawed out and cover with moist soil.

The strawberry patch should have a dressing of manure late in the fall, and it should be fairly well rotted for best results. The plants should not be covered to any depth, but they may be given a light straw mulch after the ground is frozen if it is thought best, though it is seldom needed. A thick mulch will smother them out.

#### THAT GASOLINE STOVE OF YOURS.

BY LAUREL MAY HARRINGTON.

A gasoline stove is a boon to the busy housewife, but it needs attention at times. I have learned by experience that certain things help in keeping it in order.

In the first place the stove should be kept well supplied with gasoline. But if it should happen to burn dry, do not fill the tank with gasoline and then shake the stove and blow in the tank to get it to flow again. It is too much trouble and takes too long. Just unscrew the tank and fill the pipe with the gasoline, put the tank back on and it is ready to light. You will find this a vast improvement over the old way.

Then, if your stove gets so the blaze is not bright and clear, and you are beginning to think it is worn out and you must throw it away, take off the tank, remove the loose parts of the stove, burners, etc., and tip the stove upside down, letting the gasoline in the pipe run into an old pan. You will be surprised at what you find in the pan, and wonder that your stove burned at all. Turn on the gasoline and blow down the pipe to see if all foreign substance is removed. If it is, the gasoline will fly up in the air a foot or so when you blow down the pipe. If it does not, tip the stove upside again, letting the gasoline all run out once more. I used to have a great deal of trouble with my gasoline stove until I tried this way. Now I give it this treatment every two or three months and find it pays. It is well to take the stove out of doors while performing the operation.

If the stove leaks around the tank, scrape some laundry soap and apply. If at the burners, just turn off the gasoline, unscrew the part that you turn on the gasoline with, and soap thoroughly the end that screws into the burner.

Sometimes when the burners are clogged the gasoline will flow sideways when turned on. In that case bend the point of a pin a quarter of an inch and insert in the opening, working it around in the burner. That will help when other methods fail.

#### CLOSE OF DAY.

BY ELLA E. ROCKWOOD.

When the shades of night are falling  
And the supper table's spread,  
From the barn with pails a-brimming  
Father comes with weary tread,  
Soon the separator's humming  
Starts a steady, snowy stream,  
Foamy milk flows out of one spout,  
From another comes the cream.

When the separating's finished  
Father washes up for tea,  
Draws his chair up to the table,  
Looks around at Jim and me  
Sitting quiet in our places,  
Hungry as small boys can be.

Then comes mother with the supper,  
Something good all smoking hot,  
Baked potatoes and cream gravy,  
Or spaghetti like as not,  
Mother glances 'round the table,  
Sees that nothing's missing there,  
And when everything is ready  
Slips into her waiting chair.

After supper come the dishes,  
Mother helps us with our books,  
Proudly waving each a towel,  
Take great pains to wipe them dry.

Then, while father reads the paper,  
Mother helps us with our books,  
'Till the lessons all are ended.  
At the clock she takes a look,  
"Bed-time, boys: be off," she warns  
us,  
"Morning soon will come, you  
know."  
"Good night, Dad, and good night,  
Mother."  
Off upstairs we youngsters go.

#### THE HOARDING INSTINCT.

BY MRS. JEFF, DAVIS.

Most housekeepers suffer from a disease that might be designated as the "Hoarding Instinct." Half of the burdens of housekeeping come in doing the things we don't need to do and caring for things we don't need at all.

Start in the attic and go straight down through your house to the cellar, and with one desperate sweep rid yourself of the multitude of things you don't need, at your next general housecleaning. In so doing you will experience a wonderful sense of freedom and relief. And, no doubt, the very women who feel they are most in need would have the most things to throw away.

If you are in doubt about a thing, whether to hoard or discard, do not hesitate. In keeping there is likely to be nothing but weariness, and the things you discard may be actually useful to someone else, may serve instead of having to be served. So rid your attic of everything that has outlived its usefulness to you. Take what things you can and make them over into something you need or sell them for what you can get or give them away or burn them.

It makes most of us shudder every time we think of cleaning our attics. If we would only move things out instead of moving them around at housecleaning time we would be much wiser.

Let us remember it isn't the doing of the necessary things that wears out the bodies and spirits of housekeepers; it is the doing of the wholly unnecessary things. We would all be happier and less care burdened if we refused to be enslaved by mere things.

#### HOME QUERIES.

Household Editor:—I should like to ask if any of the readers ever canned citron and would like to know how?—Mrs. W. M., Baroda.

Cut the citron in slices, remove the green outer rind and cut the fruit in small pieces, cover with cold water, allowing a tablespoon of salt to each quart, and let stand 24 hours. In the morning rinse thoroughly and cook in boiling water until transparent. Make a syrup, allowing three-quarters of a pound of sugar and a half cup of water for every pound of fruit and cook the citron in this until the pieces begin to darken a little. Skim out the citron and put in cans, boil the syrup until it begins to thicken and pour over the fruit.



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Good cooking helps the health and happiness of your family. Surely you should have a range that will enable you to do your best cooking.

"Majestic" makes good cooking easy. It is not merely "so much metal put together to hold fire"; each part is scientifically built to do its work just right. Made of malleable and charcoal iron, metals that resist rust and wear three times as long as ordinary range metals. All joints cold-riveted (no putty used)—a Majestic stays tight—holds the heat in, main-

taining uniform baking heat with least fuel. Oven braced on top by heavy beam and in front by frame—prevents buckling.

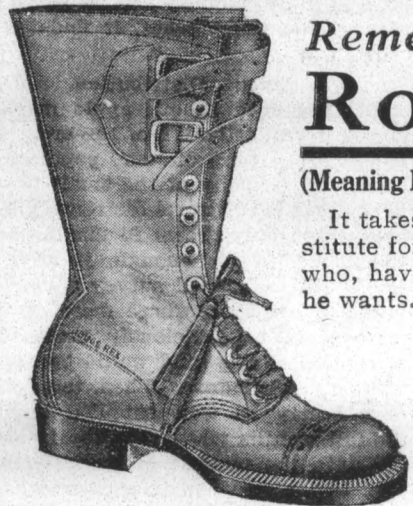
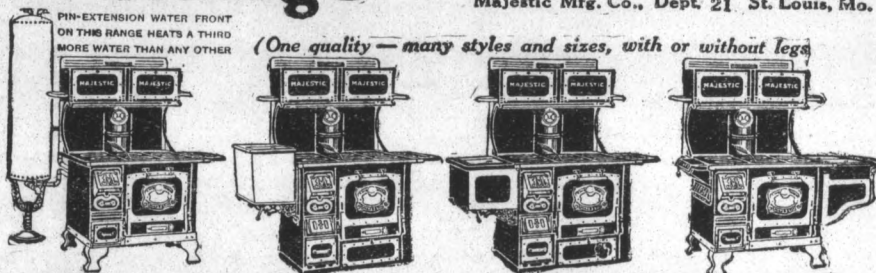
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The health and happiness of your whole family is effected by the range you buy. Investigate thoroughly. There is a Majestic dealer in every county of 40 states; if you don't know the one near you, ask us, and get "Range Comparison" explaining Majestic ranges fully. Majestic Mfg. Co., Dept. 21 St. Louis, Mo.

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Malleable and Charcoal Iron



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It takes a good argument to sell a substitute for Rouge Rex Shoes to the man who, having worn them, knows just what he wants.

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is a shoe for the season. The stock is a carefully selected tannage, tough and serviceable. The leg is 12 inches high, with full bellows tongue, and two thicknesses of leather at the toe clear to the sole, and then it has a good heavy bottom such as

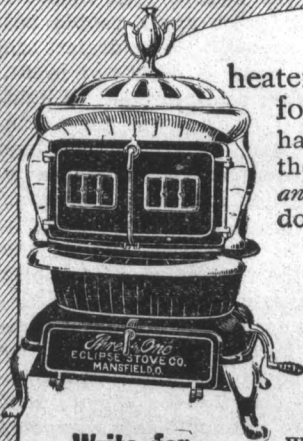
is needed at this time of the year. Ask your dealer for them. Look for this trade-mark on the sole.

Write Dept. F for free descriptive book and name of nearest merchant handling these shoes.

**HIRTH - KRAUSE COMPANY**  
Hide to Shoe Tanners and Shoe Manufacturers  
GRAND RAPIDS MICHIGAN



## Latest Stove Sensation



A new type of heater! The one you must have for all-season comfort. Burns hard or soft coal or wood. Built to answer the big demand for a stove that will burn anything. Note the long, oval firepot with double doors for big chunks and odd pieces.

## ECLIPSE

STOVES and RANGES

Write us for name of Eclipse dealer. Ask him to explain the different features which make the Eclipse stove or range give you such splendid results. All styles for all kinds of fuel. Guaranteed to last. We will also send free illustrated booklet.

Eclipse Stove Company, Mansfield, Ohio

Write for  
FREE BOOK  
Today



# Farm Commerce.

## Vital Needs in Apple Marketing.

**A**GRICULTURAL education is being extended into the channels of distribution and marketing. These channels are being studied as generally and more earnestly today than are problems of production. Like in the military campaign, it is important to know the strategic points to be defended or attacked, so here those affected must see clearly the problems that are to be solved in one way or another.

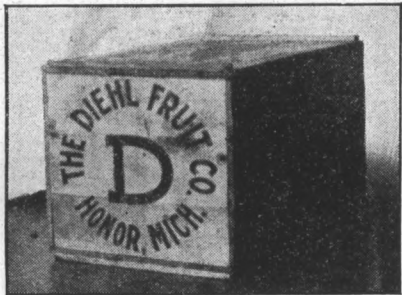
### We Have Too Many Standards.

The first great need is our apple marketing is uniform packing. We are troubled today with too many standards in the packing of this fruit. Neither seller nor buyer is scarcely ever certain that the classification of the fruit being considered is correct. This makes dealing more or less of a gamble, and naturally dealers will always take this into consideration in tendering bids. Unless one has a personal reputation for proper grading and packing, he must suffer through the general disrepute into which apple packing has fallen.

The present situation is hopeful, however, because of the attention being given to it by both the public and private individuals. Our state and federal governments have enacted measures to encourage a more uniform apple pack. Everywhere are to be seen efforts on the part of growers and packers to improve their grades and methods of putting up the fruit. Then, too, the buying public is now more discriminating in its demands, and this is making necessary more careful work by the growers.

### Must Get Public Confidence.

It is difficult to appreciate what the advantage to the apple industry would be if the grading and packing could



Apple Box Used by Michigan Growers.

be standardized. When one purchases certain brands of manufactured goods he is confident that he will get the very goods asked for. While the perishable nature of apples makes it impossible to market them with the same confidence that a jobber can market nails or soap, still the experience of western co-operative associations has justified the belief that a very high degree of confidence can be gained and held; and where the seller stands ready to make good any loss resulting from improper grading or decaying fruit, the element of chance can be entirely eliminated and business dealings placed on an absolutely safe basis.

### Expensive Containers.

There appears to be a tendency among growers who are experimenting to find better methods of marketing, to use expensive containers. There is a certain class of people with whom this can be done profitably. A small per cent of the population of every city wants products that show the use of great pains in their production and preparation for market. For such people apples can be packed in expensive containers. On this page will be found illustrations of a box

used by a Michigan grower. The apples are packed in the same way that eggs are placed in cases for shipment. The box illustrated held 96 apples. The container, including the fillers, cost 36 cents; this makes the cost of container for each apple less than 0.4 of one cent. As we must consider all containers to be necessary evils, this cost would appear to be altogether too high for the marketing of any considerable portion of the bulk of our apples.

It still seems that the apple barrel is one of the best packages in which to market the better grades of our Michigan fruit. This is true not only because the cost is comparatively low, and the fruit can be carried safely, but also for the reason that it has been the custom to market our eastern fruit in this manner.

Because of our large crop and the low prices that are being paid this year, many cars of apples are going forward in bulk. Shipments from Michigan to the Dakotas and other general agricultural states are being made in this manner. Where the fruit is to be used immediately, this method of distribution has merit, because it reduces the cost to the lowest figure. Where the apples are to be stored, however, the plan could not be commended. It furnishes, nevertheless, a very cheap way of getting apples to the consumer, and in years of plenty, like the present, it finds general favor.

### Judicious Distribution.

Another need in our apple market is a better distribution of the crop. No mean proportion of our population, especially in many of the small towns in general agricultural districts where apples are only grown in small quantities, fail to get enough, if any, of this fruit. A careful survey should be made to ascertain where more of the fruit could be judiciously used. Information of this kind would be invaluable to distributors. Then, too, while people may be well supplied during the fall months when the crop is coming onto the market in large quantities, but a very small per cent have the fruit during the winter. An effort to supply the general public with apples for six or seven months of the year should be included in the general campaign for improving our apple market.

### Educating Apple Appetites.

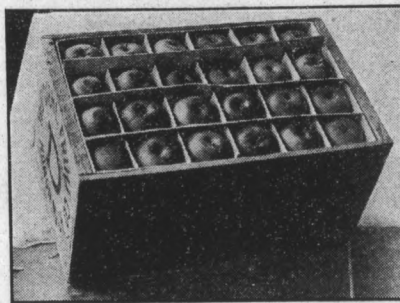
Again, consumption should be stimulated. The appetite for apples ought to be encouraged. Our people would enjoy better health if they were more liberal consumers of the king of fruits. One method of helping along this line is in reducing the cost to the final consumer. We believe that retailers are responsible for many people not using more apples. These dealers are exacting too wide a margin of profit, many instances being brought to light where the selling price was more than double the cost price. If retailers could be encouraged to sell apples in larger quantities and at a narrower margin of profit, their net returns would not be decreased, and at the same time the consumption of apples would be greatly increased.

A Detroit dealer has started a campaign to increase consumption by means of moving pictures, through which he is drawing the attention of city people to the apple as a source of food. Just how effective this will be, remains to be seen. In connection with the films this party publishes upon the screens at certain moving picture theatres every night the quota-

tions for apples delivered in barrel quantities.

Another suggestion but recently made is the "Buy a Barrel" slogan. This suggestion has come out of the effort on the part of business men of the south to help out the cotton industry by asking individuals to buy a bale of cotton. If this "Buy a Barrel" slogan could be generally published in the press of our cities, we believe it would stimulate consumption and at once increase the demand for fruit.

