

Public Library
— OF THE —
CITY OF DETROIT

MICHIGAN FARMER

AND
LIVE STOCK
PUBLISHED WEEKLY.

JOURNAL.
ESTABLISHED 1843.

The Only Weekly Agricultural, Horticultural, and Live Stock Journal in the State.

VOL. CXXXIX. No. 12.
Whole Number 3609.

DETROIT, MICH., SATURDAY, SEPT. 21, 1912

\$1.00 A YEAR.
\$2.75 5 YEARS.

SELECTING SEED CORN.

THE result of the present season's planting has taught a much needed lesson. Thousands of acres of corn are carrying only half a stand or less. The reason for this very unfortunate condition is that the seed which was used was imperfect, if not decidedly lacking in vitality. Many fields were replanted and even then only a partial stand was secured. Never will there be another such season of short crop due to a poor stand of corn. Farmers everywhere are going to pick seed corn from the field and dry it properly this year. As much as \$10 per bushel was paid for good seed corn last spring—and it was easily worth it, as a couple of additional bushels per acre this year will more than repay the extra cost. However, it is an enormous price to pay, and no farmer should again be caught in such circumstances as to make it necessary to pay such a high price when by a few hours work he can have corn on his own farm that will be equally as good, if not better.

Very properly, the first point to be emphasized in field selection of seed corn is that the corn will dry properly and that the embryonic, or tiny little plant within each kernel will be properly developed and preserved. This will insure growing vitality when the seed corn is planted next spring. To be safe on this point the seed corn must be selected early in the fall and dried out before frost or freezing weather has affected it.

The manner of gathering may be very simple. A man may first decide upon the size and type of ear that he wishes to use as a standard. That ear he should carry with him constantly where he can see it. If that is not done the large and varied number of ears of different shapes will confuse any man and in the end he would have many different types of ears in his collection. No doubt the easiest way is to use a large sack with a strap from either end tied at one corner and passing over the man's shoulder. We carry the sack in this manner with the open end in front. When an ear is seen that looks at all likely to be a seed ear it is examined by raising the husks on one side. If this examination shows the ear to be what is wanted, it is husked completely and dropped into the sack. A man will be able to gather in ordinarily heavy corn as much as he can carry in a very short time. There are several convenient ways of disposing of the corn as the sack may become heavy. Boxes or bags may be kept at one or both ends of the field and the seed corn emptied each trip. A wagon may be used in the same way or the corn may be piled on the ground temporarily.

A large number of very important factors may well be considered in field selection. The kind of a stalk upon which the ear grew is worthy of attention. The size of the stalk should be suitable to the climate. A stalk with the ear too high is likely to break over in the wind. One with the ear too low is very likely to have an ear upon it that is undersized. It must not be overlooked that the stalks surrounding the one upon which a seed ear grew are very likely to be represented in the parentage of the ear. It is, indeed, well to examine the neighboring stalks for if the ear under examination has been fertilized by barren or inferior stalks, certainly we do not want it for seed. An ear that grows on a stalk in a hill where there are two or three other stalks is to be preferred to another that grows on the only stalk in the hill. The latter has had a very much better opportunity and might have been only an ordinary specimen if it had shared with one or two other ears. A

good ear that has grown and matured under normal conditions is more likely to produce satisfactorily than one which has reached the same development under more favorable conditions. Selection in the field has been one of the most important factors in improving our corn to its present standard. Men are finding it profitable to gather their seed corn in the field for the numerous reasons mentioned, and more.

The ideal place to dry seed corn would be where there is a circulation of warm, dry air. On the ordinary farm one cannot provide ideal conditions—he must make the best use of the means at hand. Any sort of a closed building is apt to be lacking in a circulation of air. The same is true of the farmhouse. In the

used. The two ends are tied together. An ear of corn is laid in the middle of the doubled string. The strings are then crossed, the two strands being held about three inches apart. Another ear is laid in and the strings crossed as before. This is kept up until the end of the string is reached. Then one open end may be drawn through the other and the string of ears hung up by it or handled as desired. The strings between the ears keep them from touching, which is very necessary as moulding no doubt would occur if they were to touch. When it is desired to move the corn all the ears on one string can be handled as easily as a single ear, which is not possible when any other method is used. Once dried thoroughly it matters little



Seed Corn Selected from the Hill and Properly Cured will Insure a Good Stand Of Corn Next Spring.

cellar the air is usually so damp that corn will not dry out at all. An open shed where the wind can blow through and which will shelter the corn from rain has given very good results in practice. For years the writer lived in Nebraska, where there was invariably a dry season at seed corn picking time. We simply strung the corn up in the open, taking care to carry it inside if rain threatened. In the more humid regions such a plan is not safe.

The simplest and all around most satisfactory plan that can be used in hanging up corn to dry is undoubtedly the one devised by two Iowa boys. A binder twine string, about ten feet in length, is

where the corn is stored, so long as the place is dry. Freezing does not damage corn that is perfectly dry, at least not so that it can be noticed. The kitchen attic or an unused room on the second floor of the house will rank among the most desirable places. To have the place of storage free from rats and mice is absolutely essential. Last fall the writer happened to stay with a farmer who had in several upper rooms of his home, seed corn several inches in depth. The corn was dry and of most excellent type. In the spring that corn gave 96 per cent germination test and sold at an average price of \$6.00 per bushel or more. Minnesota. H. E. McCARTNEY.

HANDLING DAMP GRAIN.

As a rule, it is not customary for those who write for the agricultural press to look upon the gloomy side of things, but they are supposed to always have an agreeable and optimistic outlook before them.

The present season has certainly been a very unusual one, especially since the harvesting of the grain has begun. Rains have been prevalent throughout a large portion of the country, and it has been almost an impossibility to secure the grain before it has become more or less damaged by excessive moisture.

It may not be wise to describe the annoyances that confront one under such conditions as we have experienced during the present harvest, but it will be well to avoid if possible, some of the difficulties that are likely to arise in consequence of the grain becoming more or less damaged. To the experienced individual, some of the serious results are so familiar that it seems appropriate to offer a few words of caution that may benefit some, not only this present year, but in years to come.

The ancient custom of putting cap-sheaves on the shocks of grain after it is shocked up is not as prevalent as in former years. While it takes a little more time to cap the shocks, it more than repays the trouble in keeping the grain in good condition during a rainy season. To many the art of capping the shocks well is a lost one, but it would be well if it were regained again in order to insure the grain against serious damage and loss.

Putting Grain in Mow or Stack.

It is customary with many to put grain in the mow or stack before it is either well cured or the moisture that comes from rains has dried out, believing that the sweating process will dry out the grain, and that it will be nearly if not quite as good as if it had not been dampened.

To handle grain just at that period requires not only skill but excellent judgment in order to secure the best results. Where the grain, especially oats, is ripe and dry, and the stalk is green or damp, the grain can be allowed to sweat in the mow or stack two weeks and then thresh without injury to the grain, as the grain itself will still be dry; but if the grain is left longer, until it is past the sweating and heating process, it will absorb moisture from the stalk and will not be in as good condition for putting in the bin as it would have been at the end of two weeks.

Handling damp grain after it has been threshed requires skill and good judgment in order to prevent loss and damage that may follow the use of dusty and musty grain. If grain is damp, it ought not to be left in the bin after threshing more than 24 hours before it is stirred. It should be spread on floors or in bins at a depth not to exceed 12 or 15 inches, and then the grain should be stirred at least once a day until it has entirely dried. To attend to damp oats and prevent their becoming injured is a task that very few will court after they have passed through the ordeal once. It requires much longer time to dry out damp oats than it does damp wheat, and the abandoning of the stirring process is often resorted to, and damage by must and dust follows.

Feeding Damaged Grain.

After oats have become dusty and musty, they should not be fed to horses directly from the bin without some method of treatment that will prevent the horse inhaling the dust on the bronchial tubes, which seems to irritate and cause a peculiar cough that is the forerunner

of more serious difficulties. Such grain should be mixed with bran and dampened before feeding, or else mixed with some other kind of grain and ground before feeding to horses.

Those damaged grains, however, that are injured by being allowed to become musty and dusty in the bin may be fed to other classes of stock without as much serious injury as is experienced when being fed to horses. Poultry, hogs, sheep and cattle do not seem to be affected by the use of damaged grain as much as are the horses.

Seed Oats.

There are but few who seem to realize that grain which has become heated in the mow or stack and subsequently in the bin is injured for seed. The heating process destroys the germs in many of the kernels, and to use such grain as seed will ultimately bring disappointment. It is by far cheaper and better to secure seed that has not been injured in any way. Oats that have passed through the heating process, while they may grow, produce only sickly and feeble stalks and diminish the ultimate yield of the grain. It is worth the while to keep these facts in mind in order to insure a maximum crop the following season.

Oakland Co. N. A. CLAPP.

FARM NOTES.

Seeding Clover in Buckwheat.

I have 30 acres of land that is a little light. This land was sown to wheat and rye last fall and seeded to clover this spring, but the June drought killed the seeding. As I have not got the time to fit this ground this fall for seeding I have planned to plow the ground early in the spring and summer fallow up until about the last of June and sow to buckwheat and clover at the same time. Would this be a reasonably sure way of getting it seeded? Another plan I have in mind is to plant this ground to corn wide enough apart each way so as to cultivate the row with a riding cultivator and then run a spring-tooth harrow between the rows so as to have the ground in the best possible condition for seeding the latter part of the summer. I wish to get this ground seeded and at the same time get something for my labor while doing it. This is a rented farm and if I should move off one year from next spring I would get no compensation for my work. To seed in a fall crop would almost be certain failure in case of a drouth. Which would be the better method, the former or the latter?

Ingham Co.

D. W. G.

This plan of seeding clover in buckwheat is one which would probably be successful in a season such as we have had this year, since there has been plenty of moisture from the time it would have been sown. In a season when there was a severe drouth, however, the fate of the seeding would probably be similar to that in wheat and rye this year.

The same factors would largely control the success of the seeding in corn, as suggested in this inquiry. This year has been an especially favorable one for seeding in corn. On the writer's farm a piece of alfalfa was seeded in corn at the last cultivation. It came up at once and has made a rapid growth since, the alfalfa now being from three to six inches high according to how much it was shaded. The effect of the sunlight upon this plant is especially noticeable in this corn field. Wherever there happens to be a missing hill the alfalfa has made twice the growth which it has in the more densely shaded portions of the field.

From this experience it is the writer's opinion that the suggestion made in this inquiry of planting the corn rather wide apart one way where it is to be seeded to clover is a good one. If the wide space between the rows is in a north and south direction so that the sun at mid-day could get better access to the ground, it would stimulate the growth of the young clover very materially. In a normal season, it is the writer's opinion that this plan would probably be worthy of a trial, although experience has demonstrated that seeding in corn is rather an uncertain proposition, depending very largely upon weather conditions as to the success attained. The experience of readers along the line suggested in this inquiry would probably be beneficial to others as well as to this inquirer.

When to Cut New Seedlings of Alfalfa.

I have about two acres of apple orchard which I seeded to alfalfa in June without a ruse crop. I cut the weeds with a scythe in spots about the first of August. Where I did not cut the weeds it has got a good growth. Ought I to cut it this fall, and if so how soon? The trees are full of apples and I cannot cut it very well with a machine.

Oakland Co.

E. F.

So far as the future value of the stand of alfalfa is concerned it would be unnecessary to cut it this fall. It should not be cut later than in September, since it ought to get growth enough to

be some protection over winter, and if it must be cut by hand it would probably not pay to cut it at all this fall. In any event it should not be cut until the new shoots have started from the crowns.

Winter vs. Spring Rye.

Please advise me as to spring rye, as there is scarcely any grown around here. I would like to know how the yield compares to the winter rye. Is the spring rye as good to seed in as the winter rye? How much would you sow to the acre of spring rye?

Kalamazoo Co.

SUBSCRIBER.

Spring rye is grown to only a limited extent in Michigan. This is very good proof that it is not so well adapted to Michigan conditions as winter rye. The writer has seen it grown to a limited extent only, and then without any apparent inclination on the part of those who have grown it to follow up its culture from year to year, but has no authentic data as to comparative yields or advantages.

SOFT DRAIN TILE VS. GLAZED TILE.

I am thinking of draining some sand loam land. Would you advise using the soft tile or the glazed tile, and will the soft tile retain its normal condition in the ground as well as the glazed tile?

Muskegon Co.

SUBSCRIBER.

Common clay drain tile will absorb a considerable amount of moisture and in the winter time if they lay on top of the ground they will absorb enough moisture so that when it freezes they will crumble, but if they are laid above the ground so that they cannot draw the moisture from the soil they will not be injured by cold weather, that is, they do not absorb enough moisture by simply being rained upon so that when it freezes it has any effect upon them at all. Now when they are laid in the ground below the frost line, as tile drain ought to be, two and a half or three feet deep, they will not be affected at all by the weather, and they will last probably just as long as the glazed tile. It is a splendid thing, however, at the mouth of the tile drains, the last half dozen tile, to use glazed tile if you use the common soft clay for the rest of the ditch, because at the mouth of the ditch they may absorb moisture and freeze and crumble and it will work quite an injury. It is quite a job to keep the mouth of a tile drain open, as it ought to be anyway, and you cannot take too much pains, and I would use glazed tile at the mouth of the ditch. As I have said before, glazed tile break less in handling and in shipping than do the soft tile, and I think on the whole, that there isn't very much difference whether you buy soft clay tile properly burned, or the glazed tile.

COLON C. LILLIE.

SUCCESSFUL CULTURAL METHODS ON A SANDY FARM.

I have the best piece of corn I ever raised and if we don't have a hard frost before the first of October it will go 100 bushels per acre. The field from which I will fill my silo will be ready in September and is eared heavily, but there are some fields of corn in this section that will have very few ears on. My land is very sandy. I plow my corn ground in April and get it worked down good; sometimes I plow it in the fall. From now on I shall put my manure on top of the plowed ground with the manure spreader and work it in with the cutaway harrow.

Beans in this section will be a good crop. I have a field that looks fine. The vines cover the ground and will be ready to pull in ten days. I plowed my bean ground in April, worked it good and have no weeds, so when I pull the beans the ground will be as clean as a floor.

The wheat crop around here was a failure. I mowed mine down and never raked it up, it was so thin. But I have a fair catch of clover on the field. I top-dressed it with manure. If I had not done so that dry spell would have killed it all out.

This spring I top-dressed a corn stubble field with stable manure and about the first of June I went on with my cutaway harrow and chopped the ground up thoroughly and then dragged it frequently until the middle of July, when I sowed it to alfalfa. I have a good stand. It is six inches high now. I did not inoculate the seed. I may be wrong, but I laughed at the idea of inoculation. I have a neighbor that has started three different fields and he never inoculated. Now the way my alfalfa has grown, by the last of September it will be a good height. Will it be a good plan to clip it? Will Mr. Lillie answer this question?

Ingham Co.

A. D. M.



Why Plow with Dull Shares?

You wouldn't use a dull razor. Why burden your team with dull plow shares?

Ordinary soft center shares when sharpened by the blacksmith are not re-hardened. Why? Because he is cautioned against it by the manufacturer—he can't afford to take the risk.

ACME SOFT CENTER STEEL SHARES can be re-tempered any number of times, any place that fire and water can be found and at our risk. Both user and blacksmith are protected by

OUR GUARANTEE

Acme steel hardened shares, shovels and shapers are warranted not to break under any condition where plowing for crop is being done. Shares guaranteed against breakage under same conditions of usage after blacksmith has drawn the temper, sharpened, heated to a cherry red and re-tempered same. Acme shares are guaranteed to wear as long as any other soft-center steel shares made.

By re-tempering, you get hard shares—hard shares wear—retain their sharp edge—reduce the cost of plowing per acre. "Acme Shares Don't Break."

CAN'T BREAK THE ACME

ONE BLOW BREAKS OTHERS

Note the difference in these photographs between Acme Shares and others. Mr. Farmer—why not have the perfect Acme Shares on your plows? They cost no more than others and think how much more they are worth to you. Where can you get Acme Shares? On Moline Plows only—The best plows in the world—The best made, the best balanced, the easiest to handle.

The "Best Ever" Sulky and Gang Plows are made of carefully selected materials, in a factory making only high-grade implements. Positive wheel control—perfect scouring qualities—light draft and many other strong features in addition to the Acme Steel Shares and Moldboards which place Moline Plows in a class by themselves.

Write today for FREE FOLDER on Best Ever plows, also Acme booklet.

MOLINE PLOW COMPANY

Dept. 26

MOLINE, ILLINOIS

The "Best Ever"

Two Kinds of Husker-Shredders



There are two kinds } (1) The Advance
of Husker-Shredders } (2) The Others

We make this statement seriously and we believe it to be true. Scores of farmers have told us that the Advance machine is in a class by itself. The Retard Rolls of the Advance are protected by patents. So is the Husking Device.

The ADVANCE HUSKER-SHREDDER



needs only one man to feed it, and it will do more high-class husking and shredding, with less labor-cost, than any other machine. The Advance does neat, clean, reliable work. "It is the finest and lightest-running of all the Husker-Shredders, and it has the greatest capacity I have ever seen," says John D. Samels, of Freeport, Illinois.

Any Rumely dealer will show you the fine points of the Advance. If you want all the facts at once, write today for our "Shredder Book."

RUMELY PRODUCTS COMPANY, Inc., 6293 Main St., La Porte, Ind.

A Penny Spent in building a warm house is a Dollar Saved



in heating it afterwards

"QUILT"

will make it wind and frost proof; keep out the cold of winter or the heat of summer. Costs 1¢ a foot, and one layer is equal to 28 layers of common building paper. Send for free sample and name of nearest agent.

Samuel Cabot, Manufacturing Chemists, Boston, Mass.
MICHIGAN DISTRIBUTORS W. P. Williams, Grand Rapids, C. H. Little Co., Detroit.

Make Money Raising Golden Seal and Gensing.

Only six feet square required. Gensing brings \$20 and upward per pound in China. Golden Seal brings \$5.00 per pound. If all available land for Golden Seal were planted crop would be short. If a man plants 100 roots of either and attends to them, he will get rich. In five years these plants will pay better than a profession. We sell roots and seed at one cent each for seed and ten cents each for plants, in hundred lots. A hundred will fill 640 square inches of your back yard. Ours are genuine and guaranteed.

JNO. W. TALBOT, South Bend, Ind.

Test this Hay Press FREE 10 days

Spencer's Steel Alligator

with 60-inch feed hole can bale 2½ tons an hour or it is yours free.

Would such a baler interest you?

Write today for FREE Catalog.

J. A. SPENCER, Dwight, Ill.

121 William Street



When Writing to Advertisers please mention the Michigan Farmer.

PRACTICAL SCIENCE.

SPECIAL ARTICLES ON MILK.

BY FLOYD W. ROBISON.
Pasteurization of Milk.

In marketing milk and its products several expedients have been adopted by dairymen at various times supplementing the campaign carried on educationally for the production of clean milk. This campaign has been productive of slow results, as is nearly always the case in all educational campaigns. Business men have not been content to wait the results of educational propaganda work but have been compelled to take milk as it is produced commercially, and to so modify it in one or another way that it becomes at least a merchantable article of food.

Influence of Bacteria in Milk Has Been Recognized Before.

Since the advent of a more or less marked appreciation of the role which bacteria play in milk it has been found that to produce a commercial product from milk has depended in no small measure upon the controlling of the bacterial flora in the milk. In the cheese factories the cheese maker has known for some time that the activity of the various bacteria affects the finished product. So true is this that it is now common knowledge that certain varieties of cheeses owe their marked characteristics entirely to the peculiarity of a specific organism which has been encouraged to grow in that particular cheese to the exclusion of most other types of bacteria.

Before the cheese maker ascertained that he could produce certain desirable flavors and desirable aromas by the culture of a certain specific organism in the cheese he found that unless he had the conditions more or less under control that very undesirable, haphazard results were obtained in the manufacture of cheese. In other words, taking milk as it comes to the cheese factory, the variety of organisms present each producing in a measure its own particular end products, develop a variety of flavors, and variety of odors, which uncontrolled militates seriously against the production of any uniform cheese.

Advantage of Pasteurization.

After some experimentation some cheese makers and butter makers ascertained that by pasteurizing the milk early in the stages of its incubation and then subsequently inoculating this pasteurized milk with certain definite organisms the fermentation of the milk could be controlled. It became necessary to resort to pasteurization because most of the milk produced in the country was produced under such unclean conditions that a very great variety of bacteria began growing in the milk. If the milk were pure to begin with, that is, perfectly devoid of bacteria, there would be no need of the introduction of cultures or for the pasteurization of the milk.

What Pasteurization Means.

Pasteurization in so far as cheese production is concerned and the ripening of milk for butter making is concerned means simply the giving the milk a fresh start. By employment of pasteurization most of the bacteria present are killed and then when a fresh culture is stirred into the milk it begins to grow immediately and develops along its own particular line. It may be well to state that the practice of pasteurization of milk arose because clean milk was not generally a commercial product and recognizing that it was impossible to secure clean milk without a prolonged educational campaign, butter makers and cheese makers found that the next expedient was to pasteurize milk sent to them and then to inoculate this pasteurized product with a fresh culture, or starter, and continue the development in this way. The pasteurization of milk in so far as it may concern creameries and cheese factories has many distinct advantages over the raw, commercial, unclean product. The milk, however, is not as satisfactory after pasteurization as before pasteurization, provided it is clean. Consequently pasteurization does not improve clean milk. It does, however, make unclean milk more usable and in some instances when pasteurization takes place sufficiently early it may make merchantable a product which otherwise would speedily become of no value.

Pasteurized Milk Not so Valuable in City Milk Supply.

While pasteurization of milk has a very legitimate and desirable field of operation in creameries and in cheese fac-

ories, the analogy does not necessarily hold when applied to city milk supply. In city milk supply there is practically no expedient which will do away with the necessity for clean milk. It is doubtful if the pasteurization of milk by the dairymen or by the middleman is ever a safe thing for the consumer. The term "Pasteurized Milk" is a very fanciful one and carries with it to the consumer a meaning of security which is not at all real in so far as that particular milk is concerned.

Pasteurization Does Not Destroy Spores.

It is the consensus of scientific opinion that the pasteurization of milk has very little influence indeed, on the vitality of the spores of the spore-forming bacteria. Consequently if the milk is not consumed very shortly after pasteurization the spores may go on developing and in their turn produce a very active bacterial flora of the same undesirable general type as existed in the parent germ. On the other hand, if to the pasteurized milk a certain amount of starter, or culture, is added the very activity of this new culture or starter, elaborating its waste product, will hold in check the development of the spores of the undesirable type which were killed or whose vitality was much lessened through pasteurization.

Home Pasteurization Best.

For city milk supply the ideal point of pasteurization is in the home after the milk has been delivered. If, then, there is any doubt or suspicion as to the wholesomeness of the milk supply, the danger may be minimized by resorting to home pasteurization of the milk. To pasteurize milk in the home, a bottle of the product may be placed in a large can or pail, cold water filled around the outside up to the neck and the same heated fairly rapidly until the water on the outside of the milk bottle has begun rapid boiling. The milk is then cooled down as rapidly as possible and may then be used with a high degree of safety, in the home. The pasteurization of milk in so far as the city milk supply is concerned is not now as much in favor as was at one time supposed it would be and various cities which have been quite insistent on the subject have relinquished their energies and are now quite convinced that the pasteurization of milk as generally performed in the city, adds very little, if any, to the general safety of that article.

Pasteurization Not a Substitute for Cleanliness.

Pasteurization is an expedient which is of service in a cheese factory and in the creamery. It is doubtful if it may be practiced with anywhere near the same degree of satisfaction and as high degree of safety with the milk at retail in cities except its pasteurization be performed at the home directly before the same is to be used in the family. In other words, pasteurization is an expedient which is designed to, and under certain conditions does, counteract many of the evil effects of unclean milk but does not in any sense of the word, nor in a single instance, take the place of clean milk.

LABORATORY REPORT.

I would like to know which is the best feed for horses, molasses or glucose? Glucose is much cheaper than molasses.

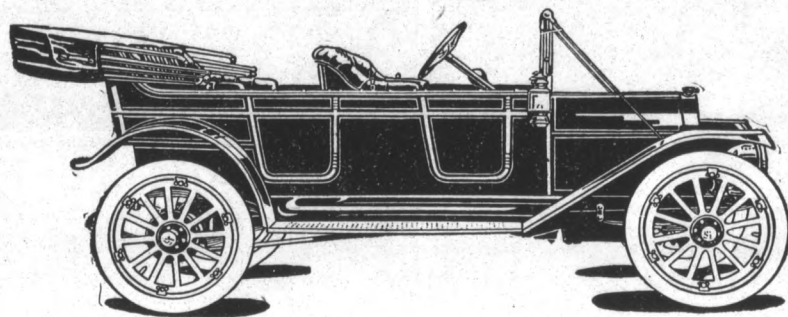
A. H. S.

We are compelled to give our preference to molasses over glucose. Our reasons are because molasses has been studied in its relation to the animal ration, whereas we are not familiar with any extended experiments on this point with glucose. A second reason is that molasses possesses a higher value from the standpoint of palatability than does glucose, molasses having a much more pronounced sweet taste and on this account we think should be superior to glucose. A third reason is that molasses, especially the best molasses, possesses a marked content of protein, which is not true of glucose.

Prof. Thomas Shaw states, "Molasses has been fed successfully along with skim-milk. Its use, however, in feeding swine will probably be limited, as an appetizer is less necessary for swine than for other classes of farm animals."

We think that possibly glucose might enter into better advantage in swine feeding but with horses and cattle we have no hesitancy in advising at the present time molasses in preference to glucose.

K-R-I-T



Model "K" Touring Car, Fully Equipped \$900

Equipment includes three oil lamps, two gas lamps, generator, top with side curtains and top cover, windshield, horn, demountable rims with spare rim, tool kit with jack and tire repair outfit with pump.

Give us the chance to convince you of K-R-I-T quality and service

That is all we ask.

We feel reasonably sure that we can convince you and in a way that will be pleasing too.

We know what the K-r-i-t can do and has done on the roads or hills you travel.

But we don't want to ask you to take our word for it alone.