These are a few of the needs of our apple market. In them will be found important points for attack in the general campaign to better marketing conditions. We cannot take up one problem at a time and settle it; oper-



Apples are Packed in Fillers in the Same Way as Eggs.

tions must continue along the entire battle front. It is for individuals and organizations concerned in the matter to work earnestly and persistently wherever they find a place to help. And we must start now to prepare for future crops. It is safe to say that if an intelligently conducted educational campaign had been followed during the past five years this year's crop would have found ready buyers at reasonable prices.

Wayne Co.

A. H.

### GRAND RAPIDS GROWERS CO-OPERATE.

Growers of vegetables under glass in and near Grand Rapids have been successfully working together for over four years now, under the name of the Grand Rapids Growers' Association. The story of the attempts of the growers to get together for many years is the usual one of ups and downs, with organizations repeatedly going to pieces through lack of support, but at the present time the 30 members, comprising the leading glass farmers in this section, are loyal co-workers, and the organizations is one of the most successful of its kind in the United States. They would not think of going back to the old blind, hit-and-miss system, or lack of system, in marketing their products, with every man for himself and his Satanic Majesty taking the hindmost.

The association is duly organized, with officers and committees. Monthly meetings are held, also an annual picnic with dinner and a program of sports. The meetings are of an educational nature, with speakers from outside often on hand and free discussion by the members on the problems of glass farming, such as best uses of fertilizers, insecticides, etc. The mutual advantages along this line are beyond computation.

And then, last but by no means least, is the marketing end, which is looked after by sales agents, located at a central packing and shipping station in Grand Rapids. It is the business of this firm, not only to keep in close touch with the outside markets but to see that the stuff is well put up and goes out in attractive packages. An intelligent system is followed in sowing the successive crops by members, so that the harvest and marketing periods will be well distributed and not all come together to glut the trade.

Lettuce and tomatoes are the leading crops raised under glass here.

The Grand Rapids curly leaf lettuce was originated by Eugene Davis, of

Kent county, who has been well called the "Luther Burbank of Michigan," and Mr. Davis has also propagated the long green cucumber which bears his name. By the way, we might add that Mr. Davis has retired from business with a competence made in farming under glass, that will keep him the rest of his days. The lettuce season opens about November 15 and continues until the outdoor product crowds it off the market. Lettuce is washed, graded and packed in 80-pound barrels at the central warehouse, then is shipped by express to points as far south as Kentucky and West Virginia and in carloads to Cincinnati for distribution, also to Ohio, Indiana, Illinois, and Michigan points. Growers received an average price this season of 7½ cents per pound net.

The tomatoes are put up in eight-pound baskets, with tops that prevent crushing. Each tomato is wrapped in paper and the package bears the association label and guarantee as to quality. Tomato shipments start about April 15, this product going as far east as New York City, also to Chicago, to points in Wisconsin and elsewhere. Growers realized an average price of 50 cents a basket this season.

The members have over half a million square feet of glass in their houses and are burning 150 cars of coal annually in their forcing operations. While no official action has been taken as yet, it is expected that the state will establish an experiment station here in vegetable growing and the Grand Rapids Growers' Association at its last meeting adopted a resolution tendering a greenhouse plant and fuel for same free of charge for such uses, this station to be in the hands of an expert from the Michigan Agricultural College.

Kent Co.

ALMOND GRIFFEN.

### WHAT ARE YOU DOING?

Are you doing anything to improve your market?

Do you ever hope to sell your products directly to the final user?

Have you any reason for not making the start today?

The Michigan Farmer stands ready to do at least two things for you:

First.—It will place your name and address and a list of the products you have for sale, in the hands of consumers, thereby opening up the way for direct selling.

Second.—It will furnish you with a steel crated shipping box 8½x12½x14 inches, equipped with four one-dozen egg cartons, one two-pound butter tub, one pint cream bottle, partitions, paraffined paper and shipping tags, postpaid, for 58c, if you live in the first or second zones from Detroit, and 62c if you live in the third zone. At the office the price is 50c, or 80c with the Michigan Farmer one year. Orders should be addressed to the Michigan Farmer, Detroit. This box can be used over and over again; it is light, durable and easily packed.

We realize that most people object to changing their methods, and it is better to be conservative where new systems are uncertain, but those who have tried direct selling are finding that it pays them well. We tried it several years ago, and are still dealing that way. We are confident that it will bring those who follow it much larger net profits than they secure under the old method of marketing. To benefit our readers, we are therefore doing what we can to get as many as will, started; not only do we offer to do the things mentioned above, but we shall constantly keep all Michigan Farmer readers informed of any new plans or methods that may be found.

If you are sincere in the desire to get your name before city people who are anxious to secure farm products, and wish a crate to make shipments in, take advantage of this opportunity and do it immediately.



## Crop and Market Notes.

## Michigan.

**Monroe Co., Oct. 13.**—The weather is ideal for seeding wheat and grass; plenty of rain to keep them growing nicely; fine weather for ripening late planted corn and potatoes; have had no frost yet to do any damage. The farmers are about done filling silos and of a good quality of corn and many more silos than usual being filled. The price of meat stuffs has dropped some during the last three weeks. Dressed pork light 13c; heavy and rough 11@12c; calves, dressed 14@15c; fowls, live 13c; young chickens 13c; old hens 13c, a half-cent drop in the last three weeks. The bottom fell out of the potato market, dropping from 80c to 90c bushel down to 35c to 45c; some now and then at 50c. Apples \$2.25@2.75 per bbl; hay by the load, loose \$15, timothy; corn in the ear \$1 per cwt; oats 48@50c per bushel; shelled corn 85@90c per bushel. There is some quite large patches of very late corn planting that is not cut yet, and is looking green and nice.

**Branch Co., Oct. 10.**—The weather is favorable for late potatoes and corn. Corn cutting is not all finished and not many potatoes dug except earliest fields, from which the yield was rather light. Bean harvesting is well under way, and the weather has been favorable. Clover seed is a fair crop but small acreage. Apples light yield. Stock is looking well. Wheat 1.02; corn 75c; oats 44c; potatoes 70c; butter 25c; eggs 23c; clover seed 10; apples 75c per bushel.

**Wexford Co., Oct. 5.**—We are having fine weather for this time of year. There are a great many potatoes to be dug, and the yield per acre is small. Corn is a large crop. There is very little wheat sown, but a larger acreage of rye than usual. Hogs are scarce; good milk cows are scarce, ranging in price from \$60@90. All stock looks fine, as we have had abundant pasture. Cattle \$4@5; sheep \$4; hogs, live 9c; potatoes 25c; oats 50c; loose hay \$10; baled \$12; wheat 90c; rye 70c; old corn 70c; new beans, white \$1.75; buckwheat \$1.25 per cwt; eggs 22c; butter 24c; butter-fat 26c; chickens 12c.

**Hillsdale Co., Oct. 5.**—About the usual acreage of wheat and rye is being sown; corn promises to yield fairly well. Some farmers have just commenced husking, while others have not yet finished cutting. Late potatoes will be a big crop, but are slow in ripening, and none have been harvested yet. Fine weather has prevailed for the gathering of the bean crop which is good. Buckwheat, of which there is quite a large acreage, is a good crop. There is but very little clover seed. Butter 27c; eggs 21c; potatoes 75c; wheat \$1; oats 42c; rye 80c; clover seed \$9.50; live chickens 11½c; heavy hogs \$8.50; yorkers \$8.75; veal 6@9c; butcher cows \$2.50 @4; butcher heifers and steers \$5@6; choice steers \$6.50@7.

## New York.

**Columbia Co., Oct. 10.**—We have had no rain since the last of August; much of the rye sown is failing to sprout. Corn, beans and oats are better than usual. Potatoes good; buyers are offering as low as 40c per bu. Good milk cows are high. Apples are plentiful and prices very low. Eggs 35c; butter 38c.

## Ohio.

**Coshocton Co., Oct. 12.**—Nearly all the wheat is in the ground, and there was a large acreage sown. Early sown wheat is coming up rather unevenly on account of the dry weather. Corn is all cut, and a few are beginning to husk; it will be an average crop. The potato yield is rather low. Clover seed is being hulled, and is turning out well for the amount of straw. Apples are being picked, and

there will be a large crop. There has been no damaging frost yet. Pastures and stock are looking good. The horse market is dull, but cattle and hog market is booming. Hogs \$7@8.40; veals \$8.50; cattle \$6.50@8; butter 22c; eggs 26c; potatoes 70c; apples 50c; hay \$15; wheat \$1; corn 85c; middlings \$1.70; chickens 13c; turkeys 13c; timothy \$3.25; alfalfa \$8.50; clover \$11@11.50.

**Holmes Co., Oct. 13.**—Weather fair with light rains. Pasture is very poor. Corn is all in shock, and is 85 per cent of average. Potatoes 80 per cent. Clover seed above the average. A large acreage of wheat and rye sown. Live stock is plentiful but not much being sold. Winter apples are plentiful for home consumption. Corn 85c; wheat \$1; oats 45c; middlings \$30 per ton; butter-fat 31c; butter 25c; eggs scarce.

**Wayne Co., Oct. 12.**—The weather has been dry and warm for the past three weeks. Corn is cut, but not much husked yet. Wheat practically all sown, and acreage about normal. Potatoes are being harvested, and some nearly a failure, others yielding fairly well. Pasture is good. Fall apples are plentiful. Hogs plentiful; cattle scarce; both cattle and hogs in good condition. Wheat 98c; oats 42c; corn, old 80c; butter 28c; eggs 28c.

**Carroll Co., Oct. 12.**—Farmers have most of their corn cut. Some are digging potatoes which are a fair crop. The corn is very poor crop on account of dry weather we had this summer. It was too dry for the wheat to grow, until last week we got a few nice showers. Winter apples are picked now, which is a nice crop.

## Illinois.

**Perry Co., Oct. 10.**—Larger acreage of wheat sown than last year. Live stock was mostly sold off during the dry summer, but pastures are fine now since the rains in August. Horses are bringing good prices and being shipped to Europe. Hogs \$8; wheat 95c; eggs 26c; chickens 13c; geese 13c per pound.

## Missouri.

**Phelps Co., Sept. 24.**—Corn is over half a crop and some of it is extra fine; potatoes and sweet potatoes are extra good, considering this dry year. Onions and beans are extra good. Apples are fine this year and are selling from 75c@1.50. There will be plenty of winter apples and will be a fair price. Farmers are busy sowing their wheat and rye and getting ready to get their corn in. They are also sowing clover and timothy seed with their wheat and rye. Wheat 90c; corn \$1; beef cattle \$8@9; calves, veal \$8; butter 18c; eggs 19½c; chickens, hens 10½c; spring chickens 10½c; turkeys 14½; young turkeys 13c; ducks 8c; young ducks 9c; geese 4c; young geese 9c; cocks 6c; guineas, young and old 15@25c; hides, green 11½c per lb; feathers 43@60c.

## Kansas.

**Lincoln Co., Oct. 10.**—This section had a fine rain; the wheat is up fine; grasshoppers did some damage to the wheat and alfalfa. There are not very many farm products displayed on the fairs, while horses and cattle are plentiful. Some cattle are shipped in for roughing through the winter. Hogs are sold light and cheap, \$7.50 was paid by the shipper. Cream 23c; eggs 16c. Wheat is being kept for higher prices.

**Dickinson Co., Oct. 3.**—Farmers are busy sowing wheat. The ground is in good condition, and a large acreage is being sown. There is very little corn to be husked. Rough feed plentiful. Stock is coming out of pastures in good shape. Apples and potatoes are not much of a crop. Threshing is nearly all done. Wheat averaged 25 to 30 bushels; oats 30 to 60 bushels. Wheat 90c; corn 90c; hogs \$7.50; eggs 21c; butter 22c; chickens 10c.

## Nebraska.

**Hitchcock Co., Oct. 9.**—At present we are having some nice rains, which places the ground in good condition for fall sowing. A large acreage is being sowed. The potato crop is from Colorado and are selling for \$1 per bushel. Some hog cholera is reported, which is unusual for this part of the country. Wheat prices are down to 81c on the local market. The farmers are hauling grain quite fast to market.

## LIVE STOCK NEWS.

Provisions have participated in recent weeks in the course of the hog market, with a sharp recent rally in prices, however. Stocks of cured hog meats in leading packing centers decreased last month 20,842,000 lbs., as compared with a reduction of 51,278,000 lbs. in the same month last year, aggregate stocks being 150,000,000 lbs. on October 1, or 31,000,000 lbs. less than a year ago. Stocks of lard in the same places decreased last month 66,000 tierces. Local packers are helped in putting hogs lower by the small eastern demand here for hogs, and they are talking liberal hog supplies after the pigs are matured.

Charles Shurte, the widely-known sheep seller in the Chicago stock yards, reports that shipments of feeder lambs and sheep from Chicago and Omaha markets this year have run probably 200,000 head short of the same time last year. He thinks prices for feeders are not likely to go very much lower and says he regards them as nearer worth the prices asked than they were last year. More killing lambs and fewer feeders have been coming to market, and this has made a firmer market for the latter. Mr. Shurte says: "The country is short of native lambs and sheep and owing to the recent dry weather I believe they have been marketed closer than usual, so that it looks as though they will be marketed sparingly during the fall and winter months. Therefore there are high prices in sight."

A Missouri stock feeder marketed in Chicago recently 60 head of fat Hereford cattle that averaged 1690 pounds at \$10.70 per 100 pounds. The cattle were bred in Texas, were grazed in that state and marketed in Kansas City last October, when they were bought by Mr. Schlup. He put them on full feed in January and turned them on grass the first of May, feeding them shelled corn up to the time of marketing.

Feeding of live stock promises to be centered in strong hands this fall and winter. Country banks are very conservative in lending money to their customers for financing feeding operations, and to a large extent the men who are buying cattle or lambs for finishing on feed are using their private funds for the purpose. It is certain that tight money is going to keep out many intending beginners and financially weak stockmen, and this will inevitably greatly improve the chances for those who do engage in feeding live stock.

Col. Ike T. Pryor, the veteran Texas cattleman and vice-president of the American National Live Stock Association, is favoring the southwestern cattlemen cashing in their cattle now that prices have reached top levels, declaring it his firm belief that the wail of the consumer before long will have the result of breaking the market. He says: "I am more than gratified at the splendid way in which the cattle market is holding up, especially in view of the European war situation. And now, while the market is good and prices high, I believe it will be the part of wisdom for the cattlemen to put all of their cattle on the market and get the money. Now the cattlemen can get the money for their cattle and reduce their financial obligations before money becomes even scarcer than at present. If in the fall conditions are uncertain and paper is maturing just the same, it is likely that the would-be purchasers will not have the money to buy cattle. Hence, in my opinion, it is the part of wisdom for the cattleman to sell his stock now while he can get the money and a price on a level with what he will find the quotations a month or two later." Colonel Pryor declared that the war has not affected the price of cattle and that the market is on a level with the market of a few months before the war began. He believes that in the event of money matters becoming less stringent, many farmers will buy cattle for raising.

Edward C. Simmons was recently selected by President Wilson for the position of Governor of the Federal Reserve Board, under the new Currency Act, but felt it necessary, on account of his advanced years, not to undertake that great work. Such a service—second to none in importance to the commercial interests of the country—would indeed have been a fitting climax to the successful career of this man, who typifies the highest ideals in American business life. Among the many remarkable things done by this man, who has frequently been called "the leading merchant of the United States," was his far-sighted act in resigning the presidency and all active management of the Simmons Hardware Company in 1897, when his oldest son, W. D. Simmons, was elected president, which office he still holds. Two other sons—Edward H. Simmons and George W. Simmons—are vice-presidents.

## Waterproof

Not nearly—not fairly—but dryly waterproof



## REFLEX SLICKER

The wet weather coat for you for good hard service. Light weight, strong, and big all over for comfort.

\$3.00 Everywhere Protector Hat, 75 Cts. SATISFACTION GUARANTEED Catalog free  
A. J. TOWER CO., Boston

## Farms and Farm Lands For Sale

## MICHIGAN FARMING LANDS

Near Saginaw and Bay City, in Gladwin and Midland Counties. Low prices: Easy terms: Clear title. Write for maps and particulars. STAFFELD BROTHERS, 15 Merrill Building, Saginaw, (W. S.), Michigan.

**FOR SALE**—In whole or part, 320 acre southern Michigan farm. Good soil, buildings and fences. Immediate possession. O. S. SCHAEFER, 214 Dewey Ave., Swissvale, Pa.

## DELAWARE FARMS

Fruit, live stock, alfalfa. Best land near best markets. Address, State Board of Agriculture, Dover, Delaware.

**Sunny Tennessee**—194 acres fenced, 125 ready for plow, cotton, corn and clover land, 8 room dwelling. Price \$4000. Similar bargains. Free List. JENKINS & SON, Huntington, Tenn.

**FOR SALE**—60 acre farm, 35 acres seeding, level, buildings, best in Michigan, must sell, a bargain at \$3000. Address, 146 Rust Ave., Big Rapids, Michigan.

**BARGAIN! 80 ACRES.** 6 acres best onion land, balance best hardwood grain land, best state of cultivation, fitted for dairy. Silo and plenty of good buildings, 2 miles new wire fence, 80 rods from city limits of city of 6,000. Price \$6,000. Address owner, Andrew O. Brown, Hastings, Mich.

**Farm For Sale or Exchange** for a smaller farm, Farm F comprises 80 acres of clay loam, in Huron County, one of the best farms in the Thumb District. Good buildings, orchard, water, and well fenced with woven wire. Apply Box C-24 The Michigan Farmer, Detroit.

**MARYLAND**—The State for Thrifty Farmers. Delightful, healthy climate. Good Land. Reasonable Prices. Close to big markets of large cities of the East. Send for free descriptive pamphlet with map. STATE BUREAU OF IMMIGRATION, Hoffman Bldg., Baltimore, Md.

**210 Acres** 22 head fine cows and heifers, 5 horses, best stock, hay, grain, 14 room big white house, large barns, basements. Hay, crops, stock, tools, every thing on this fine farm, goes \$12,000, part cash. Write for particulars. Hall's Farm Agency, Owego, Tloga Co., N. Y.

**Rich Ohio Farms at Farm Prices**  
NICE LEVEL 70-ACRE FARM.

Good location, new house, barn and orchard. Price \$3,850. Very easy terms.

**EXCELLENT 108-ACRE FARM.**  
One mile from town. Two sets of good buildings, two orchards, sugar grove, good timber, rich land. Price \$6,950. Terms, \$2,500 down, balance very easy. GET OUR LARGE LIST OF FARM BARGAINS. S. W. WILSON, - ATWATER, OHIO

## \$2,000 Cash Required

232 Acres, 30 Cows, 3 Horses, Machinery, Tools and Crops

Big immediate steady income assured; in one of New York's best farming sections; cuts 100 tons hay, produces great quantities all staple crops; pasture for 60 cows; large woodlot; fine buildings; 8-room house; 90-ft. basement barn, concrete floor; silo; 50-ft. basement barn, concrete floor; horse barn; poultry house; all supplied with fine water; slightly location; beautiful view; perfect drainage; aged owner has made money, wants to retire; if taken now you get 30 Holstein cows, 3 horses, poultry, machinery, wagons, tools, 8 acres oats, 7 acres corn, etc., with price for all only \$8000, \$2000 cash, balance easy terms; photograph of residence and traveling directions, page 3, "Strout's Special Bargain Sheet". Send today for your free copy. E. A. STROUT FARM AGENCY, Station 101, Union Bank Bldg., Pittsburg, Pa.

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Down South there are wonderful openings for ambitious men. Farming offers exceptional opportunities. Cheap lands, fine climate, ample rain, big crops and good markets. Business and industrial openings everywhere. "Southern Field" magazine, "Business Openings" folder and State booklets on request.  
M. V. RICHARDS, D. & J. Art. Washington, D. C. Room 78.  
Southern Ry. Mobile & Ohio Ga. So. & Fla. Ry.

## Go To Idaho

The state of diversified farming—fruits, grains, grasses, alfalfa, sugar beets, etc., also stock raising—the State where you have many real comforts on the farm, that are not available in many other sections. Electricity at low cost is used for lighting, heating, cooking and for power on many farms, and in most towns in Idaho.

There are many tracts of land—irrigated and nonirrigated—suitable for all kinds of farming, for sale cheap and on reasonable terms. I will give complete information to you free for the asking.

R. A. SMITH,

Colonization and Industrial Agent, Union Pacific R. Co., Room 352, Union Pacific Bldg.

OMAHA, NEB.

Please mention the Mich. Farmer when writing to advertisers.

## NATIONAL CROP REPORT.

The Crop Reporting Board of the Bureau of Crop Estimates makes the following estimates of production of the various crops named for the United States from reports of its correspondents and agents, which are compared with the final yields in preceding years, for comparison as follows:

Crop.	1914. Forecast.	1913. Final.	1909-1913. av. Final.
Winter wheat .....	675,000,000	523,000,000	441,000,000
Spring wheat .....	217,000,000	240,000,000	245,000,000
All wheat .....	892,000,000	763,000,000	686,000,000
Corn .....	2,676,000,000	2,447,000,000	2,708,000,000
Oats .....	1,137,000,000	1,122,000,000	1,131,000,000
Barley .....	197,000,000	178,000,000	182,000,000
Rye .....	43,000,000	41,000,000	35,000,000
Buckwheat .....	17,000,000	14,000,000	17,000,000
White potatoes .....	382,000,000	332,000,000	357,000,000
Sweet potatoes .....	55,000,000	59,000,000	58,000,000
Tobacco, lbs. ....	954,000,000	954,000,000	996,000,000
Flax .....	17,000,000	18,000,000	20,000,000
Rice .....	24,000,000	26,000,000	24,000,000
Hay (tame) tons. ....	69,000,000	64,000,000	66,000,000
Apples .....	230,000,000	145,000,000	176,000,000

\* Interpreted from condition reports. \* Preliminary estimate.



# Markets.

## GRAINS AND SEEDS.

October 20, 1914.

**Wheat.**—The past was a week of bullish sentiment in wheat circles and prices have advanced. The statistical situation indicates more strongly than ever that the wheat crop of the world is below normal, and that because of the unusual conditions prevailing in Europe, prices should at least be maintained somewhere near the present basis. Exporters are buying in liberal quantities, and the demand for ships to carry the grain abroad is urgent. There has been a heavy falling off in the amount of wheat delivered by farmers at primary elevators in the spring wheat districts and those having winter wheat for sale are acting conservatively because of faith in better prices later on. The visible supply increased less than for the corresponding week in 1913. The price for No. 2 red wheat one year ago was 91½¢ per bushel. Quotations for the past week are:

	No. 2	No. 1	
	Red.	White.	Dec.
Wednesday	1.10	1.07	1.15
Thursday	1.10	1.07	1.15
Friday	1.10½	1.07½	1.15½
Saturday	1.11½	1.08½	1.16½
Monday	1.13½	1.10½	1.18½
Tuesday	1.13½	1.10½	1.18½

Chicago, (Oct. 19).—No. 2 red \$1.12½@1.14½; December, \$1.16½; May, \$1.22½.

**Corn.**—Notwithstanding the small volume of corn changing hands prices have advanced in sympathy with wheat. An improvement in weather conditions is helping to secure the crop, and has no doubt prevented a larger advance than would otherwise have been made. While this grain is not meeting so broad a demand partially, no doubt, for the reason that the new crop is not yet on the market, the effect of the foreign call for wheat and oats is reflected in trade circles for corn. One year ago No. 3 corn was quoted at 71½¢ per bushel. Quotations for the past week are:

	No. 3	No. 3	
	Mixed.	Yellow.	
Wednesday	73	75	
Thursday	73	75	
Friday	73	75	
Saturday	74	76	
Monday	74	76	
Tuesday	74	76	

Chicago, (Oct. 19).—No. 2 yellow, 73¼@74¼¢; December 68¾¢; May, 70¾¢.

**Oats.**—Market is firm at advanced prices. A strong foreign demand has helped sellers and is securing for the farmers rather satisfactory prices. Both France and Italy took large quantities of oats the past week. There is also an active local demand. The visible supply increased over two million bushels last week. A year ago the quotations for standard oats was 41½¢ per bushel. Quotations are as follows:

	Standard.	No. 3	
		White.	
Wednesday	48	47½	
Thursday	48	47½	
Friday	48½	48	
Saturday	49	48½	
Monday	50	49½	
Tuesday	50	49½	

Chicago, (Oct. 19).—Standard 48¼@48½¢; Dec., 50¢; May 53¼¢.

**Rye.**—This grain is firm at 91¢ for No. 2, which is 1¢ higher than last week.

**Clover Seed.**—Market is quiet and easy. Prices are lower. Prime spot quoted at \$9; December \$9.15; March at \$9.35; prime alsike sells at \$8.75.

**Beans.**—Demand is good and prices are higher. Detroit quotations are: Immediate and October shipment \$2.25. Chicago.—Firm tone prevails here but dealers are not saying much about the business. Prices are higher. Pea beans, hand-picked, choice, are quoted at \$2.35@2.40; common at \$2.10@2.25; red kidneys, choice \$3.50.

## FLOUR AND FEEDS.

**Flour.**—Market is fair, with prices some lower. Jobbing lots in one-eighth paper sacks are selling on the Detroit market per 196 lbs., as follows: Best patent \$6; second \$5.50; straight \$5; spring patent \$6.20; rye flour \$5.80 per bbl.

**Feed.**—In 100-lb. sacks, jobbing lots are: Bran \$24; standard middlings \$25; fine middlings \$32; coarse corn meal \$31; corn and oat chop \$28 per ton.

**Hay.**—Carlots on track at Detroit are: New, No. 1 timothy \$16@16.50; No. 2, \$14@14.50; No. 3, \$11@12.

Chicago.—Demand fair and offerings large. Choice timothy \$16@16.50; No. 1, \$14@15; No. 2, \$12.50@13.

**Straw.**—Steady. Rye \$7.50@8; oat straw \$7@7.50; wheat straw \$7@7.50 per ton.

## DAIRY AND POULTRY PRODUCTS.

**Butter.**—Good butter firm and active at prices 1¢ higher than last week. Extra creamery 30¢ per lb; firsts 28¢; dairy 19¢; packing stock 18¢ per lb.

Chicago.—Firmness for fancy grades and easiness for under grades still prevail in this market. Prices have advanced for the fancy and declined for the lower grades. Extra creamery 30¢; extra firsts 28@29¢; firsts 25@26½¢; seconds 23@24½¢; packing stock 20@20½¢.

Elgin.—Sold at 30¢ which is the same as last week.

**Eggs.**—Market is steady with prices unchanged. Fresh stock sells at 23¢ per dozen; current receipts 21½¢.

Chicago.—Fresh eggs are in demand at higher prices while for the under grades the trade is only fair. Miscellaneous lots, cases included 17@22½¢; ordinary firsts 20@21¢; firsts 22½@23¢.

**Poultry.**—In ample supply and market easy, with prices on hens and springs 1¢ lower. Springs 13@13½¢; hens 13@13½¢; ducks 14@15¢; young ducks 15@16¢; geese 11@12¢; turkeys 19@20¢.

Chicago.—Large receipts lowered prices on fowls and springs. Trade was good at the decline. Quotations on live: Fowls 12½@13¢; spring chickens 12¢; ducks, good stock 14¢; guinea hens, per dozen \$3.50; young guinea hens \$2@4; turkeys 16¢; geese 12@13¢ per lb.

## FRUITS AND VEGETABLES.

**Fruits.**—Pears, Bartletts, \$1.75@2 per bu; common 50@75¢; grapes 15@16¢ for blue, per 8-lb. basket.

Chicago.—Michigan peaches 75¢@1.25 per bushel; pears \$1.25@5 per bbl; grapes 15¢ per 8-lb. basket; quinces 75¢@1.25 per bushel.

**Vegetables.**—Home-grown cabbage, 75¢@1 per bbl; new beets 50@55¢ per bu; radishes \$1@1.25 per hundred bunches; tomatoes 80¢@1 per bushel.