We want you to see for yourself how the K-r-i-t acts and behaves on country roads and hills.

That is our reason for wanting you to phone or call on the nearest K-r-i-t dealer and arrange to

have him bring the car to your farm.

When you have your demonstration please note the smoothness and silence with which the motor runs and its wonderful pulling powers.

Also note the generous room the car gives the five passengers; the complete equipment and the beautiful and lasting finish of the car.

If you do not know the name and address of the nearest K-r-i-t dealer, write us, and we will gladly send it along with our latest catalog.

Other Models

Model "KR" Roadster : : \$900
" "KD" Covered Delivery \$900

KRIT MOTOR CAR COMPANY, 1003 E. Grand Boulevard, Detroit, Mich.

Economy Gasoline Engines always justify our binding guarantee. We build them to exceed their rated horse power and to excel our claims of low fuel cost, durability and steady running. And then consider our remarkably low prices.

With Economy standard water cooled engines selling as low as \$26.95, the expense of being without an engine is surely many times the cost of buying one.

Turn to pages 1384 to 1392 in our latest Big General Catalog and note the remarkably low prices we quote on any size engine you want. Shipped on 60 Days' Trial and backed by Sears, Roebuck and Co.'s guarantee.

If you haven't a copy of our Big General Catalog just write "ECONOMY ENGINES" on a postal card and sign your name and address.

Sears, Roebuck and Co.
Chicago

ECONOMY

of more serious difficulties. Such grain should be mixed with bran and dampened before feeding, or else mixed with some other kind of grain and ground before feeding to horses.

Those damaged grains, however, that are injured by being allowed to become musty and dusty in the bin may be fed to other classes of stock without as much serious injury as is experienced when being fed to horses. Poultry, hogs, sheep and cattle do not seem to be affected by the use of damaged grain as much as are the horses.

Seed Oats.

There are but few who seem to realize that grain which has become heated in the mow or stack and subsequently in the bin is injured for seed. The heating process destroys the germs in many of the kernels, and to use such grain as seed will ultimately bring disappointment. It is by far cheaper and better to secure seed that has not been injured in any way. Oats that have passed through the heating process, while they may grow, produce only sickly and feeble stalks and diminish the ultimate yield of the grain. It is worth the while to keep these facts in mind in order to insure a maximum crop the following season.

Oakland Co. N. A. CLAPP.

FARM NOTES.

Seeding Clover in Buckwheat.

I have 30 acres of land that is a little light. This land was sown to wheat and rye last fall and seeded to clover this spring, but the June drought killed the seeding. As I have not got the time to fit this ground this fall for seeding I have planned to plow the ground early in the spring and summer fallow up until about the last of June and sow to buckwheat and clover at the same time. Would this be a reasonably sure way of getting it seeded? Another plan I have in mind is to plant this ground to corn wide enough apart each way so as to cultivate the row with a riding cultivator and then run a spring-tooth harrow between the rows so as to have the ground in the best possible condition for seeding the latter part of the summer. I wish to get this ground seeded and at the same time get something for my labor while doing it. This is a rented farm and if I should move off one year from next spring I would get no compensation for my work. To seed in a fall crop would almost be certain failure in case of a drought. Which would be the better method, the former or the latter?

Ingham Co. D. W. G.

This plan of seeding clover in buckwheat is one which would probably be successful in a season such as we have had this year, since there has been plenty of moisture from the time it would have been sown. In a season when there was a severe drought, however, the fate of the seeding would probably be similar to that in wheat and rye this year.

The same factors would largely control the success of the seeding in corn, as suggested in this inquiry. This year has been an especially favorable one for seeding in corn. On the writer's farm a piece of alfalfa was seeded in corn at the last cultivation. It came up at once and has made a rapid growth since, the alfalfa now being from three to six inches high according to how much it was shaded. The effect of the sunlight upon this plant is especially noticeable in this corn field. Wherever there happens to be a missing hill the alfalfa has made twice the growth which it has in the more densely shaded portions of the field.

From this experience it is the writer's opinion that the suggestion made in this inquiry of planting the corn rather wide apart one way where it is to be seeded to clover is a good one. If the wide space between the rows is in a north and south direction so that the sun at mid-day could get better access to the ground, it would stimulate the growth of the young clover very materially. In a normal season, it is the writer's opinion that this plan would probably be worthy of a trial, although experience has demonstrated that seeding in corn is rather an uncertain proposition, depending very largely upon weather conditions as to the success attained. The experience of readers along the line suggested in this inquiry would probably be beneficial to others as well as to this inquirer.

When to Cut New Seedings of Alfalfa.

I have about two acres of apple orchard which I seeded to alfalfa in June without a nurse crop. I cut the weeds with a scythe in spots about the first of August. Where I did not cut the weeds it has got a good growth. Ought I to cut it this fall, and if so how soon? The trees are full of apples and I cannot cut it very well with a machine.

Oakland Co. E. F.

So far as the future value of the stand of alfalfa is concerned it would be unnecessary to cut it this fall. It should not be cut later than in September, since it ought to get growth enough to

be some protection over winter, and if it must be cut by hand it would probably not pay to cut it at all this fall. In any event it should not be cut until the new shoots have started from the crowns.

Winter vs. Spring Rye.

Please advise me as to spring rye, as there is scarcely any grown around here. I would like to know how the yield compares to the winter rye. Is the spring rye as good to seed in as the winter rye? How much would you sow to the acre of spring rye?

Kalamazoo Co. SUBSCRIBER.

Spring rye is grown to only a limited extent in Michigan. This is very good proof that it is not so well adapted to Michigan conditions as winter rye. The writer has seen it grown to a limited extent only, and then without any apparent inclination on the part of those who have grown it to follow up its culture from year to year, but has no authentic data as to comparative yields or advantages.

SOFT DRAIN TILE VS. GLAZED TILE.

I am thinking of draining some sand loam land. Would you advise using the soft tile or the glazed tile, and will the soft tile retain its normal condition in the ground as well as the glazed tile?

Muskegon Co. SUBSCRIBER.

Common clay drain tile will absorb a considerable amount of moisture and in the winter time if they lay on top of the ground they will absorb enough moisture so that when it freezes they will crumble, but if they are laid above the ground so that they cannot draw the moisture from the soil they will not be injured by cold weather, that is, they do not absorb enough moisture by simply being rained upon so that when it freezes it has any effect upon them at all. Now when they are laid in the ground below the frost line, as tile drain ought to be, two and a half or three feet deep, they will not be affected at all by the weather, and they will last probably just as long as the glazed tile. It is a splendid thing, however, at the mouth of the tile drains, the last half dozen tile, to use glazed tile if you use the common soft clay for the rest of the ditch, because at the mouth of the ditch they may absorb moisture and freeze and crumble and it will work quite an injury. It is quite a job to keep the mouth of a tile drain open, as it ought to be anyway, and you cannot take too much pains, and I would use glazed tile at the mouth of the ditch. As I have said before, glazed tile break less in handling and in shipping than do the soft tile, and I think on the whole, that there isn't very much difference whether you buy soft clay tile properly burned, or the glazed tile.

COLON C. LILLIE.

SUCCESSFUL CULTURAL METHODS ON A SANDY FARM.

I have the best piece of corn I ever raised and if we don't have a hard frost before the first of October it will go 100 bushels per acre. The field from which I will fill my silo will be ready in September and is eared heavily, but there are some fields of corn in this section that will have very few ears on. My land is very sandy. I plow my corn ground in April and get it worked down good; sometimes I plow it in the fall. From now on I shall put my manure on top of the plowed ground with the manure spreader and work it in with the cutaway harrow.

Beans in this section will be a good crop. I have a field that looks fine. The vines cover the ground and will be ready to pull in ten days. I plowed my bean ground in April, worked it good and have no weeds, so when I pull the beans the ground will be as clean as a floor.

The wheat crop around here was a failure. I mowed mine down and never raked it up, it was so thin. But I have a fair catch of clover on the field. I top-dressed it with manure. If I had not done so that dry spell would have killed it all out.

This spring I top-dressed a corn stubble field with stable manure and about the first of June I went on with my cutaway harrow and chopped the ground up thoroughly and then dragged it frequently until the middle of July, when I sowed it to alfalfa. I have a good stand. It is six inches high now. I did not inoculate the seed. I may be wrong, but I laughed at the idea of inoculation. I have a neighbor that has started three different fields and he never inoculated. Now the way my alfalfa has grown, by the last of September it will be a good height. Will it be a good plan to clip it? Will Mr. Lillie answer this question?

Ingham Co.

A. D. M.



Why Plow with Dull Shares?

You wouldn't use a dull razor. Why burden your team with dull plow shares?

Ordinary soft center shares when sharpened by the blacksmith are not re-hardened. Why? Because he is cautioned against it by the manufacturer—he can't afford to take the risk.

ACME SOFT CENTER STEEL SHARES can be re-tempered any number of times, any place that fire and water can be found and at our risk. Both user and blacksmith are protected by



CAN'T BREAK THE ACME

OUR GUARANTEE

Acme steel hardened shares, shovels and shapes are warranted not to break under any condition where plowing for crop is being done. Shares guaranteed against breakage under same conditions of usage after blacksmith has drawn the temper, sharpened, heated to a cherry red and re-tempered same. Acme shares are guaranteed to wear as long as any other soft-center steel shares made.

By re-tempering, you get hard shares—hard shares wear—retain their sharp edge—reduce the cost of plowing per acre. **"Acme Shares Don't Break."** ONE BLOW BREAKS OTHERS



Note the difference in these photographs between Acme Shares and others. Mr. Farmer—why not have the perfect Acme Shares on your plows? They cost no more than others and think how much more they are worth to you. Where can you get Acme Shares? On Moline Plows only—The best plows in the world—The best made, the best balanced, the easiest to handle. The "Best Ever" Sulky and Gang Plows are made of carefully selected materials, in a factory making only high-grade implements. Positive wheel control—perfect scouring qualities—light draft and many other strong features in addition to the Acme Steel Shares and Moldboards which place Moline Plows in a class by themselves.


Write today for FREE FOLDER on Best Ever plows, also Acme booklet.

MOLINE PLOW COMPANY
Dept. 26
MOLINE, ILLINOIS



The "Best Ever"

Two Kinds of Husker-Shredders




There are two kinds of Husker-Shredders

(1) The Advance

(2) The Others

We make this statement seriously and we believe it to be true. Scores of farmers have told us that the Advance machine is in a class by itself. The Retard Rolls of the Advance are protected by patents. So is the Husking Device.

The



HUSKER-SHREDDER

needs only one man to feed it, and it will do more high-class husking and shredding, with less labor-cost, than any other machine.

The Advance does neat, clean, reliable work. "It is the finest and lightest-running of all the Husker-Shredders, and it has the greatest capacity I have ever seen," says John D. Samels, of Freeport, Illinois.

Any Rumely dealer will show you the fine points of the Advance.

If you want all the facts at once, write today for our "Shredder Book."

RUMELY PRODUCTS COMPANY, Inc., 6293 Main St., La Porte, Ind.

A Penny Spent in building a warm house is a Dollar Saved in heating it afterwards



"QUILT"

will make it wind and frost proof; keep out the cold of winter or the heat of summer. Costs 1¢ a foot, and one layer is equal to 28 layers of common building paper. Send for free sample and name of nearest agent.

Samuel Cabot, Manufacturing Chemists, Boston, Mass.
MICHIGAN DISTRIBUTORS W. P. Williams, Grand Rapids, C. H. Little Co., Detroit.

Make Money Raising Golden Seal and Gensing.

Only six feet square required. Gensing brings \$20 net upward per pound in China. Golden Seal brings \$5.00 per pound. If all available land for Golden Seal were planted crop would be short. If a man plants 100 roots of either and attends to them, he will get rich. In five years these plants will pay better than a profession. We sell roots and seed at one cent each for seed and ten cents each for plants, in hundred lots. A hundred will fill 640 square inches of your back yard. Ours are genuine and guaranteed.

JNO. W. TALBOT, South Bend, Ind.

Test this Hay Press FREE 10 days

Spencer's Steel Alligator

with 60-inch feed hole can bale 2½ tons an hour or it is yours free.

Would such a baler interest you?

Write today for FREE Catalog.

J. A. SPENCER, Dwight, Ill.
121 William Street



When Writing to Advertisers please mention the Michigan Farmer.

PRACTICAL SCIENCE.

SPECIAL ARTICLES ON MILK.

BY FLOYD W. ROBISON.
Pasteurization of Milk.

In marketing milk and its products several expedients have been adopted by dairymen at various times supplementing the campaign carried on educationally for the production of clean milk. This campaign has been productive of slow results, as is nearly always the case in all educational campaigns. Business men have not been content to wait the results of educational propaganda work but have been compelled to take milk as it is produced commercially, and to so modify it in one or another way that it becomes at least a merchantable article of food.

Influence of Bacteria in Milk Has Been Recognized Before.

Since the advent of a more or less marked appreciation of the role which bacteria play in milk it has been found that to produce a commercial product from milk has depended in no small measure upon the controlling of the bacterial flora in the milk. In the cheese factories the cheese maker has known for some time that the activity of the various bacteria affects the finished product. So true is this that it is now common knowledge that certain varieties of cheeses owe their marked characteristics entirely to the peculiarity of a specific organism which has been encouraged to grow in that particular cheese to the exclusion of most other types of bacteria.