**Potatoes.**—Michigan 50¢ per bushel in sacks; carlots 45@48¢ per bu; at Chicago Michigan white, sacked, are quoted at 45@53¢ per bushel.

**Apples.**—Supply is liberal and demand is fair. Average receipts 50@75¢ per bu; \$1.50@3 per bbl.

Chicago.—Trade is good and supply is ample. Trade is divided between barrel, bulk and box stock. Stock held at higher prices moves slowly. Baldwins \$1.75@2; Wealthy \$1.75@2.50; Kings \$2.25@2.75; Wageners \$2@2.25; Jonathans \$3.50@4; greenings \$2@2.25; Northern Spy \$2.50; bulk apples \$90@225 per car. Western box apples are selling for \$1@1.75 per box.

## WOOL.

The placing of an embargo upon the exportation of wools from England and the advanced prices paid at the recent London sales have given the wool market on this side a much stronger tone with values firm to higher. Although fleece wools have not participated in the strength as much as other grades, prices are well maintained and some sales are being consummated. Unwashed combings are going at 29@30¢, with Michigan offerings at 26@27¢. Michigan unwashed clothing range from 23@26¢, and do. delaine 27@28¢. Sales for the week at Boston amounted to five million pounds.

## GRAND RAPIDS.

While egg dealers are quoting 26@27¢ to the country trade for strictly fresh eggs, the stores are retailing them for 32¢ and farmers with private customers have no trouble in getting this price. No. 1 dairy butter is now around 30¢ to private trade. Potatoes are quoted at 45@50¢ on the city market and stores are selling them at 60¢. The outside markets last week were lower, with prices ranging around 30¢ at loading stations. The apple market continues quiet with much fruit going into cold storage. National Apple Day was widely observed here Tuesday of this week, with large displays and sales made by merchants, banks, the hospitals and others. The movement will help the growers.

## DETROIT EASTERN MARKET.

There were fewer teams on the market Tuesday morning; trading, however, was fairly active. This is the season of the year when the offerings on the city markets meet with strong competition from the wholesale houses, with the result of a slower movement prevailing in certain lines. Apples and potatoes are particularly affected at the present time. Tuesday morning potatoes were generally selling at 65¢ per bushel, while apple prices ranged from 50¢@1. Cabbage 25¢; cauliflower 60¢; pears 60@80¢; celery 25¢ per bunch; chickens \$1 a pair; loose hay is selling at \$17@19 per ton.

## THE LIVE STOCK MARKETS.

### Buffalo.

October 19, 1914.

(Special Report of Dunning & Stevens, New York Central Stock Yards, Buffalo, N. Y.)

With 230 cars of cattle on our market today, and with heavy receipts reported in Kansas City, Chicago and also Jersey City, our market was fully 15@25¢ per cwt. lower than last Monday on all grades of cattle, quality considered, and the market was dull and draggy from start to finish, and at the close there were several loads of cattle unsold that never received a bid. Our advice would be to shippers from the country, for the next 30 days, to buy nothing but strictly fat cattle, no matter whether females, handy butcher steers or shippers, as the slippery and half-fat low grade cattle cannot be sold to make any margin from the country.

We had entirely too many hogs today for present conditions, about 150 double decks, the largest run of the season to date, consequently a lower market on everything. We had a fairly good outside demand, and while packers did not take any great number, trading was fairly active and a fair clearance was made. The bulk of the best sorted hogs sold at \$7.90, with a few decks of fancy at \$7.90 and one load of choice hogs at 8¢ per lb. Pigs sold from \$7@7.10, and light hogs from \$7.25@7.50; roughs \$6.50@6.75; stags \$6.25@6.75. Late trade was rather dull and with 15 double decks of hogs going over unsold, prospects for the next few days look no better, unless on the pig end. Possibly pig weights will sell some higher, but would still bear in mind that hogs are going to sell cheaper and would continue to buy for declining markets.

The market was active today on lambs and slow on sheep, with prices 15¢ higher on lambs than the close of last week; choice handy lambs selling mostly at \$8.15. We look for steady to shade higher prices last of the week.

We quote: Lambs \$8@8.15; cull to fair \$6@7.90; yearlings \$6@6.75; bucks \$3@4.25; handy ewes \$5.25@5.50; heavy ewes \$5@5.10; wethers \$5.50@5.85; cull sheep \$3.50@4.50; veals, choice to extra \$11.75@12; fair to good \$10@11.50; heavy calves \$6@9.

Receipts here today as follows: Cattle 230 cars; hogs 150 d. d.; sheep and lambs 50 d. d.; calves 1600 head.

### Chicago.

October 20, 1914.

Cattle, Hogs, Sheep.  
Receipts today..29,000 37,000 38,000  
Same day 1913..17,822 41,951 42,979  
Last week.....53,022 106,165 179,388  
Same wk 1913..50,718 141,552 167,893

The receipts of cattle this Monday are greatly excessive for these times, and at a late hour scarcely any were sold. The expectation was that while the best beefs and cheap canners would be closed out at steady prices, the general run would decline sharply. The run included about 10,000 western rangers—an unusually liberal supply. Other markets wired heavy cattle supplies. Hogs suffered a landslide, prices breaking mostly 20@25¢, with sales at \$6.80@7.85. Hogs received last week averaged 230 lbs., comparing with 237 lbs. a week earlier and 254 lbs. late last August. Sheep and lambs are steady to firmer, with range feeding lambs selling 10¢ higher for the best at \$7.25.

Cattle were in much the same condition as they were in previous weeks during the last week, with decidedly too generous receipts of grassy natives, which had to compete with fair offerings sold 10@15¢ lower. This On the opening day the cattle receipts aggregated 22,470 head, and before the close of the day the bulk of the offerings sold 0@15¢ lower. This weakness brought about much smaller supplies, and the decline was largely checked, only 14,523 head arriving on Wednesday's market. Demand continued to center strongly on choice beefs, but even the very best cattle had to sell lower, \$10@10.90 being paid for choice to extra steers. The commoner light-weight grassy steers sold at \$6.40@7.75, and the bulk of the steers of all descriptions found buyers at \$8@10.25, fat light steers and handy-weight yearling steers being prime favorites with buyers. Fair to middling steers brought \$7.80@8.50, while a medium grade sold at \$8.60@9.35, with sales of good steers at \$9.40@9.95. Yearling steers of desirable quality brought \$9.50@10.70, with sales all the way down to \$7.75@8 for common yearlings, while butchering cows and heifers sold at \$5.10@9.60 for common to fancy lots. Cutters brought \$4.65@5, canners \$3.60@4.60 and bulls \$4.50@7.75. There was a fairly large movement in stockers and feeders, the former selling at \$5@7.50 and the latter at \$6@8. Plenty of common lots of these cattle were offered on low terms, but the call continued to run more on the better class, and these were not offered very liberally. Stock calves sold at \$7.25@

8 and stock and feeding cows and heifers at \$5@7.15. Calves sold at \$5@11.25 and milch cows at \$60@95 each. An important factor in the cattle trade is the big demand for canned meats, millions of pounds of corned beef and tinned beef having been purchased from Chicago packers by agents for the allied armies in Europe. Late in the week stockers and feeders declined 25@50¢.

Hogs continued on their downward course for still another week, despite the fact that receipts in the Chicago and other packing centers continued much smaller than in recent years, the reduction in supplies for the year compared with 1913 being enormous. Prices made further low records for the year, with medium weights selling highest, followed by prime light hogs, while heavy packing hogs sold lowest of all, as usual. The continued downward movement of prices is responsible for reductions of average weights in the hog receipts in recent weeks, late receipts having averaged 237 lbs., or 11 lbs. less than the average at the beginning of September. The average was 207 lbs. a year ago, when great numbers of pigs and underweights were shipped in because of the ravages of hog cholera. Four years ago, however, when hogs were selling at \$9@9.35, the receipts averaged 261 lbs. Pigs have been arriving at the rate of about 4500 a week, comparing with 10,000 to 15,000 a year ago. Eastern shippers have been moderate buyers. Hogs closed Saturday at their lowest, sales being at \$7@8.05, with pigs at \$5@7.25. A week earlier hogs brought \$7.15@8.45.

Sheep and lambs were marketed with great freedom last week, the ranges furnishing again the great bulk of the supplies, and a big share of the range lambs consisted of feeders from Montana and Wyoming, with some from Idaho. Diminishing offerings of prime fat lambs checked weakness in their values, but otherwise lambs sold lower under liberal receipts. The best demand was for feeders, and these were much slower to show weakness than mutton flocks. Closing prices were: Lambs \$6@7.85; feeder lambs \$5.50@7.15; yearlings \$5.50@6.50; wethers \$5.35@6; ewes \$3@5.10; feeding ewes \$4@4.60; breeding ewes \$5@6.25; bucks \$3.75@4.25.

Horses were marketed so sparingly last week that weakness in prices was checked, despite a small general demand. The poorer class sold at \$60@100 per head and the best class of heavy drafters at \$240@285, while a fair to good class of horses went at \$110@235. The bulk of the horses failed to go over \$200.

## LIVE STOCK NEWS.

Money lenders are reported as loosening up a little in some parts of cattle feeding districts, and it is possible in quite a number of cases to effect necessary loans on cattle paper. Loaners usually insist on early maturity of such loans.

Provisions have undergone material reductions in prices in sympathy with the remarkable downward movement that has taken place in hog prices in recent weeks.

John Clay of Chicago, widely known in live stock circles, says: "This autumn the migration to the country of feeding lambs and sheep is woefully short. The result we will see next spring in higher prices. But we must look further ahead. The open range is contracting. Every dry farmer, every acre put under crop, whether it be successful or not, means restricted grazing. As the cattle are gradually disappearing from our western plains, so the sheep will need to graze in enclosed pastures, or at least on land owned or leased by our flockmasters. This condition will not come all at once, but slowly, surely the lines are tightening. The remedy lies in our getting back to the farm, back to the homesteads of Illinois, Indiana, and Ohio, to the stump lands of Michigan, to the wornout farms of New England, to the hillside of Virginia and kindred states. This fall, on account of money matters, we are having an up and down market, but the writing is on the wall in strong lettering that except we commence reproduction of our flock and fleece, we are in for high prices in this line of live stock such as were seen in cattle and hogs."

Cattle of prime beef grade are selling at unusually high prices still because of their growing scarcity, while the numerous consignments of grass cattle offered in Chicago and Missouri river markets have undergone a big decline, with native grass cattle forced to compete with cattle from the western ranges.

The Chicago Live Stock Exchange has passed the proposed substitute for the telegraph and telephone rule. The rule now adopted prevents members from sending prepaid telegrams or telephone messages, or receiving messages sent collect. The penalty provided for live stock commission men, violating the rule is censure, fine, suspension or expulsion.



## THIS IS THE FIRST EDITION.

The first edition is sent to those who have not expressed a desire for the latest markets. The late market edition will be sent on request at any time.

## DETROIT LIVE STOCK MARKETS.

## Thursday's Market.

October 15, 1914.  
Cattle.

Receipts 1311; market steady. Best heavy steers (quotable) \$8.50@8.75; best heavy weight butcher steers \$7.50@8; mixed steers and heifers \$7@7.25; handy light butchers \$6.50@7.25; light butchers \$6.25@6.75; best cows \$6@6.50; butcher cows \$5.25@5.75; common cows \$4.50@5; canners \$3.50@4.50; best heavy bulls \$6@6.75; bologna bulls \$5.50@5.75; stock bulls \$5@5.50; feeders \$6.50@7.25; stockers \$5.50@6.25; milkers and springers \$4@9.00.

Bishop, B. & H. sold Parker, W. & Co. 2 cows av 980 at \$4.75, 12 do av 900 at \$4.75; to Smith 21 stockers av 540 at \$6; to Watkins 39 do av 505 at \$6; to Sullivan P. Co. 5 cows av 980 at \$5.90, 9 butchers av 750 at \$6.50, 4 cows av 750 at \$6.50; to Bresnahan 3 cows av 850 at \$4.25; to Parker, W. & Co. 2 bulls av 1150 at \$6; to Rattkowsky 3 butchers av 600 at \$5.25; to Mason B. Co. 1 steer wgh 1180 at \$8, 16 butchers av 920 at \$7; to Applebaum 3 cows av 875 at \$5; to Newton B. Co. 2 steers av 925 at \$8, 2 do av 1150 at \$6, 4 cows av 800 at \$5.50, 1 heifer wgh 850 at \$6.75, 1 steer wgh 1030 at \$7.50, 1 bull wgh 1100 at \$6; to Watkins 14 stockers av 650 at \$5.50, 2 do av 400 at \$5, 10 do av 632 at \$6; to Breitenbeck 9 steers av 950 at \$7.35, 2 cows av 1100 at \$5.50; to Thompson Bros. 2 do av 910 at \$5.50; to Breitenbeck 2 do av 870 at \$4.25, 6 do av 950 at \$4.75; to Watkins 26 stockers av 550 at \$6.25, 35 do av 626 at \$6.25, 41 do av 531 at \$6.10; to Newton B. Co. 27 butchers av 840 at \$6.75; to Mich. B. Co. 4 steers av 900 at \$7.75; to Parker, W. & Co. 10 cows av 1084 at \$4.75; to Rattkowsky 9 do av 1032 at \$5.60; to Mason B. Co. 4 do av 962 at \$6.25, 3 do av 747 at \$5.25, 5 butchers av 800 at \$6.65, 2 do av 765 at \$7, 1 cow wgh 1150 at \$5.50.

Haley & M. sold Resnick 3 butchers av 553 at \$5.25; to Breitenbeck 11 do av 782 at \$6.85, 9 do av 842 at \$6.85; to Lachalt 1 steer wgh 760 at \$6.50, 3 do av 817 at \$6.50; to Kamman B. Co. 1 cow wgh 950 at \$6, 1 steer wgh 1080 at \$7.75, 9 do av 751 at \$6.95; to Hammond, S. & Co. 12 butchers av 770 at \$6.35, 10 do av 559 at \$5.75, 23 do av 550 at \$5.75; to Resnick 1 cow wgh 1020 at \$5, 1 do wgh 770 at \$5.40; to Sullivan P. Co. 2 do av 1070 at \$6.25, 1 do wgh 940 at \$5.25, 1 bull wgh 890 at \$6; to Applebaum 2 do av 590 at \$5; to Findlay 4 stockers av 620 at \$6.25; to Spencer 20 do av 585 at \$6, 20 do av 507 at \$6; to Kamman B. Co. 16 butchers av 783 at \$6.65; to Thompson Bros. 1 cow wgh 1230 at \$6.25, 1 steer wgh 1030 at \$7.25, 2 do av 425 at \$6.50, 2 cows av 815 at \$5, 1 do wgh 880 at \$6; to Shapero 8 butchers av 462 at \$5.40.

## Veal Calves.

Receipts 511. Market 25@50c lower; few extra at \$11.25@11.50; good \$10@11; others \$7@9.50.

Spicer & R. sold Kull 5 av 150 at \$10.50; to Thompson Bros. 15 av 140 at \$10.40; to Parker, W. & Co. 7 av 185 at \$11; to Rattkowsky 5 av 150 at \$10.50, 1 wgh 140 at \$11.

Roe Com. Co. sold Rattkowsky 3 av 120 at \$11, 3 av 135 at \$7, 1 wgh 340 at \$6.50, 6 av 150 at \$11, 3 av 110 at \$8.

## Sheep and Lambs.

Receipts 7235; market steady. Best lambs \$7.50; fair lambs \$7@7.35; light to common lambs \$6.25@6.75; fair to good sheep \$4@5; culls and common \$2.50@3.50.

Haley & M. sold Thompson Bros. 36 sheep av 90 at \$4.35, 42 lambs av 70 at \$7.40, 25 do av 60 at \$6.75; to Sullivan P. Co. 39 sheep av 90 at \$4.50, 21 do av 100 at \$4.65, 23 lambs av 70 at \$6.75, 172 do av 80 at \$7.50.

Spicer & R. sold Hayes 6 lambs av 60 at \$7; to Rattkowsky 15 sheep av 110 at \$4.50; to Mich. B. Co. 6 do av 115 at \$3.50, 31 lambs av 75 at \$7.50, 46 do av 70 at \$7.50, 38 do av 70 at \$7.35, 25 do av 83 at \$7.25.

Roe Com. Co. sold Sullivan P. Co. 13 lambs av 55 at \$6.50, 23 sheep av 120 at \$4.50, 13 do av 100 at \$4, 14 do av 100 at \$4.60; to Nagle P. Co. 80 lambs av 72 at \$7.40, 98 do av 82 at \$7.30, 115 do av 85 at \$7.25, 66 do av 80 at \$7.40, 22 sheep av 95 at \$4.50, 16 do av 105 at \$4.50; to Hayes 15 lambs av 55 at \$6.50.

## Hogs.

Receipts 5997. Wednesday's sales were at steady prices. Pigs \$7.50; others \$7.80@7.85.

Bishop, B. & H. sold Hammond, S. & Co. 2200 av 190 at \$7.85, 275 av 160 at \$7.80.

Roe Com. Co. sold Sullivan P. Co. 150 av 200 at \$7.85, 100 av 160 at \$7.80.

Spicer & R. sold Parker, W. & Co.

260 av 200 at \$7.85, 75 av 160 at \$7.80.

Thursday's market at a standstill as we go to press, with packers bidding \$7.80 for tops and shippers refusing to sell at that price.

## Friday's Market.

October 16, 1914.

## Cattle.

Receipts this week 1388; last week 1952; market steady. Best heavy steers \$8.50; best handy weight butcher steers \$7.50@8; mixed steers and heifers \$7@7.25; handy light butchers \$6.50@7.25; light butchers \$6.25@6.75; best cows \$6@6.50; butcher cows \$5.25@5.75; common cows \$4.50@5; canners \$3.50@4.50; best heavy bulls \$6@6.75; bologna bulls \$5.50@5.75; stock bulls \$5@5.50; feeders \$6.50@7.25; stockers \$5.50@6.25; milkers and springers \$4@9.00.

## Veal Calves.

Receipts this week 599; last week 678; market steady. Best \$11@11.25; others \$7@9.50.

## Sheep and Lambs.

Receipts this week 8578; last week 8538; market steady. Best lambs \$7.50; fair lambs \$7@7.35; light to common lambs \$6.25@6.75; fair to good sheep \$4@4.75; culls and common \$2.50@3.50.

## Hogs.

Receipts this week 7478; last week 9326; market slow. Pigs \$7.50; others \$7.70@7.80.

## LIVE STOCK NEWS.

Frank B. McLain writes from Lancaster, Pa., that feeder cattle are scarce, their scarcity being aggravated by the shutting down of the Canadian cattle because of the high rate of money exchange between the United States and Canada. The best feeders offered on the Lancaster market recently averaged 940 pounds and cost \$8.15 per 100 pounds. They were shipped there from Chicago. Eastern feeder cattle markets have been in a healthy condition.

Several country buyers have paid pretty steep prices in the Chicago market of late for nice feeding lambs. A short time ago an Ohio buying order for 500 head of choice fleshy lambs for a short feed was filled at \$7.25 per 100 pounds, but the lambs were really of killing grade, with the best 58 to 60-pound feeders held at the same time at \$7.10@7.15 without finding ready purchasers. Since then the best Idaho range feeding lambs have sold up to \$7.40, with quick sales near that price.

The meager offerings of common canning and butchering cattle in the Chicago stock yards in recent weeks resulted in the big packing firms sending agents throughout stock feeding districts for picking up such stock from first hands, and considerable numbers were secured in this manner. Other markets were drawn upon at the same time, and in a single day upwards of 25 carloads of cheap cow stuff arrived from other points, including seven cars of Canadians from Buffalo, and job lots from Cincinnati, Milwaukee, St. Louis and elsewhere.

Oscar Cain, of Iowa, son of Edward Cain, who, before his recent retirement, was one of the largest cattle feeders in that state, arrived on the Chicago market with a shipment of two cars of prime heavy beeves that tipped the scales at 1465 lbs. There were 32 head of them and they brought \$10.90 per 100 lbs. They were put on full feed on April 1 last, and Mr. Cain said they brought him more money than any other cattle he ever fed, and were good money-makers. He said there are very few cattle being bought to put on feed in his locality, and added that he owned a load of heavy sows that looked much lower in value than cattle.

John Blanchard, the widely-known feeder of lambs, of Wisconsin, made his appearance in the Chicago stock yards recently in search of high-class range feeding lambs. He said he is going to feed about his usual number of lambs the coming winter, or about 8,000 head, and he intends to confine his purchases to a fleshy, breedy class, believing that in this period of high feed prices the meat can be bought cheaper than it can be put on a lamb carcass. Regardless of the flesh his feeders carry when put in the feeding sheds, it is a safe guess that Mr. Blanchard's lambs will be finally marketed in prime condition.

South Dakota cattlemen say the range never looked better than this season, but most of the former large cattlemen have been forced to smaller pastures and smaller herds, while the newly settled farmers are buying small herds of cattle.

Buyers for the commissaries of the French, British and Belgian armies were reported as quietly buying meat and other supplies in Chicago a few days ago. These buyers were operating secretly and required dealers to remain silent about these negotiations. Packers have been free buyers of the cheaper class of live stock suitable for canning purposes of late, especially canning cattle.

## Veterinary.

CONDUCTED BY W. C. FAIR, V. S.

Advice through this department is free to our subscribers. Each communication should state history and symptoms of the case in full; also name and address of writer. Initials only will be published. Many queries are answered that apply to the same ailments. If this column is watched carefully you will probably find the desired information in a reply that has been made to someone else. When reply by mail is requested, it becomes private practice, and a fee of \$1.00 must accompany letter.

Suppurative Lumpjaw.—I have a cow that has a bunch on jaw; it occasionally breaks and runs, and I would like to know if it is curable. H. H. Armada, Mich.—Apply tincture of iodine to sore and surrounding edges every day or two. Give her 2 drs. of potassium iodide at a dose two or three times a day and if this treatment fails to effect a cure, fatten her. Perhaps you had better segregate her.

Contagious Abortion.—We have a small cow which we believe has contagious abortion. Had we better try to effect a cure, and if so, what had we better apply? I have tried commercial remedies, but they fail in this case. Is there any danger of bull becoming infected when mated to her? B. L. P., Fowlerville, Mich.—If this cow is the only one in your herd that has miscarried, dispose of her to the best possible advantage, but, of course, tell why you are getting rid of her. A diseased cow is pretty certain to disease bull at time of service unless he is properly treated.

Shrinkage of Milk Yield.—I have a heifer calf that dropped her calf last June; has had no udder trouble during the summer that I know of, but the milk from one-quarter seems to be decreasing, but this cow seems to be in perfect health. She runs in clover and oat pasture, but is not fed any grain. J. D. P., Chesaning, Mich.—Increase her milk producing food supply by giving her some grain twice a day and hand-rub inactive portion of udder twice a day.

Indigestion—Diarrhea.—I have six nice pigs about seven weeks old that were weaned a few days ago, and am feeding them on milk, bran, cooked apples, carrots and small potatoes, all mixed together and every one of them have bowel trouble. E. E. S., Jackson, Mich.—All that is required is a change of feed, the mixture you are feeding is an unfit ration for such young pigs. Give them milk, some oat meal, with perhaps a little corn meal added, but discontinue feeding them roots as they are too loosening for such young pigs. Give them each 10 or 15 drops of tincture ginger and two or three grains of subnitrate of bismuth at a dose two or three times a day.

Roup.—I should like to ask advice on the subject of a new disease among our chickens. The nostrils fill with mucus till they can no longer breathe through them. W. J. D., Elm Hall, Mich.—Your fowls either have nasal catarrh, or roup. Dip the beak in one part peroxide of hydrogen and four parts clean water two or three times a day and give each fowl 1 gr. of powdered sulphate iron and 3 grs. of baking soda at a dose two or three times a day. Are your fowls not roosting in a damp place where there is a draft? The outside openings to your coop should be screened with either fine wire or muslin.

Bunch in Teat.—Please tell me how to remove a hard lump from cow's teat. G. N. P., Kalamazoo, Mich.—The only way to remove some hard bunches from cow's teat is by a surgery.

Weakness—Sore Shoulder—Sidebone.—Last spring my mare had a colt which only lived 24 hours; shortly after this she lost flesh and has been out of condition since. She appears to be weak, and tires easily. She also has a very sore shoulder and I have been using commercial remedies, but shoulder is not yet well. Am feeding her five quarts of oats and five ears of corn at a feed. She also has what our local Vet. calls sidebone and the paste he gave me failed to effect a cure. My neighbor also prescribed a remedy which he said had taken off three, but it failed, in this case. W. W. E., East Lake, Mich.—Give your mare a dessertspoonful of Fowler's solution, ½ dr. fluid extract nux vomica at a dose three times a day. Apply equal parts boracic acid and oxide of zinc to sore shoulders twice a day. Also apply one part red iodide mercury and four parts lard to sidebone every week or ten days. If successful operation; however, this should be done by a competent veterinary surgeon. Some bunches are reduced

pretty much entirely by applying one part iodine and 19 parts fresh lard.

Enlarged Throat Gland.—I had a shoat which was all right until a few days ago, when it began to breathe hard and cough. I put it in a pen alone, it would eat corn, but would not drink very much milk. The pig gradually grew worse, breathing much like a horse with heaves. I killed it and found a growth in its throat about the size of an egg, which was hard. (Continued on page 367).

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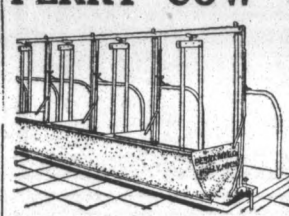
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# Practical Science.

## DISINFECTION AND DISINFECTANTS.

BY FLOYD W. ROBISON.

Disinfectants have a very important part to play in modern farm life. It is quite generally acknowledged that without the employment of suitable fungicides and insecticides and effective spraying, orchard culture in this section of the country is impossible, and many other forms of agriculture industry are likewise made more profitable by the employment of suitable disinfectants. The employment of insecticides in spraying materials accomplishes the same purpose that is accomplished by the use of germicidal disinfectants in general disinfection. Insects and bacteria are parasitic in their relationship to man and animals. With the increase in urban population the use of disinfectants in the sterilization of sewage and in the disinfection of many municipal water supplies has become a vital necessity. With a city situated in such a condition as is the city of Detroit, without the employment of a suitable disinfection of its water supply, the life and health of the entire population are placed in jeopardy. There are many more reasons why the employment of disinfectants should be familiar to every rural inhabitant. The water supply in the rural communities is in a very great many instances far from satisfactory and a long way removed from safety. Not only is this true of the water supply but it is true as well of the food supply and the surroundings in general of the home on the farm are far from satisfactory from the standpoint of sanitation and health. There is no need for this condition to exist.

### Disinfectants Conserve Health.

The employment of suitable preventative measures, together with proper disinfection will make farm surroundings from a health standpoint as satisfactory as the city home.

It really is an excellent training for one who is to spend his life upon a farm if he can live for a time in a progressive urban community. He then has an opportunity to see at first instance how simple the matter of protection from the parasites of man and animals by the employment of suitable preventative means and proper disinfection. For instance, there are ordinances in many cities which require that barns where horses and stock are kept, should be screened in such a manner that there is no opportunity for the breeding of flies, and the encouragement of other forms of animal parasites. In other places this same result is accomplished by efficient disinfection. Modern medical science has shown to us that there are many destructive diseases that are transmitted indirectly by certain insects. It has been demonstrated that the yellow fever may be transmitted by mosquitoes; likewise that malaria may be conveyed from one individual to another in a similar manner. We know definitely that the germs of Texas fever are transmitted from one cow to another by means of the Texas cattle tick. It is suspected that rodents are the cause of certain other obnoxious and destructive diseases.

### Combating Insect Life.

It seems apparent, reasoning from analogy, that one should expect that flies, mosquitoes and insects in general are the cause of transmission of disease and fungus troubles from one place to another.