Before the cheese maker ascertained that he could produce certain desirable flavors and desirable aromas by the culture of a certain specific organism in the cheese he found that unless he had the conditions more or less under control that very undesirable, haphazard results were obtained in the manufacture of cheese. In other words, taking milk as it comes to the cheese factory, the variety of organisms present each producing in a measure its own particular end products, develop a variety of flavors, and variety of odors, which uncontrolled militates seriously against the production of any uniform cheese.

Advantage of Pasteurization.

After some experimentation some cheese makers and butter makers ascertained that by pasteurizing the milk early in the stages of its incubation and then subsequently inoculating this pasteurized milk with certain definite organisms the fermentation of the milk could be controlled. It became necessary to resort to pasteurization because most of the milk produced in the country was produced under such unclean conditions that a very great variety of bacteria began growing in the milk. If the milk were pure to begin with, that is, perfectly devoid of bacteria, there would be no need of the introduction of cultures or for the pasteurization of the milk.

What Pasteurization Means.

Pasteurization in so far as cheese production is concerned and the ripening of milk for butter making is concerned means simply the giving the milk a fresh start. By employment of pasteurization most of the bacteria present are killed and then when a fresh culture is stirred into the milk it begins to grow immediately and develops along its own particular line. It may be well to state that the practice of pasteurization of milk arose because clean milk was not generally a commercial product and recognizing that it was impossible to secure clean milk without a prolonged educational campaign, butter makers and cheese makers found that the next expedient was to pasteurize milk sent to them and then to inoculate this pasteurized product with a fresh culture, or starter, and continue the development in this way. The pasteurization of milk in so far as it may concern creameries and cheese factories has many distinct advantages over the raw, commercial, unclean product. The milk, however, is not as satisfactory after pasteurization as before pasteurization, provided it is clean. Consequently pasteurization does not improve clean milk. It does, however, make unclean milk more usable and in some instances when pasteurization takes place sufficiently early it may make merchantable a product which otherwise would speedily become of no value.

Pasteurized Milk Not so Valuable in City Milk Supply.

While pasteurization of milk has a very legitimate and desirable field of operation in creameries and in cheese fac-

ories, the analogy does not necessarily hold when applied to city milk supply. In city milk supply there is practically no expedient which will do away with the necessity for clean milk. It is doubtful if the pasteurization of milk by the dairyman or by the middleman is ever a safe thing for the consumer. The term "Pasteurized Milk" is a very fanciful one and carries with it to the consumer a meaning of security which is not at all real in so far as that particular milk is concerned.

Pasteurization Does Not Destroy Spores.

It is the consensus of scientific opinion that the pasteurization of milk has very little influence indeed, on the vitality of the spores of the spore-forming bacteria. Consequently if the milk is not consumed very shortly after pasteurization the spores may go on developing and in their turn produce a very active bacterial flora of the same undesirable general type as existed in the parent germ. On the other hand, if to the pasteurized milk a certain amount of starter, or culture, is added the very activity of this new culture or starter, elaborating its waste product, will hold in check the development of the spores of the undesirable type which were killed or whose vitality was much lessened through pasteurization.

Home Pasteurization Best.

For city milk supply the ideal point of pasteurization is in the home after the milk has been delivered. If, then, there is any doubt or suspicion as to the wholesomeness of the milk supply, the danger may be minimized by resorting to home pasteurization of the milk. To pasteurize milk in the home, a bottle of the product may be placed in a large can or pail, cold water filled around the outside up to the neck and the same heated fairly rapidly until the water on the outside of the milk bottle has begun rapid boiling. The milk is then cooled down as rapidly as possible and may then be used with a high degree of safety, in the home. The pasteurization of milk in so far as the city milk supply is concerned is not now as much in favor as was at one time supposed it would be and various cities which have been quite insistent on the subject have relinquished their energies and are now quite convinced that the pasteurization of milk as generally performed in the city, adds very little, if any, to the general safety of that article.

Pasteurization Not a Substitute for Cleanliness.

Pasteurization is an expedient which is of service in a cheese factory and in the creamery. It is doubtful if it may be practiced with anywhere near the same degree of satisfaction and as high degree of safety with the milk at retail in cities except its pasteurization be performed at the home directly before the same is to be used in the family. In other words, pasteurization is an expedient which is designed to, and under certain conditions does, counteract many of the evil effects of unclean milk but does not in any sense of the word, nor in a single instance, take the place of clean milk.

LABORATORY REPORT.

I would like to know which is the best feed for horses, molasses or glucose? Glucose is much cheaper than molasses.

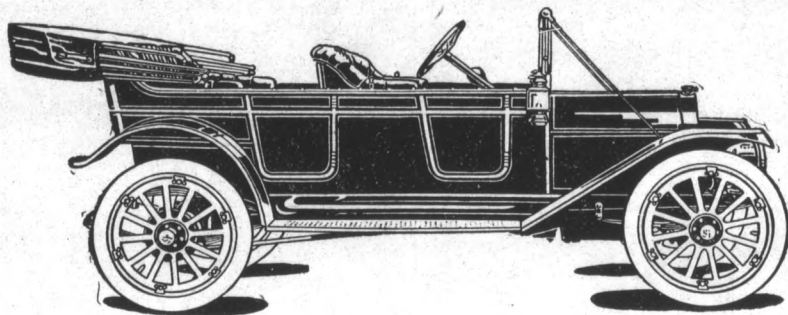
A. H. S.

We are compelled to give our preference to molasses over glucose. Our reasons are because molasses has been studied in its relation to the animal ration, whereas we are not familiar with any extended experiments on this point with glucose. A second reason is that molasses possesses a higher value from the standpoint of palatability than does glucose, molasses having a much more pronounced sweet taste and on this account we think should be superior to glucose. A third reason is that molasses, especially the best molasses, possesses a marked content of protein, which is not true of glucose.

Prof. Thomas Shaw states, "Molasses has been fed successfully along with skim-milk. Its use, however, in feeding swine will probably be limited, as an appetizer is less necessary for swine than for other classes of farm animals."

We think that possibly glucose might enter into better advantage in swine feeding but with horses and cattle we have no hesitancy in advising at the present time molasses in preference to glucose.

K-R-I-T



Model "K" Touring Car, Fully Equipped \$900

Equipment includes three oil lamps, two gas lamps, generator, top with side curtains and top cover, windshield, horn, demountable rims with spare rim, tool kit with jack and tire repair outfit with pump.

Give us the chance to convince you of K-R-I-T quality and service

That is all we ask.

We feel reasonably sure that we can convince you and in a way that will be pleasing too.

We know what the K-r-i-t can do and has done on the roads or hills you travel.

But we don't want to ask you to take our word for it alone.

We want you to see for yourself how the K-r-i-t acts and behaves on country roads and hills.

That is our reason for wanting you to phone or call on the nearest K-r-i-t dealer and arrange to

have him bring the car to your farm.

When you have your demonstration please note the smoothness and silence with which the motor runs and its wonderful pulling powers.

Also note the generous room the car gives the five passengers; the complete equipment and the beautiful and lasting finish of the car.

If you do not know the name and address of the nearest K-r-i-t dealer, write us, and we will gladly send it along with our latest catalog.

Other Models

Model "KR" Roadster : : \$900
" " "KD" Covered Delivery \$900

KRIT MOTOR CAR COMPANY, 1003 E. Grand Boulevard, Detroit, Mich.

Economy Gasoline Engines always justify our binding guarantee. We build them to exceed their rated horse power and to excel our claims of low fuel cost, durability and steady running. And then consider our remarkably low prices.

With Economy standard water cooled engines selling as low as \$26.95, the expense of being without an engine is surely many times the cost of buying one.

Turn to pages 1384 to 1392 in our latest Big General Catalog and note the remarkably low prices we quote on any size engine you want. Shipped on 60 Days' Trial and backed by Sears, Roebuck and Co.'s guarantee.

If you haven't a copy of our Big General Catalog just write "ECONOMY ENGINES" on a postal card and sign your name and address.

Sears, Roebuck and Co.
Chicago

ECONOMY

Hog Wallow Prevents Disease

KEEPING hogs in a healthy, growing condition at this season of the year is a simple matter, provided preventive measures are adopted. Sprinkle about the runs, pens and sleeping quarters and in the hog wallow

Dr. Hess Dip and Disinfectant

and your hogs will do the rest.

Dr. Hess Dip and Disinfectant is a guaranteed germ and vermin killer. No bothersome parasite or insidious microbe can get in its deadly work when opposed by this powerful preparation. Easy to prepare and entirely harmless. Endorsed by the Government as an official dip for sheep scab. Use it freely to disinfect foul drains, sinks and outbuildings. Send for dip booklet.

DR. HESS & CLARK
Ashland, Ohio



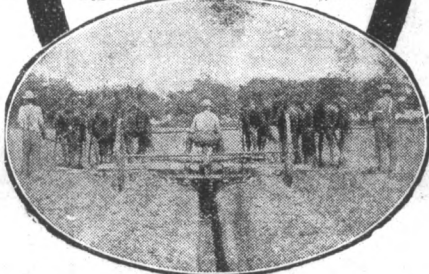
Drain Your Land for 4 cents a Rod

We guarantee this horse power Cyclone Tile Ditching Machine cuts tile ditch, 10 inches wide, 24 inches deep, at rate of 300 rods a day. Finished ditch cut, tile laid and covered, for 3 or 4 cents a rod in average soil. Read our free book giving information, from U.S. Govt. authorities on Drainage

Cyclone Tile Ditching Machine

pays for itself in first 20 to 40 acres you drain, according to spacing of laterals. Increased crops all profit. Make hundreds of dollars on your own ditching, and cutting ditches for neighbors. Anyone who can plow can operate successfully. Write for free book showing The Money Making Way of Draining Land.

Jeschke Manufacturing Co.
Box 111 Bellevue, Ohio



KEEPS OUT ALL THE RAIN.

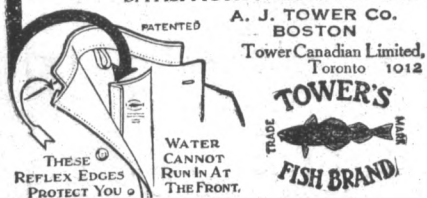
You don't know how much real comfort you can take out of a rainy day until you have worn a

TOWER'S FISH BRAND REFLEX SLICKER

The only slicker with the famous Reflex Edge (pat'd) that prevents water from running in at the front. Made for hard service. Two colors—black or yellow.

\$3.00 Everywhere.

SATISFACTION GUARANTEED.



PERCHERONS

bred for utility as well as show quality. Stable includes several international winners. Three 2-year-old stallion colts of quality for sale. Come, or write B. F. ANDERSON, R. No. 3, Adrian, Mich.

For Sale—Horses, cattle, sheep, swine, poultry and dogs, nearly all breeds. Sires exchanged. South West Michigan Pedigreed Stock Ass'n., David Woodman, Sec'y-Treas., Paw Paw, Mich.

Mention the Michigan Farmer when writing to advertisers.

LIVE STOCK

FINISHING HOGS ON CORN.

The fat or lard hog is a product of the corn producing area of the United States. He has been produced in this area unsurpassed by any other part of the world. He has been fed corn principally along with grass and has made money for the farmer who has raised him. However, all farmers who have raised the fat or lard hogs, have not succeeded as well perhaps, as they might have done had they known they could not produce prime pork on corn alone.

In North Dakota we have conditions this year that will allow many farmers to put their hogs on the market to top the quality of the hogs from the corn belt, and do it as economically as can be done anywhere.

The conditions mentioned are these— young hogs at four months of age, being farrowed about April 1, have had an abundance of grass pasture which is ideal for the best development later in their lives. If the feeder does what he should for his hogs on grass he will feed some corn or other grain along each day to furnish the pig more nutrients than he can secure in his grass diet and also to help concentrate his ration. If this is kept up to the time in the pig's life when he is six, seven, or even eight months of age he is then a large pig, growthy, strong, but not in any condition to market. He has built up his frame and muscle work large enough so that by feeding six weeks or two months longer he can be finished off on corn into the prime pork the market pays the long price for. This last period is called the finishing or fattening period; but this does not mean that the pig, which has been allowed to roam over a grass pasture (or better still, a clover pasture), and been fed perhaps a pound or two pounds of corn or other grain in the evening just to keep him growing fine, should be kept in an eight by ten foot pen and stuffed on corn. He will not do best under these conditions. He wants some good clean soil to eat every day as he had all the rest of his life. He wants a 50 yard straightway where he can scamper and shake up his intestines which are as full as a city boy at grandmother's on Thanksgiving Day.

Now corn alone and a lot to scamper in will not be all that is necessary for finishing these hogs. They are still to grow some and their growth requires protein material and this protein material must be in excess of that found in the corn. Nothing could be better than the clover field or the alfalfa field, but as these are frosted or covered with snow the Canadian field peas can be used that should have been threshed out some weeks before. These should be ground for best results and fed in slop. If this slop could be made of the fresh separated milk so much the better but if it cannot the hog is thankful for the field peas and corn or the skim-milk and the corn, and they will show their appreciation by laying on their carcasses a pound to two pounds more of fat and muscle each day.