There is a method well known for combatting mosquitoes. Stagnant pools of water are known to be breeding places of these insects. Coal oil

and other types of disinfectants are known to be destructive of the larvae of mosquitoes and therefore on the farm a little attention and a little spraying of the stagnant pools with coal oil will quite effectively rid the premises of this troublesome pest.

(Continued next week).

## LABORATORY REPORT.

### How to Keep Cider Sweet.

Please tell me how to keep cider from turning to vinegar.  
Iosco Co. SUBSCRIBER.

The best way to keep cider from turning to vinegar is to keep it out of contact of air and in a cool place. If the cider is in a barrel the barrel should be filled as nearly as possible and then taken down cellar where it is very cool. The bung should be inserted loosely or a layer of cottonseed oil may be poured over the top of the cider, and then, of course, when the cider is drawn off it will be necessary to draw it from beneath the oil. This will quite effectively keep the air from it and if kept cool the cider should keep a long time if it is not agitated. If one has simply a small quantity of cider it may be kept by canning just the same as grape juice is kept sweet.

Even though it is stored in the cellar where it is cool, alcoholic fermentation will gradually but slowly creep in, but probably not sufficiently enough to cause any annoyance for a considerable period.

A barrel of cider cooled and properly protected with a layer of oil should not turn to vinegar for a long time, probably in two years it will still be very low in acid content.

### Canning Pumpkin.

Will the person who is writing the article on "Canning Vegetables in the Home," please tell just how to can pumpkin? I am so careful and it looks all right, but when I open the can there is no mold, but it is sour.  
Eaton Co. A. M. S.

Pumpkin is quite a difficult product to can for it makes quite a suitable culture media for bacteria growth. If it is placed in glass jars a good way to make it keep is as follows: Fill the jar with the pumpkin and put the cover on lightly. Then set it in a boiler, surrounded with water; bring the temperature to boiling and maintain this temperature for about 45 minutes. Then screw the can down while hot or, if one of the wide-mouthed cans is used, it may be made tight by simply springing down the clamp. Allow the can to stand for 24 hours; then heat it again in the boiler in boiling water for 30 minutes the second day; allow to cool again, and repeat this treatment the third day. We think under this treatment no difficulty will be found in the product keeping.

## CONCRETE CISTERNS.

In making a new concrete cistern all that is necessary to have rain water soft from the first is to thoroughly coat the walls by using two parts cement and one part lime in water to make a rather thick wash. Apply with a brush until the walls have a glazed appearance. In four or more hours wash the walls down thoroughly by using 10 to 15 gallons of water and a broom. Repeat the washing later with the water and the cistern will be ready for rain water and give no further trouble.

Some of the chemical coatings are very dangerous to use in a close place like a cistern. A man in our neighborhood nearly lost his life by being overcome by the gas formed while coating a tank—was nearly dead when found.—W. G. Boyd, Hillsdale Co.

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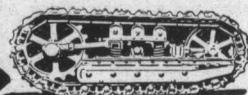
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# Poultry and Bees.

## The Why of the Open-Front House.

**B**IRDS of all kinds are creatures of high temperature. Very few breeders have connected this fact with open-front houses and oxygen-free arrangements in the poultry buildings. Why do certain reptiles hide away at the approach of cold weather? Because they are cold-blooded organisms and cannot withstand the ravages of freezing temperatures. The blood of snakes, lizards, frogs and turtles shows a temperature of 80 degrees F., or less. At the opposite end of the scale are the birds with temperatures ranging, in some species, as high as 110 degrees or higher. Careful experiments by certain stations have shown that the normal temperature of a hen is in the vicinity of 107 to 108 degrees. The lighter breeds may show a temperature slightly above the latter figure, while the heavier breeds show the lower. Reptiles, with the low temperature, cannot withstand the cold; man with a normal temperature of a little above 98 degrees, by the aid of artificial covering, is able to survive; but the birds with still higher range of body heat is provided by nature to keep out the cold.

### Free Circulation of Air Necessary.

Do you think a closed and poorly ventilated house is a suitable place for an organism of this kind? If they are provided by nature to survive the cold, the only thing then, for man to do is to shelter them from the elements and give them proper food, and that in abundance. Hens, of course, will not lay well if not kept comfortable. The tightly-closed house, with an abundance of glass, is not what makes them comfortable, however. On the contrary, a free circulation of air is necessary and, were it not for wattles and combs—which have been put on by man's breeding—much less shelter would be required.

### Natural for Chickens to Withstand Cold.

When a human being registers a temperature of over 100 degrees he is ill; at 105 to 106 he is very ill, yet a hen's temperature is considerably above that point when she is in health. Doctors agree that a fever patient with a temperature of 104 degrees could safely lie in a snow bank. Why should not a hen, with a normal temperature still higher be able to do the same? I believe one of the greatest factors in winter egg-production, then, is in keeping the house airy and open, that the fowls may not suffer from over-heating. Look to nature for teaching in the matter. Birds of the class to which domestic fowls belong inhabit the coldest climates and seek out their food in the open. Can we, then, expect a hen to be comfortable in closed quarters? If she is not comfortable she will not lay, no matter how well she may be fed.

### The Importance of Oxygen.

It is plain that many of the failures and indifferent successes in the poultry business, which we see on every hand, are due to this cause. The open-front house allows plenty of oxygen to circulate, and this is the greatest life-giving element in nature. Hens in this house will be active and alert, they will consume large quantities of food; they will assimilate and digest food rapidly, and they will lay. On the other hand, in the closed houses the hen will be listless and inert, preferring to sit on the roost half the day rather than come down and eat. She is obliged to breathe carbon dioxide, and her digestion will soon be in poor condition. The least draft of air may

bring on a cold, and roup is liable to develop, simply because her vitality is low through lack of oxygen.

### The Disadvantages of Much Glass.

Looking at the matter carefully and keeping the blood temperature of a normal hen in mind, there is no reason for the closed, poorly ventilated house. Much glass is inexcusable in this day. This collects the heat during the hours of sunlight, and it allows the cold to come in in the same way. Cooling of the old worn-out air inside the house works havoc. A fresh supply of oxygen, even if of low temperature, invigorates and strengthens. As the poultry business is given more careful thought and the experiment stations are searching out things like the temperature of a hen, many old ideas are giving way to the new. One of the most noticeable of these has been the revolution in building the house.

New Hamp. C. H. CHESLEY.

### CULL, CULL, CULL.

Four letters—CULL—should be written large over the doorway of every hen house. The fall is a good season, none better, to practice what they preach.

To begin with, the flock should be of one variety, although that really makes a chapter by itself because of its importance. Therefore, decide on one variety and cull out all others unless you plan to keep several pure-bred flocks, which involves separate yards. Having your kind of chickens by themselves, proceed to cull again, this time disposing of all fowls over 18 months of age, all cripples, cross-bills, and weak or stunted ones. Then cull again, taking out the off-colored birds, those that are markedly culls as to color. And still cull again, lastly taking out all the cockerels and male birds and shutting up for fattening all that will not be needed for breeding purposes later.

Most of you who read these lines will not have the nerve to make so vigorous culling of your flock as this. Very well, if you prefer, keep your cull birds at a loss of feed or of your reputation as an up-to-date farmer. But if by any means you can bring yourself to practice such drastic good sense, you will not regret it. The oldest pullets will look plump and even in color—a beautiful sight. The hens, robbed of their old, disreputable mesdames, will soon settle down to egg business. The few choice males which you saved will grow more vigorous that they do not have to divide pen and feed with their scrappy comrades. And the little, late-hatched fellows—how they will enjoy and make good use of their freedom from being tramped under many feet.

Even after all this, if you still have less than four square feet of floor room in your house for every pullet and hen you have saved, then once again, cull, cull, until you have reduced your birds to the space you possess. Whatever else you do before snow flies, cull the chickens.

JENNIE BUELL.

The natural method by which a hen cleans her plumage, and rids her body of lice and other vermin, is dusting in loose earth. In winter when the ground is frozen there is very little chance for the fowl to dust, and a special dust bath should be provided. A box at least 15 inches deep should contain soft dry loam at least six inches deep. Some poultrymen advocate adding a little lime to this dust bath, others advise the use of a few finely sifted coal ashes and a little of some good lice killing powder.



Gilbert Hess  
Doctor of  
Veterinary  
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Doctor of  
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## Now is the Time Your Hens Need a Tonic

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What your hens need right now is Dr. Hess Poultry Pan-a-ce-a. This splendid tonic is the result of my lifetime experience as a doctor of veterinary science, a doctor of medicine and a successful poultry raiser. It tones up the dormant egg organs, offsets the weakening effects of moulting, quickens quill shedding, makes for a new feather growth and makes hens lay.

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Shortens Moulting Period—Makes Hens Lay

This is also a splendid tonic for fattening poultry for market. It helps the birds digest the maximum amount of their ration and convert it into flesh. It keeps poultry healthy and fit while cooped up. Besides, my Poultry Pan-a-ce-a is an excellent constitutional remedy for roup.

So sure am I that Dr. Hess Poultry Pan-a-ce-a will make your poultry healthy, make hens lay, help chicks grow and shorten the moulting period, that I have authorized my dealer in your town to supply you with enough for your flock and if it doesn't do as I claim, return the empty packages and get your money back.



My new Poultry Book  
tells all about Pan-a-ce-a. It's free.

Sold only by reputable dealers whom you know, never by peddlers.

### Buy On My Money-Back Guarantee

14 lbs. 25c; 5 lbs. 60c; 25-lb. pail \$2.50. Except in Canada and the far West. Pan-a-ce-a costs only 1c per day for thirty fowl.

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Taken off pasture, put on dry feed and closely confined, your stock are apt to get out of fix during winter. Some are liable to get constipation, dropical swellings, stock legs, but most common and dreaded of all diseases, especially among hogs, is worms—worms. Dr. Hess Stock Tonic will keep your stock toned up, enrich their blood, keep their bowels regular and will rid them of worms. 25-lb. pail \$1.60; 100-lb. sack \$5.00. Smaller packages as low as 50c. Except in Canada, the far West and the South.

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Kills lice on poultry and all farm stock. Dust the hens and chicks with it, sprinkle it on the roosts, in the cracks, or keep it in the dust bath, the hens will distribute it. Also destroys bugs on cucumber, squash and melon vines, cabbage worms, etc., slugs on rose bushes, etc. Comes in handy sifting-top cans, 1 lb. 25c; 5 lbs. 60c. Except in Canada and the far West. 1 guarantee it.

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S. L. WYANDOTTE EGGS—From great laying strain of Blue Ribbon Birds. Satisfaction guaranteed. F. E. Cowdrey, Ithaca, Mich.

LILLIE FARMSTEAD POULTRY  
B. P. Rocks, R. I. Reds, and S. C. W. Leghorn eggs for sale, 15 for \$1.20 for \$1.50; 50 for \$2.50.  
COLON C. LILLIE, Coopersville, Mich.

PINE CREST WHITE ORPINGTONS—The great winter State Fair, pullets, cockerels, hens, also puppies. Mrs. Willis Hough, Pine Crest Farm, Royal Oak, Mich.

SILVER, White and Golden Wyandottes. Eggs from Whites \$1.50 per 15, \$2.50 per 30. Silvers & Golden at catalog prices. Browning's Wyandotte Farm, Portland, Michigan.

PLYMOUTH Rock cockerels 5 to 11 lbs., according to age, hens 5 to 8 lbs., 15 eggs \$1. Minimoth Bronze Tom Turkeys 8 to 35 lbs. according to age. Price \$3 to \$25. 10 eggs \$3. A. E. ORAMTON, Vassar, Mich.

### DOGS AND FERRETS.

FOX, COON AND RABBIT HOUNDS  
Broke to gun and field. Prices right. Fox and Coon hound pups \$5 each. Stamp for reply.  
H. C. LYTLE, Fredericksburg, Ohio.

Trained Running Fox Hounds—30 Fox and Coon hound pups, 50 Ferrets, Puppies.  
Send stamp. W. E. LECKY, Holmesville, Ohio.

## Fox and Wolf Hounds

of the best English strain in America  
40 years experience in breeding these fine hounds for my own sport. Save your pigs sheep and poultry. Send stamp for catalog

T. B. HUDSPETH,  
Sibley, Jackson County, Mo.

2000 Ferrets for sale. Write for price list. It's free. Guarantee safe delivery.  
DeKleine Bros., Box 41, Jamestown, Mich.

White and Brown Ferrets for Sale Prices free. Will drive and all small animals out of holes. Burt Ewell, Wellington, O.



## COLEMAN AIR-O-LANTERN

A regular "Jack-of-all-lanterns"—carries, hangs or stands anywhere, anytime, for any job of work. No matter what the weather—rainy or clear, stormy or still—your Air-O-Lantern keeps right on shining. Furnishes 300 candle power of good, strong, steady light that cannot blow out—or jar out, even if tipped over.

### GUARANTEED FOR FIVE YEARS

This lantern is solidly made of brass, heavily nickled—is built to stand all the hard knocks of after-dark work in the feed-lot, barn, cow stable, garage, cellars, sheds, camps, etc. Every Air-O-Lantern has two mantles in non-breakable Mica Globe—no wicks, no chimneys. Burns gas. Costs only 1/2¢ per hour to operate. Gives more light than 20 old time oil lanterns. Is absolutely safe, cannot spill or explode. Agents wanted everywhere. Write for full particulars and wholesale price list—free on request

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The Coleman Lamp Co., 1008 Summit St., Toledo, Ohio 402 Akard St., Dallas, Texas



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You risk nothing by writing; it costs nothing for advice and there will be no string to it. **Save-The-Horse BOOK**, Sample Contract and **ADVICE**—All Free (to Horse Owners and Managers.) Address,

**TROY CHEMICAL CO.**, 20 Commerce Ave., Binghamton, N.Y.  
Druggists everywhere sell Save-the-Horse WITH CONTRACT, or we send by Parcel Post or Express Paid.

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Cuts cost of feeding. Write quick for prices.  
**PITTSBURGH MOLASSES CO.**, Dept. MF, 706 Penn Ave., PITTSBURGH, PA.

**Screenings, Salvage Grains** Wholesale prices, Bartlett Co., Jackson, Mich.

## PERCHERON STALLIONS FOR SALE.

15 two and three-year-olds, black. These are good weights and desirable horses of our own breeding. We sell direct to the farmer at reasonable prices, and invite inspection.

A. A. PALMER & SONS,  
R. R. Station Orleans. P. O. Belding, Mich.

## FOR SALE A Few Registered PERCHERONS

Stallions all ages; extra good ones.  
**BARGAIN PRICES!**  
**WM. BIRD, St. Johns, Michigan.**

**FOR SALE**—Registered weanling Stallion Colts from our best Percheron Mares. Write, R. S. HUDSON, Michigan, Agricultural College, E. Lansing, Michigan.

**Registered Percherons, BROOD MARES, FILLIES AND YOUNG STALLIONS** at prices that will surprise you. L. C. HUNT & CO., Eaton Rapids, Michigan.

**Pigeon Pony Farm**—Reg. Shetland Ponies, mostly spots, 1 spotted stallion and young stock for sale. Dr. W. T. Morrison, Pigeon, Mich.

**HOG FEEDS, SALVAGE**—Ask for prices, Bartlett Co., Jackson, Mich.

## FOR SALE AT ONCE

Three cars yearling steers and heifers—few two years old—in prime condition for feeding or for block.

**MITCHELL BROTHERS CO.**, Missaukee Co. Jennings, Michigan.

**ONE HUNDRED HEAD** Of Stock Cattle Steers and Heifers ready for sale at once. Five cars of two-year-old steers will be ready for sale Oct. 15, 1914. J. B. GARDNER, Cadillac, Michigan. L. B. 437.

### BREEDERS' DIRECTORY.

#### CATTLE.

## ABERDEEN ANGUS

Bull calves and yearlings ready for service. Sired by Louis of Viewpoint II. Closely related to five Grand Champions—Brother, Sister, Sire, Sire's Brother and Grand sire. (International Grand Champion for three years in succession. Prices \$75 up. Will meet prospective purchasers either at Somerset, Addison or Addison Junction.)

You are bound to get good calves from these bulls even with strongly dairy type grade cows.

**GEO. B. SMITH & CO.**  
ADDISON AND SOMERSET, MICHIGAN.

## ABERDEEN-ANGUS

HERD FOUNDED IN 1900. Strains represented consist of Trojan Ericas, Blackbirds and Prides, only. Black Quality Ito, a bull of rare individuality and merit, heads the herd.

**WOODCOTE STOCK FARM**, Ionia, Mich.

**FOR SALE, 3 REGISTERED GUERNSEY BULLS.** Cheap if taken soon the best breeding yet. Write JOHN EBELS, Holland, Michigan.

**Guernseys.** Bulls from 15 mos. down. From Imported Sire and Dams in A. B. test. Excellent breeding prices reasonable. On farm of President Snyder, M. A. C. Address P. E. Noble, Manager, R. No. 8, Lansing, Mich.

We have for sale a number of pure Guernsey cows, heifers and bulls, also Berkshire hogs.

**VILLAGE FARM**, Grass Lake, Michigan.

Breeders Directory Continued 367.

## Grange.

Our Motto—"The farmer is of more consequence than the farm, and should be first improved."

### THE GRANGE AND NEIGHBORHOOD CO-OPERATION.

If farmers could get together and stay together on neighborhood co-operation in sanitation, education and civics, a great and lasting good would be accomplished. Disease would be prevented, crime reduced, economic loss greatly lessened. Insanitary school buildings, school rooms, obscene pictures and writings upon out-buildings cost the state annually, in cash, millions of dollars; fixes the status of thousands of coming citizens, a status that must be changed or the end will be state prison. We have boys' corn growing and girls' bread making clubs, all splendid ideal makers, but we need in every school district of Michigan men and women developing clubs. These clubs should commence a crusade at once against obscene pictures and writings upon school out-buildings. The environments of some schools are such that they are crime-makers more than educators. As our rural schools are now environed they are contributors more to truancy, delinquency, and ultimate crime than safeguards of citizenship. The Grange should take up this matter and rest not until our rural schools answer to the end for which they are organized, citizen-making, and not continue in developing law breakers. The ideal of our public school system is low and groveling. The environments of our rural schools are sin-spreading and insanitary. If the farmers of our rural districts should unite in a movement for a township central school of 10 to 12 grades, with social center community meeting places, we would wipe out the present disease of rural education which is about 75 per cent inefficiency.

Why should the business and science of raising stuff that feeds the world, breeding the dairy cow, developing means of locomotion, making better farm machinery rest on efficiency and the making of a man rest on inefficiency? At least 75 per cent of the money raised for school taxes is wasted through inefficient school administration. We spend much time and money in the Grange in chasing vagaries, and let the greatest force in our lives, education, lapse into insanitation, delinquency, ultimate crime. The fact that many of the district fathers are indifferent, mentally and socially delinquent, accounts for the inefficiency of rural education. There is not a man or woman who thinks or has a think-tank that does not know that good reading, good entertainment are the jewels of community life. But do the rural men and women use the knowledge they possess? About one in 20 does, and the other 19 sit back and curse the twentieth one for trying to live, trying to do something. If it were not for a few splendid active souls we should all rot in the quagmire of indifference, ignorance and indolence. Because of these three weaknesses of society, the real-do-something people are taxed to distraction, bored to insanity and made doubtful of the progress of humanity.

Why cannot we co-operate as efficiently in development of good children as in the development of good dairy cows? If we take as much interest in school and school environments for our children as in crops and stock we could save Michigan many millions of money in preventable disease, preventive crime, economic loss growing out of preventive loss, and we would find ourselves on the turnpike of real living. We can

instill a better living in every home, better education in every school, develop better citizens through an efficient Grange neighborhood co-operation.—W. F. Taylor, in Public Health.

### AMONG THE LIVE GRANGES.

The October Meeting of the Ionia County Pomona Grange, held at the Ionia court house, October 6, was a short one, there being no time for a program. Plans are, however, in progress for a big meeting for November at which it will be of interest to every granger in the county to be present.

For their Annual Harvest Feast on October 8, the men of Peninsula Grange took a day off for a hunt and brought in the day's game for the feast. This is something "a little different" and is enjoyable to all besides giving the men a good day's hunt.

Exhibits Should be Encouraged at Grange meetings. No matter how small an exhibit it is always an attraction. The suggestion that exhibits of fruit be encouraged is a good one for a fruit show is always a pleasing sight and creates a longing for a taste. One Grange sold the fruit in its exhibit and put the funds in the sunshine fund, used for spreading sunshine in the homes of the sick.

### COMING EVENTS.

The next meeting of Eaton County Pomona Grange will be held at Vermonthville, North Kalamo assisting in the entertainment, on October 31.

Gratiot County Pomona Grange will meet with Newark Grange, November 7. There will be a state speaker present.

## Farmers' Clubs

### OFFICERS OF THE STATE ASSOCIATION OF FARMERS' CLUBS.

President—Jas. N. McBride, Burton.  
Vice-president—J. F. Rieman, Flint.  
Secretary-Treasurer—Mrs. C. P. Johnson, Metamora.  
Corresponding Secretary—Mrs. J. S. Brown, Howell.

Directors—Wm. T. Hill, Carson City; Jerry Spaulding, Belding; R. J. Robb, Mason; Joseph Harmon, Battle Creek; C. B. Scully, Almont; C. T. Hamline, Alma.

Address all communications relative to the organization of new Clubs to Mrs. C. P. Johnson, Metamora, Mich.

### Associational Motto:

"The skillful hand with cultured mind is the farmer's most valuable asset."

### Associational Sentiment:

"The Farmer: He garners from the soil the primal wealth of nations."

### THE LOCAL CLUB AND THE STATE ORGANIZATION.

A few Clubs in the state make the mistake of not affiliating themselves with the State Association, thereby depriving all of their members of the possibility of this experience. Every local Club will benefit from sending one or more delegates to the State Association to an extent which is out of all proportion to the small cost involved. Every local Club member in the state should insist that his Club send delegates to the State Association for this reason, and also to the end that some one or two members of the Club may be developed into better leaders in Club work through the valuable experience of acting as delegates.

### CLUB DISCUSSIONS.

The Farm Barns.—The Conway and Handy Farmers' Club, of Livingston county, met with Mr. and Mrs. Henry Crooke, Friday afternoon, September 25. The first topic for discussion was "The farm barns, the place where the products of the farm are centered and utilized for financial profit." In the absence of C. Gordon the subject was opened by George Stow. The barns are being built in a modern way and old barns torn down and rebuilt to make the conveniences needed. They are being developed and made better all the time; it has been found out to be the right thing to properly take care of stock and in order to do so

the barns must be convenient and furnished with the necessary equipment; the milking machine is one of the greatest of modern inventions. Discussion was opened by J. B. Fuller, who thought a barn should be to a man what a house is to a woman, made good and convenient so that it could be kept clean. People are not quick enough to fix up their buildings and a good many do not fix over the barns, but keep them as in the days gone by; they should be rebuilt and made modern by the use of cement, and more light, so that it would be a pleasure to keep them clean. S. R. Holmes said, "fix up the barns and people will enjoy the money invested better than if it was in the bank."

A Community School.—"Shall we have a community school?" was the topic presented by Mrs. S. R. Holmes and discussed by Mrs. J. C. Wilkinson, Mrs. House, Mrs. C. Fuller and others. All favored the community school and the old district school was condemned to a finish, as well as the official school board and the people living in the district. Teachers did not escape their share of the tongue-lashing and after the ladies had said all the mean things necessary, J. B. Fuller said he favored a township high school and always had; he knew how little interest was taken by officials and people of the district. School buildings were neglected, yards grow up to weeds, nothing for the teacher to do with, the one trouble seemed to be to get the children to the community school. The question was further discussed by George Stow, Mr. Rickett, and even the roll call was responded to by answering to "What improvement can be made in the rural school?" After the report of the secretary the meeting adjourned to meet with Mr. and Mrs. J. B. Fuller in October.—Mrs. I. Holmes, Reporter.

The Young Man's Career.—In spite of the busy times there was a large attendance at the September meeting of the Lenox and Chesterfield Farmers' Club, of Macomb county, at the home of Mr. and Mrs. Myron Devinney. After the bountiful dinner the meeting was called to order. Following the opening exercises a good program was rendered. The question, "Which offers the best opportunities to a young man, agriculture, trade, or a profession?" was debated at length. Charles Ferrin, although not a farmer, stood for agriculture. He believed that the farm offered many opportunities for development, and it should not be monotonous work. The men who have failed in farming as a rule, are those who didn't strike their gait and who failed to grasp situations. The young man on the farm lives close to nature, and his own nature is finer because of this fact. He must develop mentally. He is a very necessary citizen, doing an indispensable work. Mr. Ferrin's talk was very interesting. C. D. Jackson could not understand Mr. Ferrin's viewpoint, as he was a city kid. He could understand that business life brought men together, and that it brought fine opportunities for development. R. F. Eldredge believed that according to his experience the legal profession demanded a greater mental development than either agriculture or business life. The legal profession demands the keenest mental activity. It is never monotonous, as each new demand is different from the others. Each speaker thought that the young man should take account of his inclinations and capacity, to determine his vocation. He will never make a success in something he doesn't like.

Club Fair and Pioneer Meet.—The regular October meeting and annual fair of the North Shade Farmers' Club held at the home of Mrs. Nettie Todd, Friday, October 2, was largely attended and proved to be a great success from every standpoint. While the fair feature did not bring out a large number of exhibits, yet what they lacked in quantity they made up in quality. Special mention is deserved by Clyde Coryelle, aged 13 years, as a showing of what he raised as a contestant in the boys' corn club. Also some fine samples of pop corn raised by Master Paul Todd. The time in the forenoon was devoted to visiting. When dinner was announced the delicious chicken pies and other good things prepared in the usual excellent North Shade manner, were disposed of almost as rapidly as though attacked by the contending armies now fighting in Europe. W. R. Salisbury was in charge of the program as outlined by the committee. The entire program for the afternoon had been arranged with the thought in mind of honoring the living pioneers of North Shade and having them give reminiscences of pioneer days. Supervisor R. W. Brice was assigned to give a history of the township, but he was unable to be present. Several pioneers were called upon to give reminiscences of the early days, a synopsis of some of which will be given in a future issue.



(Continued from page 363).

Can you tell me what it was and if this is a contagious disease? C. F., Milan, Mich.—It is possible that your hog died the result of tuberculosis as the glands of throat are usually involved in swine. However, you need not fear its spread even if this hog died the result of tuberculosis. It may have had goitre, or only an inflamed gland. Apply one part iodine and nine parts fresh lard to glands of throat if any more of your shoats are similarly affected.

Sidebone.—What must I do to kill sidebone that has just started on one of my horses?—J. B. L., Hillman, Mich.—Lower his heels and apply tincture of iodine three times a week.

Chronic Cracked Heels.—I have a three-year-old Shire stallion which is bothered with scratches. Our local Vet. calls it dry scratches, but as yet he has not helped it any. J. R. G., Standish, Mich.—Apply one part oxide of zinc and four parts vaseline; or, apply one part powdered acetate of lead in eight parts of fresh lard with 15 or 20 parts of carbolic acid added to each ounce once or twice a day.

Worms.—I have an eight-year-old horse that has a ravenous appetite, eats much more food than any of my other fleshy horses, but he remains thin. He also drinks large quantities of water. I have given him stock food, linseed oil with a little turpentine in it, and he has also been treated by our local Vet. who thought he might have chronic indigestion. H. I., Burt, Mich.—It will do no harm to examine his grinder teeth for they may need floating. Give 1 dr. santal, 2 drs. ginger and 7 drs. barba-aloe, one dose only. Also give him a tablespoonful of the following compound powder at a dose twice a day: Ground nux vomica one part, powdered sulphate iron one part, ground gentian four parts, bicarbonate of soda four parts. Also give him a dessertspoonful of Fowler's solution at a dose three times a day.

Weak Tendons.—I have a horse that is troubled with weak tendons; have applied flaxseed poultice, also alcohol and hot water. M. J. G., Traverse City, Mich.—Apply one part turpentine, one part oil organum, one part aqua ammonia and six parts raw linseed oil to tendons three or four times a week.