The ration of corn, should you have it ground, and the field peas, which ought to be ground, is very well mixed and makes a good ration when about five parts of corn are fed with one part of pea meal, mixed in a fairly thick slop. Should the feeder not have the pea meal and has only the skim-milk, it is well to purchase shorts and make a good slop of the shorts and milk and feed all the pigs will clean up without leaving the trough. We find the pigs like the slop of this kind very much and we feed our corn, if shelled on a floor, some 20 to 30 minutes before putting the slop before them.

Some feeders overfeed hogs and do not know why their hogs fail to do best for them. Hogs fed twice a day all they will clean up of the above mixture before they lie down to rest will usually make economical gains and come steadily upward in their weight. When the feeder observes his hogs leaving some of the food given them and he wonders what's the matter, if he is active he will think of the dinner at Thanksgiving time and know that too much of a good thing prevents partaking of the good things for an unreasonably long time thereafter.

So it is not most economical to keep food before hogs all the time, but it is conducive to best results to feed no more than they will clean up at feeding time.

N. D. Ag. Col. E. J. THOMPSON.

FEEDERS' PROBLEMS.

Tankage as a Substitute for Skim-Milk.

What feed will best take the place of skim-milk for young pigs? Is tankage a good feed for growing pigs and can it be added to their ration with economy?

Wayne Co. C. T. H. B.

Several experiments were conducted at the Michigan station to determine the comparative value of tankage and skim-milk for growing pigs, the results being reported in Bulletin No. 237. The results of these tests indicated that while skim-milk returned slightly larger gains, the cost of gains was relatively higher than with tankage when the skim-milk was valued at 20 cents per cwt. as compared with tankage costing \$1.62½ per cwt. One of these tests was conducted during a period of 56 days in the winter season, two lots of five pigs each being used, weighing respectively 313.3 lbs., and 323 lbs. Lot I was fed 420 lbs. of corn meal, 420 lbs. of middlings and 140 lbs. of tankage. These pigs gained 307.7 lbs. during the 56 days at a total cost of \$10.67, or a cost of 3.46 per 100 lbs. of gain. Lot II was fed 461 lbs. of corn meal, 461 lbs. of middlings and 980 lbs. of skim-milk, making a gain during the 56 days of 331 lbs., at a total cost of \$11.18, or \$3.37 per 100 pounds. The pigs in Lot I made a daily gain of 1.09 lbs., with an average daily consumption of 3.5 lbs. of feed per head, while the pigs in Lot II made an average daily gain of 1.18 lbs. each with an average daily consumption of 3.29 lbs. of grain mixture and 3.5 lbs. of skim-milk per day. No difference was noted between the thrift and feeding ability of the two lots.

Two other tests were made during the summer season with pigs from 50 to 128 days old. In this trial the amount of middlings was double that of corn meal in the ration, with 10 per cent as much tankage by weight as of both corn meal and middlings, while the lots being fed skim-milk were given approximately three pounds of milk to one pound of the mixed grain. In both of these trials the gain was slightly greater where skim-milk was fed, but the cost of gains was cheaper in both lots of tankage-fed pigs, being \$3.27 as compared with \$3.78 per cwt. in one trial and \$3.33 as compared with \$3.71 per cwt. in the other.

In order to further verify the results of these tests, two lots of pigs were fed on corn meal and middlings mixed in the same proportion as in the last mentioned test, but without either skim-milk or tankage. In these check tests the cost of gains was \$4.01 and \$4.18 per cwt., respectively. The general conclusions reached as a result of all of the tests above mentioned are summed up in the bulletin as follows:

"In the three tests including tankage and skim-milk, the average cost of production per 100 lbs. with the tankage rations was \$3.35, with the skim-milk rations \$3.62, and with the check ration of middlings, corn meal and water, \$4.09. In the three original tests the tankage ration pigs consumed an average of 3.14 lbs. of meal mixture per pound gain; those receiving skim-milk in the ration required 2.48 lbs. of meal mixture and 5.67 lbs. of skim-milk per pound gain. In the check ration, consisting of corn meal and middlings, the average amount of meal mixture required per pound gain was 4.09 lbs. The average daily gain from the three tankage rations was 0.98 lbs.; from the three skim-milk rations, 1.08 lbs., and from the check ration 0.8 lbs., though the ration containing skim-milk made a slightly greater gain than where tankage was used, the cost of producing this increased gain was somewhat greater."

It will thus be seen that when tankage is used in connection with corn meal and middlings as a feed for growing pigs the results are very satisfactory; nearly as satisfactory from the standpoint of gains made and more satisfactory from the standpoint of the cost of gains, which is the relatively most important factor in the economy of a ration. It should be remembered, however, that tankage is a nitrogenous concentrate, carrying a higher percentage of protein than any other concentrate in common use, and not a complete food in itself. For this reason it should be used in limited quantities in connection with other grain feeds for the purpose of producing a proper balance between the nutrients in the ration. It should also be borne in mind that tankage is manufactured for fertilizing purposes which is not suitable for stock feeding. The product used for feeding is ordinarily designated as "digester tankage" to distinguish it from the other product mentioned.

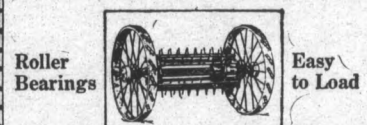
No Adjustments—No Clutches No Chains



John Deere Spreader

The Spreader with the Beater on the Axle

IMAGINE a manure spreader without any chains; with all the clutches and adjustments removed; one that has no extra shaft for the beater, no stub axle or counter shafts; one on which the parts that drive the beater all surround the main axle and are within a distance of twelve inches from it; and one that, besides being of much lighter draft than any other you have ever seen, is so low down that it is only necessary to lift the manure as high as your hips when loading.



Imagine all that and you will have some sort of an idea of what this new JOHN DEERE SPREADER—The Spreader with the Beater on the Axle—is like.

Absolutely the simplest and strongest manure spreader ever invented. It has from one hundred and fifty to two hundred less parts than any other spreader heretofore made.

Easy to load. It is always ready for business. It cannot get out of order. There are no adjustments to be made.

Valuable Spreader Book—FREE This new, special spreader book contains valuable information concerning the use of manure on the land. In addition there is a detailed description of the John Deere Spreader, with illustrations in color of this new spreader working in the field.

To get this book free, postpaid, ask us for it as Package No. Y5

John Deere Plow Company
Moline, Illinois

Horse Owners

Look to your interests and use the safest, speediest and most positive cure for ailments of your horses, for which an external remedy can be used, viz:

GOMBAULT'S CAUSTIC BALSAM

Prepared exclusively by J. E. Gombault, ex-Veterinary Surgeon to the French Government Stud.



SUPERSEDES ALL CAUTERY OR FIRING.

Impossible to produce any scar or blemish. The safest best Blister ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses or Cattle.

Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address THE LAWRENCE-WILLIAMS COMPANY, Cleveland, Ohio

YOU CAN'T CUT OUT A BOG SPAVIN

PUFF OR THOROUGHPIN, but

ABSORBINE

will clean them off permanently, and you work the horse same time. Does not Blister, or remove the hair. \$2.00 per bottle, delivered.

Before After Book 4 K free. ABSORBINE JR. the antiseptic liniment for mankind, reduces Varicose Veins, Ruptured Muscles or Ligaments, Enlarged Glands, Goitres, Wens, Cysts. Allays pain quickly. Price \$1.00 and \$2.00 a bottle at druggists or delivered. Will tell you more if you write. Mfd. by W. F. YOUNG, P. D. F., 268 Temple St., Springfield, Mass.

SELECTING AND FEEDING LAMBS.

Many Michigan farmers make a practice of feeding lambs during the fall and winter months. They have a twofold purpose in view—that of putting a part of their grain and roughage on the market at a good price, and also of providing a quantity of good manure for use on their farms.

Some of these farmers raise the lambs they feed, others not having sufficient pasture to summer a large enough flock of ewes to furnish what they want, buy enough to make out the required number. Still others who desire to follow the feeding practice do not keep a ewe flock but purchase all the lambs they feed.

Many have come to be so skillful in feeding and caring for their lambs that they seldom fail to make a handsome profit, and very rarely sustain a loss from their lamb feeding operations. Many others, failing to exercise the proper thought and care, and to give attention to the details of their work are not so successful.

It may be true that some men could never train themselves to be successful sheep feeders, and it may be that, like poets, the best are "born, not made." But a careful and systematic study of the subject of sheep feeding will surely enable the average farmer to so direct his efforts that some degree of success may be assured to him.

The feeds and the methods of giving them, also the necessity of supplying pure, fresh water and using conveniently arranged and properly constructed feed racks are the best understood phases of sheep feeding, while the breeding, the type, the quality, the condition, etc., are little looked after by many feeders, largely because they do not appreciate the important bearing they have upon the question of final success or failure.

Intelligent attention to these details may mean success instead of failure or a larger degree of success in many cases.

It is of much importance to have lambs of the type that give the most desirable results in the feed lot. The increase in weight should be as rapid and uninterrupted as possible. To this end great vigor and a strong constitution which tend to an active digestion are necessary that nothing may interfere and so retard the rapid progress desired.

Good breeding counts in the feed lot as well as in the breeding flock. Lambs from high-grade ewes and pure-bred sires have a great advantage over those indiscriminately bred that are so common in many sections. Well-bred lambs are invariably far more uniform as to type and they possess a far greater degree of merit than the ordinary common kind. The quick maturing lamb that, when fat, weighs nearly or quite a hundred pounds, not more, seems to be the quickest seller and to bring the highest price per pound. To meet these requirements the bone should not be too heavy or the frame too large, but such as, with only a medium amount of fat, will present a carcass smooth and plump at about the desired weight. It is the blocky, low set, thick type that possess these qualities in the highest degree. It is obvious that to secure the greatest profit in feeding the gain must be made as rapidly as possible. Early maturity in all the different kinds of farm stock is an important consideration and lambs are no exception. The younger the animal the cheaper will be the cost of gain.

The preference from the market standpoint is for this same low-set type, because in this type the leg, the loin, and the rib are developed most perfectly. In a well bred and well fattened lamb these parts will embrace about 70 per cent of the total dressed weight and they will bring perhaps from 85 to 90 per cent of the price paid by the consumer. It is not difficult to understand the extra value that attaches to lambs possessing these desired qualities. Cleanliness of bone, fineness of the skin, and softness of the hair covering the face and legs denote a lamb of high quality.

That lambs when finished for market should be in the best condition is necessary to bring the highest price. Not only should a lamb be well developed in the most useful parts but the covering of flesh should be evenly distributed over these parts and to a good depth. It is surprising to see how little attention some feeders give to the condition of their lambs at any time during the feeding period. When conditions are as they should be lambs will begin to show the effects of good feeding plainly by the end of the first month. During these

(Continued on page 235).

Make Your Hogs Cholera Proof NOW

Immunize your hogs now—make them cholera proof. The cholera season is here and if it is in your section, there are many ways for it to infect your herd. It is the most contagious and the most deadly of all hog diseases. Don't run the chances of losing your entire herd when less than the price of one animal will pay your veterinarian for immunizing fifty with

Consult Your Veterinarian

MULFORD HOG CHOLERA SERUM

"The reliable immunizing and curative agent"

Reliable because its production is under the supervision of biological experts from beginning to end. Reliable because every lot is thoroughly tested before sending to

your veterinarian. In fact, it's the reliability of our products that has made the Mulford Laboratories known among physicians and veterinarians over the entire world.

How We Test Hog Cholera Serum

Suppose the test is made with 12 hogs. We first inject into each one several strains of virulent hog-cholera-producing blood. This gives them all cholera. Then we inject into 8 of them a dose of our hog cholera serum. If the serum is up to our standard it will save the lives of the 8 treated hogs, while the other 4 will die of cholera. If the serum does not save the lives of the 8 treated hogs, we do not place it on the market. Every dose of Mulford Hog Cholera Serum sold must be from serum that has been tested and saved the lives of cholera stricken hogs.

Other Mulford Products

Tested Tuberculin, Black Leg and Anthrax Vaccines, Mallein, Antitoxin for Lock Jaw, Abortus Bacterin.

Send for Valuable Free Booklet

Gives methods for preventing and controlling hog cholera. Send now before the disease attacks your herd.

H. K. MULFORD CO., Chemists, Philadelphia, Pa.

New York

San Francisco

Kansas City

Atlanta

St. Louis

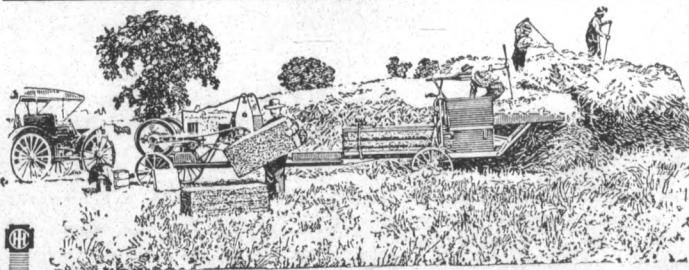
New Orleans

Chicago

Boston

Toronto

Seattle



Bale Your Hay and Sell It

THERE is always a ready market at a good price for baled hay. It occupies only about one-fifth the space of loose hay. It can be handled easily. It prevents waste and it retains its full food value. Many farmers are making hay the big cash crop of their farms, not only because of the high profits it brings at the present market value, but because as a rotation crop it renews the richness of the soil. These farmers make all the profit themselves. They feed their own stock silage and shredded corn stover which are just as good as hay, and they sell their high-priced hay. A big majority of these farmers

Use I H C Hay Presses

the only presses on the market today which fill the need of the individual farmer. Like all other I H C machine lines, our hay press line is complete. You can get I H C pull power presses requiring either one or two horses; I H C motor presses using 3, 4, or 6-horse I H C engine. Both styles have three separate bale chamber sizes, 14 x 18 inches, 16 x 18 inches, 17 x 22 inches.

The I H C pull power press has a greater capacity than any other horse press of its size. It is also easier on the horses. The steppover is the lowest and narrowest made and the horses are pulling no load when they cross it. The I H C hay press has an adjustable bale tension which insures compact bales. It is fitted with a roller tucker that turns in all straggling ends, so that the bale is neat and smooth in appearance. The bale chamber is low enough to enable the attendant to tie the bale without walking round the machine.

The I H C motor press consists of a bale chamber and an I H C engine, mounted together on substantial trucks. It is easily moved from place to place, can be backed to the stack or barn and is always ready for work. The engine does not need a man to watch it. Give it an ample supply of fuel and water, see that it has plenty of oil and it needs no other attention. There is no danger of fire because there are no flying sparks, nor is there any smoke or soot to interfere with the comfort or efficiency of the workers. The engine is detachable. Two extra wheels, an axle, and a belt pulley are furnished, so that when not baling hay you have a regular portable I H C engine, which can be used the year around to run a small thrasher or shredder, saw wood, pump water, generate electric light, shell corn, grind feed, or separate cream, or to run any other farm machine for which its power makes it suitable. Two perfect machines in one. Now is the time to get ready for your haying. Make it a big money crop. Call on the I H C local dealer in your town or write for an I H C hay press catalogue.

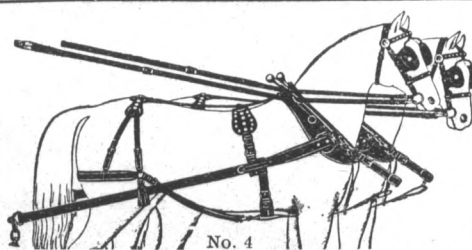
International Harvester Company of America
(Incorporated)

Chicago

U S A

I H C Service Bureau

The purpose of this Bureau is to furnish, free of charge to all, the best information obtainable on better farming. If you have any worthy questions concerning soils, crops, land drainage, irrigation, fertilizers, etc., make your inquiries specific and send them to I H C Service Bureau, Harvester Building, Chicago, U S A



HARNESS HORSE COLLARS

Ask your dealer for the Label.

Made and Warranted by

ARMSTRONG & GRAHAM

WHOLESALE ONLY.

DETROIT.

ESTABLISHED 1880.

SAVE YOUR BACK

High lifting tires and wears you out. Avoid it by using an

Electric Handy Wagon

Thousands have proved it the easiest and best wagon for farm work. Low down, broad tires, steel wheels—the complete wagon. Strength for all work, no breakdowns and no repairs.



10,000 High Lifts Saved

We will fit your old running gears with

Electric Steel Wheels

and make your wagon into a low down handy wagon. We fit any axle. A set of wheels at little cost gives you a wagon good as new. Write for catalog and particulars. ELECTRIC WHEEL CO., Box 35, Quincy, Ill.



MINERAL HEAVE REMEDY

Use Over 50 Years

CURES HEAVES

NEGLECT Will Ruin Your Horse

Send today for only PERMANENT CURE

Safe—Certain

\$3 Package will cure any case or money refunded

\$1 Package cures ordinary cases. Postpaid on receipt of price.

Agents Wanted Write for descriptive booklet

Mineral Heave Remedy Co., 463 Fourth Ave., Pittsburg, Pa.

HEAVE-EASE THE MODERN TREATMENT

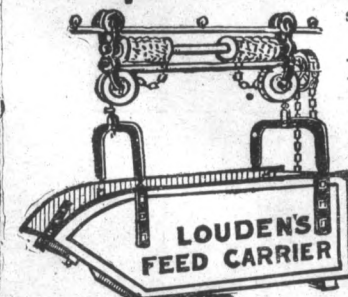
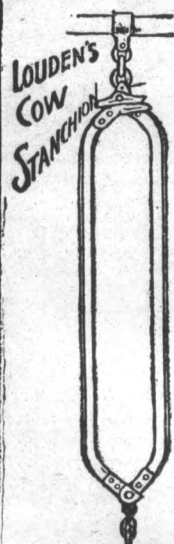
A bad case of heaves can not be cured, but they can be kept down so that you can work the worst heaver in any kind of weather. Heave-Ease fed according to directions will make a very cheap horse into a very valuable work animal. Thirty-day treatment \$1.00. Postpaid. Cash with order.

H. E. COBB & CO.,
134 West Pearl St., Jackson, Mich.

Please mention the Michigan Farmer when writing to advertisers.

SIMPLE, STRONG AND SANITARY LOUDEN'S BARN EQUIPMENT EASY TO SET-COST BUT LITTLE

MAKES BARN WORK EASY-COWS MORE PROFITABLE



Quality and Economy are the two bed rock reasons why you can't afford to buy any other than Louden's Modern Barn Equipments. They are the Best Built equipments that money can buy; the lowest priced good equipments made; and the lowest in cost per year—the cheapest in the long run—of any on the market regardless of price.

They are the oldest and best known Barn Equipments on the market—manufactured since 1867, backed up by over 45 years experience—acknowledged the standard all over the world. Steadily growing popularity has made it necessary to constantly enlarge our facilities from the first. Today our goods are made in the biggest, most complete factory of the kind in the world and we are building our second big branch factory—at Albany, N. Y.—in an effort to keep up with the demand for our goods. This is the best possible proof of their superiority.

Louden Dairy Barn Equipments

are designed and built to give greater comfort, cleanliness and health for the Dairy Cow and bigger profits for you.

Louden's FAMOUS FLEXIBLE STEEL STANCHIONS and SANITARY STEEL STALLS

are built of the best material obtainable, are neat, plain, simple, well-proportioned, absolutely sanitary and will outlast the rest of the barn.

Louden's Feed and Litter Carriers

with patented high power Hoisting Gear, Roller Bearings and Automatic Dump, are the heaviest, strongest, lightest-running carriers on the market, and they cut the drudgery out of barn work.

100% increase in the sales of these goods last year is convincing proof of their merit.

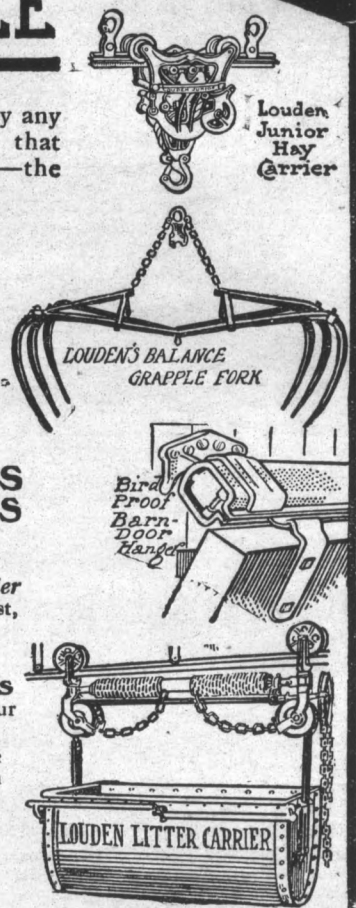
Louden's Bird Proof Barn Door Hanger and Loudens's Hay Tools including our Junior Hay Carrier and "Balance Grapple" Clover and Alfalfa Fork are among our other money-makers and labor-savers which should be on every farm.

Louden Equipments cost so little, pay so big and make farm work so much easier and more pleasant that no farmer no matter how small his place can afford to do without them. Examine them at the Loudens Dealer's or write us for full information. Send rough sketch of your barn.

If you expect to build or remodel your barn tell us your needs and our Architectural Experts will furnish you FREE advice and suggestive plans which will save you money and worry and give you a better barn.

CATALOG AND VALUABLE BOOKS FREE ON REQUEST. WRITE TODAY.

LOUDEN MACHINERY CO., 1003 Broadway, FAIRFIELD, IOWA.



BREEDERS' DIRECTORY.

CATTLE.

ABERDEEN-ANGUS.

Herd, consisting of Trojan, Erica, Blackbirds and Prides, only, is headed by Egerton W. a Trojan Erica, by Black Woodlawn, sire of the Grand Champion steer and bull at the International in Chicago, Dec., 1910. A few choice bred young bulls for sale.

WOODCOTE STOCK FARM, Ionia, Mich.

AYRSHIRES—One of foremost dairy breeds: young bulls and bull calves for sale. Berkshire swine. All pure bred. Michigan School for Deaf, Flint, Mich.

GUERNSEYS—Two nicely marked bull calves dropped in March, at farmers prices. ALLAN KELSEY, Lakeview, Mich.

For Sale—Registered Ayrshire Bull Calves at farmers' prices. Also a few cows and heifers. E. A. BLACK, R. No. 6, Lakeview, Mich.

GUERNSEY BULL CALVES for sale, at prices you can afford to pay. (Reg.) W. W. BURDICK, Wayland, Mich.

GUERNSEY BULL CALVES, YORKSHIRE PIGS, Good Stock.

HICKS GUERNSEY FARM, Saginaw, W. S., Mich.

For Sale—Registered GUERNSEY CATTLE, Large Yorkshire hogs, either sex, best breeding. JOHN EBEELS, R. 10, Holland, Mich.

GUERNSEYS—One yearling bull, 1 bull calf. Imported and Adv. Reg. breeding. One-half usual price. G. A. WIGENT, Watervliet, Mich.

FOR SALE—Eight Guernsey Heifers, grand-daughters of Glenwood's Main Stay, calves by their side. One six-year-old cow, one three-year-old bull, all registered. R. D. Lovelace, Rockford, Mich.

Johanna Concordia Prilly De Kol, The best bred yearling Bull in the State, is for Sale.

also cows and heifers bred to his sire, Johanna Concordia Champion, whose dam, sires dam and dams dam average 29.57 lbs. butter in 7 days.

L. E. CONNELL, Fayette, Ohio.

"Top-Notch" Holsteins.

Choice bull calves from 7 to 10 mos. old, of fashionable breeding and from dams with official milk and butter records for sale at reasonable prices. Also a few choice females.

MCPHERSON FARMS CO., Howell, Michigan.

HOLSTEIN BULLS

From 3 to 12 months old, \$60 to \$250 each.

You can't buy better.

LONG BEACH FARM, Augusta, Mich.

FOR SALE—6 yearling Holstein Friesian Bulls, 2 A. R. O. bred. Some cows. Also bull calves. 34 years a breeder. Photos and pedigrees on application. W. C. JACKSON, South Bend, Ind., 719 Rex St.

Holstein Bull Calf 37½% blood Hengerveld De Kol dams: record Senior 2-year-old, 18.37 lbs. butter. GEORGE E. LAPHAM, R. 8, St. Johns, Mich.

Purebred Registered HOLSTEIN CATTLE

The Greatest Dairy Breed

Send for FREE Illustrated Booklets

Holstein-Friesian, Assn., Box 164, Brattleboro, Vt.

HIGH GRADE HOLSTEINS FOR SALE

Two cows six and seven years, one heifer two years, one heifer eighteen months, heifer calf six months. The two last sired by a son of the King of the Pontiacs, the others bred to him.

ED. S. LEWIS, Marshall, Mich.

Holstein-Friesian Cattle—The kind that make good. GREGORY & BORDEN, Howell, Michigan.

REGISTERED Holstein Cattle—Two good bull calves. R. Herd headed by Hengerveld Coin Pieterje. FLOYD F. JONES, R. F. D. 3, Oak Grove, Mich.

Big Bull Bargain—Choice registered HOLSTEIN ready for service. Hatch Herd, Ypsilanti, Mich.

NOTICE—I offer for sale a fine three-year-old Jersey cow. Also two young bull calves at bargain prices. C. A. TAGGETT, R. No. 1, Caro, Mich.

Lillie Farmstead Jerseys (Tuberculin tested. Guaranteed free from Tuberculosis.) Several good bulls and bull calves out of good dairy cows for sale. No females for sale at present. Satisfaction guaranteed.

COLON C. LILLIE, Coopersville, Mich.

Jersey Cattle For Sale. C. A. BRISTOL Fenton, Michigan.

Closing Out my small but choice herd of reg. Jerseys, consisting of 4 cows 5 years old; 2 cows 2 years old; 4 heifers, 1 year old; 1 Oxford Lad bull (a son of Oxford Ann, owned by Geo. E. Peer); 1 Oxford Lad bull, 1 year old. The 12 head registered and transferred for \$700. The cows will all be fresh in Sept. but one. J. C. BUTLER, Portland, Mich.

Jerseys—Bulls ready for service, bred for production. Also cows and heifers. Brookwater Farm, R. F. D. No. 7, Ann Arbor, Mich.