Impure Blood—Bloody Milk.—I have a three-year-old colt that has blotches on different parts of body and the hair drops out of blotched part and some out of tail. I also have a cow that has been giving bloody milk from one teat and has a few blisters on bag. Mrs. C. G., Hand Station, Mich.—Give horse a dessertspoonful of Donovan's solution at a dose three times a day. Apply one part iodine and 19 parts vaseline to sores on body and scalp of tail three times a week. Apply one part tincture arnica, seven parts water to bruised quarter of udder twice a day and give her a dessertspoonful of hypo-sulphite of soda twice a day.

Indigestion—Spinal Disease.—My 14-year-old mare is a puzzle to me. She eats lots of good hay and has six to eight quarts of oats a day, but when she walks she wobbles; hind legs sway from side to side and her urine is thick. This same mare has a thick ankle and three side-bones. I forgot to say that this mare never lies down. L. A. G., Paris, Mich.—Give her 1 dr. ground nux vomica, ½ oz. of ground gentian and 2 drs. of hypo-sulphite of soda at a dose three times a day. Also give a teaspoonful of powdered nitrate of potash at a dose once a day. Leave her ankle alone and if the side-bones cause soreness or lameness, apply one part red iodine mercury and eight parts lard every few days.

Nervousness.—I have a pair of mares which appear to become nervous and uneasy as soon as brought into stable, but both of them are fleshy and do not appear to be sick. M. H., Harrison, Mich.—Clean and disinfect your stable, also admit lots of fresh air. Wash their body with warm water once or twice a day and give ½ dr. of fluid extract of nux vomica and 2 drs. of Donovan's solution at a dose to each horse three times a day.

Wounded Teat—Malignant Sore on Head.—My cow cut her udder on barb wire, inflicting wound on teat, causing milk to escape. This same cow has had a sore on side of face for the past six weeks and I have been unable to heal it. J. F. B., Irons, Mich.—You will find it difficult to heal the wound on teat. She should be milked through milking tube and apply equal parts powdered alum, oxide of zinc and boric acid to wound twice a day. Also apply this same powder to sore on face twice a day.

Ringworm.—I have a two-year-old steer infected with ringworm and I would like to know what to apply. C. S., Port Hope, Mich.—Apply one part iodine and ten parts fresh lard to ringworm patches two or three times a week and he will get well.

MILO D. CAMPBELL. CHAS. J. ANGEVINE.

## BEACH FARM GUERNSEYS

To whom it may concern:

I have just completed a tuberculin test of 80 head of Beach Farm Guernsey stock, not one of which showed the least sign of reaction. Signed Dr. Thos. L. Bott, Vet.

**Pure Bred Bulls and Grade Heifers** from the above stock for sale  
**CAMPBELL & ANGEVINE,**  
COLDWATER, MICHIGAN.

**Guernseys**—Famous May Rose Strain. A select herd. Tub. Tested. Several A. R. O. Cows. J. K. Blatchford, Windermere Farm, Watervliet, Mich.

**Holstein-Friesian Breeder**—The best families of the breed represented. D. D. AITKEN, Flint, Michigan.

**HATCH HERD REGISTERED HOLSTEIN-FRIESIANS**  
**YPSILANTI, MICH.** offers  
**HERD HEADERS** from choice A. R. O. dams and King Pontiac Jewel Korndyke, 50 dams in his pedigree average \$1.25 pounds in 7 days. Average per cent of fat of three nearest dams 4.31. Sires in first three generations in his pedigree have 500 A. R. O. daughters. Prices reasonable.  
Make your own selection at Ashmoor Farms, Tecumseh, Michigan, R. F. D. No. 2, or address  
**HATCH HERD, YPSILANTI, MICHIGAN.**

**HEREFORD BULLS** 2 six months old 1 18 months old  
**ALLEN BROS., Paw Paw, Michigan.**

## 10 HOLSTEIN BULLS FROM 1 to 3 YEARS OLD

Ten Bull calves, two to ten months old. Ten cows, **Your Choice** from my entire herd. **Don't let anybody** make you believe he can sell you a better bull for less money than I can. **Don't delay** the purchase of bull until the other fellow gets the one you want. Write me or come at once.

L. E. CONNELL, Fayette, Ohio.

**I Will Buy and Sell Holstein Cattle** on commission. Large acquaintance among the breeders. Bank references. Freeman J. Fishbeck, Howell, Mich.

**BIGELOW'S HOLSTEIN FARMS**  
Breedersville, Michigan.  
Breeder of high class  
**Registered Holsteins.**

**For Sale Pure Bred Holstein Heifers and Bulls.**  
De Kol and Landry Girl Butter Boy strain.  
**LEWIS NELLER, - Lansing, Mich.**

**"Top-Notch" Holsteins.**  
Extra large fine young bull, ¾ white, born Oct. 4, 1913. Dam has official record of 29.40 lbs. butter in 7 days, 117.50 lbs. in 30 days. Sire's dam is 22.64 lb. 4 yr. old daughter of a 30.50 lb. cow.  
**MCPHERSON FARMS CO., Howell, Michigan.**

**FOR SALE**—At a reasonable price, a fine Registered Holstein bull coming 3 yrs. old.  
**CLYDE FISHER, St. Louis, Michigan.**

**REGISTERED HOLSTEINS**—Herd headed by Albina Bonte Butter Boy No. 93124, whose dam has semi-official yearly record, Butter 892 lbs. Milk 18622 lbs. as a 2-yr. old. No stock for sale. W. B. Reader, Howell, Mich.

**Holstein-Friesian Cattle.** Young bulls ready for service out of A. R. O. cows. Satisfaction guaranteed or money refunded. Jones & Lutz, Oak Grove, Mich.

**50 gets 8 weeks old bull, 27 lb. sire.** Dam traces direct to De Kol 2d 10 times, twice to Pontiac Korndyke. M. L. McLAULIN, Redford, Michigan.

**MICHIGAN HOME AND TRAINING SCHOOL**  
**LAPEER, MICHIGAN**  
Breeder of High Grade Holstein Cattle. Lists and prices upon application.

**IXI-ON FARMS** offer choicely bred young Holstein Bulls, \$75 to \$100 each, with all papers. S. O. RATHFON & SON, R. F. D. 5, Ypsilanti, Mich.

**ESPANORE FARM, Lansing, Michigan.**  
Offers for sale a

## Holstein Bull Calf

A splendid individual of excellent breeding. Soon ready for service. Write for particulars.

**CHAS. S. OSBORN, } Owners, L. M. HATCH, } Supt.**  
**ADAM E. FERGUSON, }**

**HOLSTEIN BULLS READY FOR BUSINESS.**  
World record stock \$150 to \$400. **LONG BEACH FARMS, Augusta, Kalamazoo Co., Michigan.**

**Elmway Farm** Offers for sale seven high-grade Holstein cows. One fresh October 13, five to freshen in November, and one February 15. A little dark in color, and everyone a good individual. Not jobber's cattle. W. M. McCully, R. 31, Pittsford, Mich.

**HOLSTEIN BULL** 7 months old, mostly white, large, straight, heavy boned fellow. Dam untested, but large records close up. \$75 delivered, write for pedigree. **HOBART W. FAY, Mason, Mich.**

**First Draft for \$125** buys two unregistered 10 mos. old Holstein Heifers, crated t. o. b. **CHAS. S. RILEY, R. No. 1, Metamora, Mich.**

**Lillie Farmstead Jerseys**  
Bulls ready for service, several from Register of Merit Cows. Four bred heifers, good ones. Herd Tuberculin tested. Prices reasonable.  
**COLON C. LILLIE, Coopersville, Michigan.**

**THE WILDWOOD HERD**  
**REGISTERED JERSEYS**, Herd headed by Majesty's Wonder 90717. For sale a Grand-son of Royal Majesty, and out of a cow that produced over 500 lbs. butter in one year. Born Oct. 24th 1913. Write for prices or come and see. **ALVIN BALDEN, Opaac, Mich.**

## A Pure-Bred Jersey



bull counts for more than the dam in grading up. You should be developing some 400-pounds-of-butter cows. The thorough-bred bull is worth all he costs on grade or full-blood Jersey cows. Like begets like.  
**THE AMERICAN JERSEY CATTLE CLUB**  
324 W. 23d St., New York City.

**CROUSE'S OLD HOMESTEAD JERSEYS**  
All my surplus Full Blood Jerseys are sold.  
**J. B. CROUSE, Hartland, Michigan.**

**Jerseys.** Bulls ready for service, extra quality sired by Jacob's Fairy Emission. No. 10711, from high producing dams. **SMITH & PARKER, Howell, Mich.**

**For Sale Jerseys**—Heifers from Register of Merit Ancestry, Raleigh—King and Exile of St. Lambert breeding. Also cows with Register of Merit records. **Waterman & Waterman, Ann Arbor, Mich.**

**Jerry Bulls for Sale** from high-producing dams, with testing Assoc. records, also on semi-official test. **C. B. Wehner, B. 6, Allegan, Mich.**

**NOW IN SERVICE**—A Son of the \$50,000 sire write A. P. EDISON, Sec. M. J. O. C., 326 W. Bridge, Grand Rapids, Mich. If a breeder and a member of M. J. O. C. send list of stock for sale to the above.

**MAPLE Lane Register of Merit Jersey Herd**—Tuberculin tested by U.S. Government. For sale, Register of Merit cows, also bulls, bull calves and heifer calves, having from 3 to 7 Register of Merit dams in their pedigrees. **IRVIN FOX, Allegan, Michigan.**

**JERSEYS**—For list of stock for sale and Jersey facts write A. P. EDISON, Sec. M. J. O. C., 326 W. Bridge, Grand Rapids, Mich. If a breeder and a member of M. J. O. C. send list of stock for sale to the above.

**JERSEYS**—YEARLING BULL READY FOR SERVICE. Also bull calves. **Brookwater Farm, R. F. D. No. 7, Ann Arbor, Mich.**

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

**Young Shorthorn Bulls** And Oxford Down Yearling Rams for sale.  
**H. B. PETERS, Burton, Michigan, R. R. Elsie.**

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**Parsons Pure Bred Sheep**

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**Shropshire Yearling and Ram Lambs,** large frames, Wool and Mutton type. Also O. I. C. swine. **G. P. ANDREWS, Danville, Michigan.**

**SHROPSHIRE**—Am offering a few choice rams at reasonable prices.  
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**O. I. C.**—Choice spring boars of March and April farrow. Prices right.  
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**O. I. C's**—Growthy spring boars. Satisfaction guaranteed.  
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From Prize-Winning Stock.  
Write, or better still, come.

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**Poland Chinas** of the big type. March and April farrow. The kind that please our customers. **A. A. WOOD & SON, Salline, Mich.**

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The large, long-bodied, prolific kind. Gilts bred for September and October farrow. A choice lot of spring boars and gilts. Prices reasonable.  
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Open pigs and gilts bred for September farrow. Spring pigs either sex, pairs and trios not akin. Satisfaction guaranteed.  
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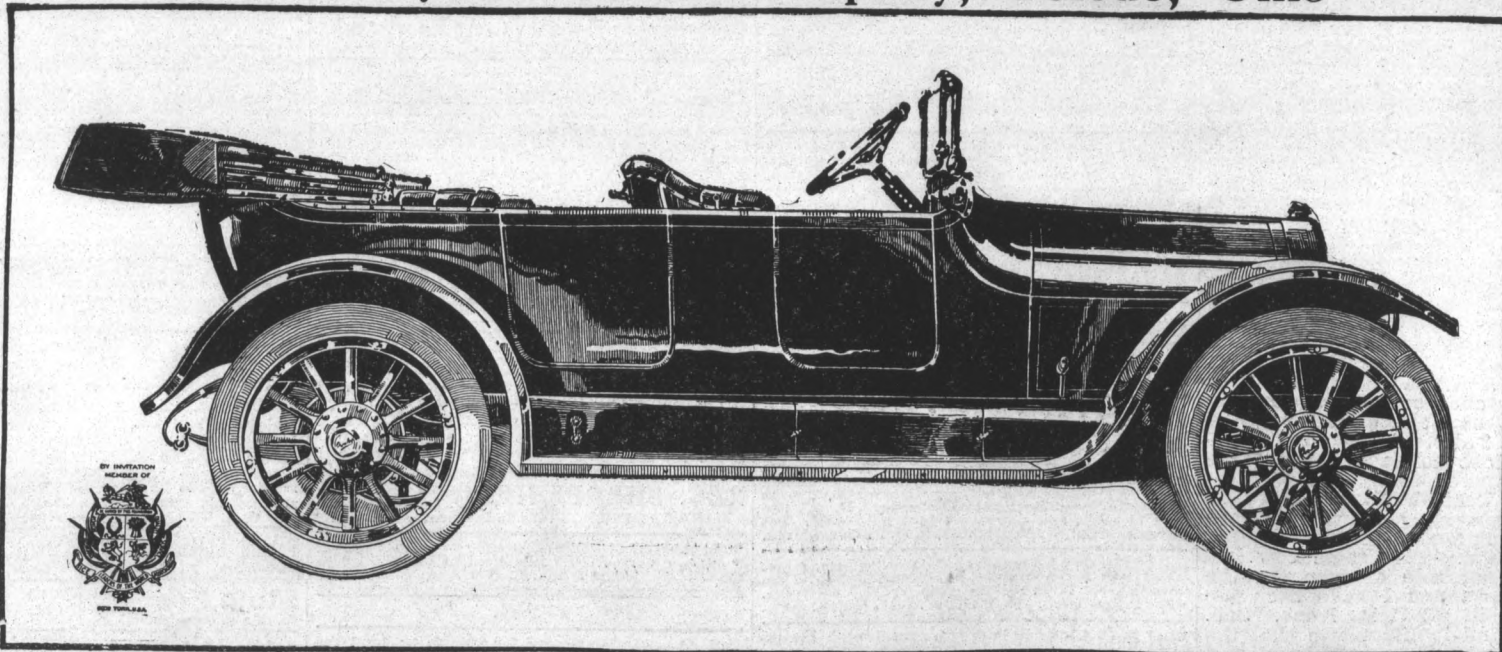
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