FOR SALE—Nine line bred Jersey Cows not registered. Mostly three and four years old. Due this fall. C. B. COOK, R. No. 1, Box 108, Owosso, Mich.

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

RED POLLED—Choice lot of females any age, also some bull calves. J. M. CHASE & SONS, Ionia, Michigan.

RED POLLED BULLS FOR SALE—from good strains. JOHN BERNER & SON, Grand Lodge, Mich.

Dairy Shorthorns—Large Cattle—Heavy Milkers. Milk Records Furnished. Two young bulls for sale. Prices right. A square deal to all. W. W. KNAPP, R. No. 4, Watervliet, Mich.

SHEEP.

Hampshires—Who wants 18 good ewes and ewe lambs, and a good 300-lb. imported ram for \$225. Also have 7 good ram lambs for sale. All registered. E. A. Hardy, Rochester, Mich.

For Sale, Oxford Down rams, yearlings, ram lambs, ewes, different ages. S. E. GILLET, Ravenna, Ohio.

Reg. Rambouillets—12 ewes, 35 rams all in perfect health. Come and see me or write for circular of breeding—none better. 2½ miles E. Morrice, on G. T. R. R. and M. V. R. J. Q. A. COOK.

Oxford Down Sheep—Good Yearling Field for sale. I. B. WATERBURY, Highland, Michigan.

Superb Von Homeyer Rambouillets for sale. Rams absolutely the best. Dr. L. Breisacher, Detroit, Mich.

HAMPSHIRE SHEEP—Rams and ram lambs by imported sire 330 lbs. Also ewes and ewe lambs cheap. C. D. WOODBURY, Lansing, Michigan.

IMPORTED B. T. D. M. RAMS FOR SALE. C. F. KALMBACH, Grass Lake, Michigan.

Shropshires

Ten good ewes. Yearling rams and ram lambs. One aged imp. Minton ram. WILLIS S. MEADE, R. No. 3, Lapeer, Mich.

Shropshires—One and two year old rams and ewes for sale from imported sires. We invite inspection. C. W. PERRY, Clare, Mich.

Ingleside Shropshires—Imported and home bred. All ages for sale. A fine lot of ram lambs for this year's trade. See them at the fairs. HERBERT E. POWELL, Ionia, Mich.

Shropshire Rams and Ewes at farmers' prices. HARRY POTTER, Davison, Mich.

Shropshires—Yearling rams at \$12 and \$15. Two extra fine rams at \$25 each. C. J. THOMPSON, Rockford, Mich.

HOGS.

Durocs and Victorias—Young sows due Mar. & April. Bred to last prize and champion boar. Priced to move them. M. T. Story, Lowell, Mich.

BERKSHIRES for Sale—March farrowed boars and gilts, sired by Handsome Prince 3d, out Weyneth Lady Francis. A. A. PATTULLO, Deerpark, Mich.

Quick Maturing Berkshires—Best breeding; best type. Satisfaction guaranteed or money refunded. O. S. BARTLETT, Pontiac, Mich.

BERKSHIRES—Weaned pigs either sex \$15 two for \$25; bred gilts \$35; bred sows \$50, registered and transferred. Excellent breeding. Choice individuals. C. C. COREY, New Haven, Michigan.

BERKSHIRES—Choice individuals, either sex, from the Champion Herd of the Thumb of Mich. ELMHURST STOCK FARM, Almont, Mich.

Improved Chesters—Spring pigs, either sex. Also have a choice young boar and a few sows bred for early fall farrow. W. O. WILSON, Okemos, Mich. Both phones.

Reg. Chester Whites—Both sexes and bred gilts, also serviceable registered Holstein bulls. Bargains. RAY PARHAM, Bronson, Mich.

O. I. C.—Extra choice bred gilts, service boars and spring pigs, not akin from State Fair winners. Avondale Stock Farm, Wayne, Mich.

O. I. C.'s—All ages, growthy and large, sows bred. Males ready, 100 to select from. Attractive prices on young stock. H. H. Jump, Munith, Mich.

O. I. C.'s—I have some very fine and growthy last fall pigs, either sex, males ready for service now, pairs not akin. OTTO B. SCHULZE, Nashville, Mich., half mile west of depot.

O. I. C.'s of superior quality. 17 choice young gilts and 11 topy young boars. Pairs no akin. FRED NICKEL, Monroe, Michigan.

O. I. C.'s of March and April farrow, shipped on approval or c. o. d. OTIS GREENMAN, R. 4, Bellevue, Eaton Co., Mich.

OUR Imp. Chester Whites and Tamworth swine won 245 1st at Fairs in 1911. Service boars, also sows bred for spring farrow of either breed that will please you in quality and price. Adams Bros., Litchfield, Mich.

O. I. C.'s with size & quality, the kind I can positively guarantee to give satisfaction or will refund money. Newman's Stock Farm, R. No. 1, Mariette, Mich.

O. I. C. SWINE—Write me for Pigs, pairs and trios, not akin. Have a number of service males of good type. Write me describing of your wants. A. J. GORDEN, R. No. 2, Dor, Mich.

O. I. C. Hogs of all ages, bred sows and gilts, service males and May and June farrowed pigs. Rolling View Stock Farm, Cass City, Mich.

DUROC JERSEY SWINE—Thirty spring pigs, brood sows. Breeding the best, prices right. Come and see them. ORLO L. DOBSON, Quincy, Mich.

DUROC JERSEYS—Fall and Spring boars from ones. SPECIAL BARGAIN in summer pigs. Brookwater Farm, R. F. D. No. 7, Ann Arbor, Mich.

DUROC JERSEYS

A few heavy boned boars and gilts for sale. Also fall pigs of either sex. Pairs not akin. M. A. BRAY, Okemos, Mich.

DUROC JERSEYS—One service boar; two bred gilts; spring pigs (either sex). Choice breeding. Prices reasonable. Write or come and see. R. G. VIVIAN, R. No. 4, Monroe, Mich.

DUROC JERSEY SWINE—THE BIG KIND. Write your wants. F. A. LAMB & SON, Cassopolis, Mich.

DUROC JERSEYS, HERD IMMUNE TO CHOLERA. CAREY U. EDMONDS, Hastings, Michigan.

Duroc Jersey SWINE. Spring and summer pigs for sale both sexes. 1 pay express. 25 years experience. J. H. BANGHART, Lansing, Mich.

DUROC JERSEYS—10 Fall and Winter Boars, ready for service. Prices right for 10 days. Write or come and see J. C. BARNEY, Coldwater, Mich.

Big Smooth Poland China Hogs from large sires, either sexes, at reasonable prices. ALLEN BROS., Paw Paw, Mich.

Poland Chinas—Bred from large type. Stock all ages, both sexes, at Farmers' prices. W. J. HAGELSHAW, Augusta, Michigan.

POLAND CHINAS—Big type spring pigs, either sex, also Shorthorn Bull calves and Oxford bucks. Prices right. ROBERT NEVE, Pierson, Mich.

POLAND CHINAS—Gilts and yearling sows bred for first of Sept. farrow, a few big types. E. D. BISHOP, Route 38, Lake Odessa, Mich.

POLAND CHINAS—Either sex, all ages. Something good at a low price. P. D. LONG, R. No. 8, Grand Rapids, Mich.

POLAND CHINAS—Home of Michigan's Grand Champion Boar, Sows, Gilts, and Boars. Priced to sell. E. J. MATHEWSON, Nottawa, Mich.

POLAND CHINAS—Young sows bred for April farrow. Extra good fall pigs, either sex. L. W. BARNES & SON, Byron, Shiawassee Co., Mich.

P. C. BOARS—Large type—sired by Expression 80439 and E. M. F. 83867. Satisfaction guaranteed. R. W. MILLS, Saline, Mich.

MICHIGAN'S Great Big Type P. C. Herd—Boars weigh 225 lbs. at 5½ mo. old, net fat. Sold one to head Agricultural College herd. Seeing is believing. Come and be convinced. Expenses paid if not as represented. Free delivery. W. E. LIVINGSTON, Parma, Mich.

TWO YOUNG TAMWORTH BOARS FOR SALE T. F. MARSTON, Bay City, Michigan.

Mulefoot Hogs—30 SOWS and GILTS Boars all ages. G. C. KREGLOW, Ada, Ohio.

For Sale, Yorkshire Gilts—Bred to farrow the latter part of August. Also pigs, both sexes. WATERMAN & WATERMAN, Meadow Land Farm, Ann Arbor, Mich.

CHOLERA PROOF HOGS.

I have more than 5700 swine on my farm and am selling grade Yorkshires, Tamworth, Poland China and Duroc brood sows, boars and shoats in any quantity at best Buffalo market price for fat yorkers on day of sale. Sows to farrow soon included. These hogs are not fat, are cholera proof and prolific breeders. Pigs that are 6 to 10 weeks old at \$3 to \$4.

ALVAH BROWN'S PIG FARM, Grand Rapids, Mich.

Large Yorkshires—Stock of all ages. Will exhibit at West Michigan State Fair, see them. W. C. COOK, R. 42, Ada, Mich.

Lillie Farmstead YORKSHIRES.

A few choice Gilts bred for September farrow, good ones. Spring pigs, either sex, pairs and trios not akin. Satisfaction guaranteed.

COLON C. LILLIE, Coopersville, Mich.

SELECTING AND FEEDING LAMBS.

(Continued from page 233).

first days of the feeding period they seem to be getting ready to put on fat, although some fat is probably nearly all the time being deposited internally. Old feeders tell us that one of the best and most reliable indications of progress is for the lambs, when standing leisurely, to assume a partially stretched posture.

Careful observation shows that fat makes its first appearance at the root of the tail and then seems to pass directly along the back and over the shoulders to the base of the neck, then gradually from this time to extend downward and envelop the sides. The feeder should be a good judge of the condition of a fattening sheep. There are times when it is of vital importance to know whether a lamb is gaining rapidly or slowly, or whether it is gaining at all or not. There are certain times when gain is made most rapidly and cheaply and beyond a certain time there is never any profit in feeding. In determining the condition most feeders have some particular place they examine first, and thereon largely base their judgment. Some rely much upon the condition at the tail, some at the flank, others at the purse, or the middle of the back.

It must not be assumed that all sheep fatten evenly in all of these parts. Some are fairly good in one or more parts and comparatively deficient in other parts. In a lamb that is well fattened there is usually a trough or crease running along the back from the tail to the shoulder. All lambs do not fatten smoothly or uniformly. One of the worst defects found, as well as the most common, is a thinness of the fat on the loin and a lightness of the hind quarters.

By careful study and observation only can one so familiarize himself with the market demands and the feed lot possibilities as to reach the highest efficiency in feeding. It is obvious that the feeder who desires to turn out as near a perfect finished product as possible, one that will bring the top price, will, if he breeds his feeding lambs himself, give due care to the selection of his ewes and sires that his lambs may be uniform and of the desired type. If he buys his lambs on the market he will endeavor to select lambs in which uniformity and good feeding type are characteristic.

Market demands are so insistent and well defined and competition is so keen that no feeder can reasonably expect to achieve pronounced success unless he adds to his own careful study and thought all the helps that scientific investigation may offer along this line.

Ingham Co. H. M. YOUNG.

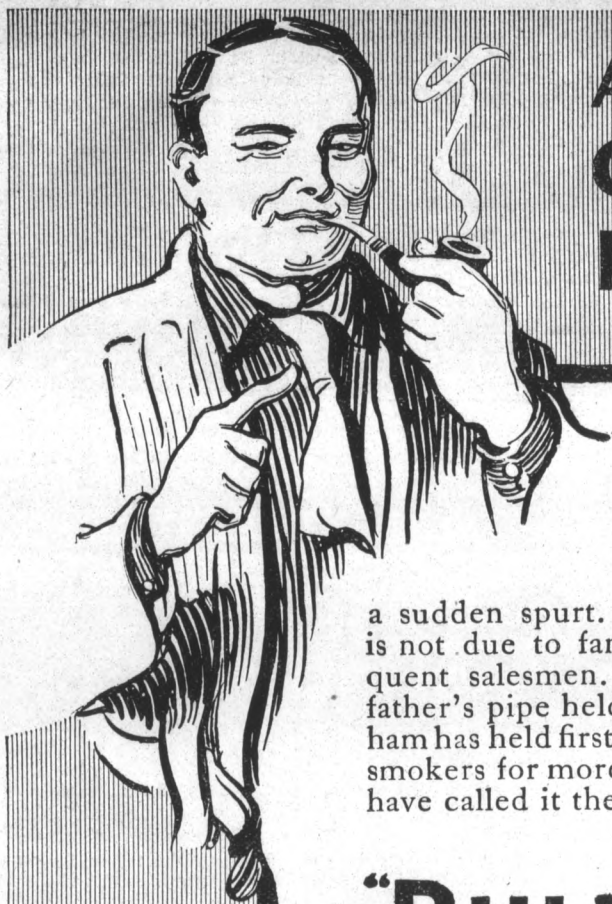
LIVE STOCK NOTES.

According to Frank Henry, of Montana, some recent heavy rains over a large area of Montana, Wyoming and South Dakota, are pretty sure to delay the marketing of many cattle and sheep that would otherwise come freely in the next few weeks, as the late pour-downs have made grass green and sappy and stockmen will be inclined to hold back until the grass cures.

Northern Colorado sheep feeders have picked up their sheep and lambs for winter feeding as fast as possible of late and a great many New Mexico lambs have been contracted—in fact, most of the stuff for sale down there has been bought by northern Colorado feeders, prices ranging at \$5@5.25 at loading points for good stuff. A few very early contracts were made around \$4@5. Those who were lucky enough to get in at these figures should make a "killing," but they are few and far between, and the contracts were made several months ago. Northern Colorado is going to feed a lot of lambs this fall and winter if the stuff is available.

Iowa's hog crop will be short this fall and winter according to reliable reports at market. A big Ottumwa operator says over 75 per cent of the breeding sows which produced last spring's pigs have been sold and only a slim number of the breeding sows used last winter will again be in service the coming season, because prices have been too high to warrant holding. Eastern Iowa is shipping pigs freely now and predictions are made that Iowa will market fewer hogs in the next year than have come from there this year.

Edward Cudahy, president of the Cudahy Packing Company, is a bear on meat prices and has of late stated it is his belief that lower meats will soon be available to the consumer. "Cheaper meats will come," says Mr. Cudahy, "and come soon, especially cheaper beef. The season of grass-fed cattle has arrived and the heavy run of medium grade cattle will force prices down. Pork also will drop, but not until about January when there will be a decline of about 10 per cent. By next summer pork will have dropped one-third. This is all due to the tremendous crops now being harvested in the west. With so much corn and feed of every kind meat prices are bound to go down."



A story your Great Grandfather knew

More men smoke "Bull" Durham than all other high-grade brands combined.

This great popularity is not a sudden spurt. It is not the fad of a minute. It is not due to fancy packages, big claims, nor eloquent salesmen. Chances are your great-grandfather's pipe held nothing else. For "Bull" Durham has held first place in the affections of American smokers for more than 52 years. Three generations have called it the best.

GENUINE "BULL" DURHAM SMOKING TOBACCO

Forty "rollings" in each 5c muslin sack

is the purest form of tobacco you can smoke. It is made from the choice, tender leaves of bright golden Virginia and North Carolina tobacco—with all the delicious flavor, unchanged by adulteration or fancy processes—with quality and quantity undiminished by an expensive, gaudy package.

These are some of the reasons why millions of loyal "Bull" Durham smokers buy it, and smoke it, and stick to it year after year. They have learned how much better a cigarette is when they roll it themselves from good "Bull" Durham. They know how good it is in a pipe.

Blackwell's Durham Tobacco Co.

Get a package today. See for yourself why so many millions prefer this glorious old tobacco above all others.

Sold by practically every tobacco dealer in the U.S.

A book of "papers" free with each 5c muslin sack.



ANYBODY CAN LAY IT.

Rubber Roofing

Warranted For Twenty-Five Years.

To Any Station East of Rocky Mountain, except Texas, Okla., Colo., N. D., S. D., Wyo., Mont., N. M., La., Ga., Ala., Miss. and Fla., on all orders of three rolls or more. Special Prices to these States on request.

ONE-PLY Weighs 35 lbs., 108 Square Feet, \$1.10 per roll.
TWO-PLY Weighs 45 lbs., 108 Square Feet, \$1.30 per roll.
THREE-PLY Weighs 55 lbs., 108 Square Feet, \$1.50 per roll.

TERMS CASH: We save you the wholesalers' and retailers' profit. These special prices only hold good for immediate shipment.

Indestructible by Heat, Cold, Sun or Rain.

Write for **FREE SAMPLES** or order direct from this advertisement. Satisfaction guaranteed or money refunded. We refer you to Southern Illinois National Bank.

Century Manufacturing Co., DEPT. 608 (East St. Louis, Illinois, or 132 N. Wabash Av., Chicago.)

When writing to advertisers please mention the Michigan Farmer.

HOW TO BUILD CORN CRIBS

Book With **BLUE PRINT PLANS FREE**

You get practical hints for storing and handling ear corn and small grain. Our free book gives plans, lumber bills and itemized cost of building corn cribs and granaries—also full information about

MARSEILLES

Portable Elevators and Wagon Dumps

Underneath or Overhead Wagon Dumps in all steel or wood. Elevator Outfits, Crib or Horizontal Conveyors in all steel or wood. Our steel tubular elevator is the strongest and fastest made for all small grain and flax. Complete line of spouts, belt attachments, jacks and horse-powers. We can furnish an outfit for any style of granary or crib whether large or small.

"How to Build Corn Cribs and Granaries, with Plans"—free if you mention this paper. Ask for it as Book No. A 5

John Deere Plow Co., Moline, Illinois

The Michigan Farmer

ESTABLISHED 1843.

THE LAWRENCE PUBLISHING CO.

EDITORS AND PROPRIETORS.

39 to 45 Congress St. West, Detroit, Michigan.

TELEPHONE MAIN 4625.

NEW YORK OFFICE—41 Park Row.
CHICAGO OFFICE—800 First Nat'l Bank Building.
CLEVELAND OFFICE—1011-1015 Oregon Ave., N. E.M. J. LAWRENCE.....President.
M. L. LAWRENCE.....Vice-President.
E. H. HOUGHTON.....Sec. Treas.I. R. WATERBURY.....Associate
O. E. YOUNG.....Editors.
BURT WERMUTH.....
ALTA LAWSON LITTELL.....

E. H. HOUGHTON.....Business Manager

TERMS OF SUBSCRIPTION:

Five Years 260 COPIES POSTPAID \$2.75

Three Years, 156 copies, Postpaid . . . \$2.00

One Year 52 Copies, Postpaid . . . \$1.00

Six Months 26 copies, Postpaid . . . 60 cts

Canadian subscriptions 50 cents a year extra for postage.

Always send money by draft, postoffice money order, registered letter or by express. We will not be responsible for money sent in letters. Address all communications to, and make all drafts, checks and postoffice orders payable to, the Lawrence Publishing Co.

RATES OF ADVERTISING:

40 cents per line agate measurement, or \$5.60 per inch, each insertion. No adv't inserted for less than \$1.20 per insertion.

✓ No literary, quack doctor or swindling advertisements inserted at any price.

Entered as second class matter at the Detroit, Michigan postoffice.

COPYRIGHT 1912

by the Lawrence Pub. Co. All persons are warned against reprinting any portion of the contents of this issue without our written permission.

WE GUARANTEE to stop THE MICHIGAN FARMER immediately upon expiration of time subscribed for, and we will pay all expenses for defending any suit, brought against any subscriber to The Michigan Farmer by the publisher of any farm paper, which has been sent after the time ordered has expired, providing due notice is sent to us, before suit is started. Avoid further trouble by refusing to subscribe for any farm paper which does not print, in each issue, a definite guarantee to stop on expiration of subscription. The Lawrence Publishing Co., Detroit, Mich.

DETROIT, SEPT. 21, 1912.

POLITICAL ADVERTISING.

In this issue on page 241 we are publishing a political advertisement. We understand that every farm paper of any importance will publish the same. The fact that the advertisement appears, just as any other legitimate advertisement may be published does not indicate any editorial endorsement of the statements that it makes. We are publishing this paper for the joint use of readers and advertisers, and advertisers are always permitted to make their own representations so long as they use proper language and honestly present their goods. Any of the other political parties are at liberty to use our columns, at regular space rates. Our readers can be interested in this advertising or not as they choose, as it has no connection with, or influence upon, our general editorial policy.

CURRENT COMMENT.

Conservative Marketing.

With the approach of the harvesting season for the important cash crops of beans and potatoes, the growers of these staples may well devote special attention to crop and market conditions regarding them. The official crop statistics of September 1, published in a recent issue of the Michigan Farmer, unfortunately, do not include statistics with regard to beans. Such statistics, however, would not be of great value at this time owing to the fact that the bulk of the bean crop is yet to be secured and much will depend upon weather conditions during the harvesting and threshing season as to the yield and quality of this crop.

Inasmuch as weather conditions will have much to do with the yield of marketable beans in Michigan, and as Michigan may well be said to be a controlling factor in the domestic production of this staple crop, these conditions should be taken into consideration by the bean grower in determining the important point as to whether he should sell his beans on the early market or hold them for later sale. We believe, however, that even with favorable weather conditions there will not be an oversupply of beans produced in the United States this year. One reason for this belief is the fact that beef and other meats are high in price and that beans, being a food high in protein, can most economically be used as a substitute for meat, for which reason consumption of beans may be expected to increase at a more rapid rate than domestic production, even under the most favorable of conditions.

Foreign production of beans may affect our market to some extent. In some sections of Europe and far eastern Asia beans are an important crop and in occasional seasons a surplus finds a mar-

ket in this country with, of course, the tariff added to the foreign price; but this is not a sufficiently important factor to require consideration at this time since statistics of foreign production are not now available.

With the market comparatively bare of old beans, and with the prospect that a considerable portion of the new crop will not be of good market quality on account of its lateness and the uncertainty of weather conditions, it would seem that the bean grower need be in no hurry to accept a speculative price for his product and that conservative marketing on the part of bean growers would add to the aggregate revenue of Michigan farmers from this important cash crop.

Statistics with regard to potato production would make it appear that this year's crop will be a large one, although an analysis of September figures shows that the average condition of the crop on September 1 was 87.2 of normal, as compared with 59.8 on September 1 of last year and a ten-year average of 79.6, thus giving prospect of a yield 7.6 per cent above normal on Sept. 1. The matter of acreage has, of course, much to do with the total production, but here again we find that the acreage for the present year is but 1.9 per cent larger than that of 1911.

When we take into consideration the comparative high price of other food stuffs, the rapid increase in the population of the country and the fact that last year more than 16,000,000 bushels of potatoes were imported into the United States, while there was a general failure in the southwest with the result that in a large section of the country potatoes were so high as to be beyond the reach of a large mass of consumers, there is no cause for alarm that the cheap prices of some years ago will prevail throughout the marketing season for this important Michigan crop.

For this reason it would be the part of wisdom for growers who are equipped with proper storage to store at least a portion of the crop in order that it may be placed upon the market gradually as needed for consumption, as by this means the best average prices will be secured and the greatest net revenue derived by potato growers.

The problem of the housing and employment of short term prisoners in the county jails of the state is a perplexing one to solve in a wholly satisfactory manner. During very recent years the question of employment of short term prisoners has been given considerable consideration by county officials and the experiment of working the prisoners on the highways has been tried with a varying degree of success.

The question of the employment of county prisoners has recently become one of greater import due to the fact that county prisoners are no longer accepted at the Detroit House of Correction, to which penal institution many county prisoners, particularly from adjacent counties, were formerly sent. The fact that this institution can no longer accommodate them owing to the great growth of the city of Detroit and the consequent increase in the number of local prisoners, has brought the prison problem home to many counties with renewed force, since it has been found necessary to provide additional room to accommodate local offenders against the law who are not subject to confinement in a state penal institution. Thus many counties finding themselves unable to dispose of prisoners for whom there is particular need of employment from a reformatory standpoint, are confronted by another phase of the prison problem which is well worthy of most careful consideration.

There is little doubt that under a system of compulsory employment there would be a noticeable decrease in the prison population of the average county. But there are difficulties to be met with in the employment of these prisoners upon the highways or other suitable work which are difficult of practical solution. A new idea which may prove of practical value in working out the solution of this vexed problem has recently been advanced in Kansas, where the proposition has been put up to the governor, by local prison authorities, of commuting the sentence of the prisoners who work upon the highways or other public work in a peaceable and satisfactory manner one day for each and every day which they so work.

This is in line with the modern penological theory that prisoners should be treated in the most humane manner possible for best results in their reformation

and be amply rewarded for good behavior during their term of imprisonment. Society has advanced to a stage in which there is a well defined sentiment for the more humanitarian treatment of those who are guilty of infractions of the law, and a more general tendency than ever before to look upon this class as unfortunates rather than as outlaws. This sentiment has become so general as to result in a demand for the abolishment of corporal punishment in the state penal institutions.

The recent mutiny at Jackson prison would seem to indicate that this sentiment may in reality be somewhat in advance of the times, so far as the attitude of the criminal class incarcerated in that institution is concerned. Obviously discipline must be maintained in a prison even though public sentiment may be strongly opposed to corporal punishment. Public sentiment is, however, undoubtedly right in the idea that every inducement should be held out to a prisoner to be industrious and orderly, to the end that such habits may be established as will make him a more desirable citizen at the expiration of his term of imprisonment.

The prison problem, however, is one which is not so easily settled by those who are confronted with its immediate and practical solution as it is by theorists. Hence the wisdom of conservatism in the expression of opinion as to how a penal institution should be conducted, and a more careful study of the problem by the public rather than the assumption of an off-hand knowledge upon the subject.

HAPPENINGS OF THE WEEK.

National.

Citizens of Duluth have appealed to Governor Ebbelhart, of Minnesota, for troops to quiet the riotous outbreaks in that city. About 5,000 street car men and sympathizers compelled the company to suspend service and the police were wholly unable to give the public protection.

Last Friday, Edward H. Schrieter, former clerk of the common council committee of Detroit, testified before the police court of the city, giving in detail the facts concerning his connection with the bootleg cases against 17 of the city's aldermen.

Aviator Paul Peck, of Washington, D. C., holder of the American duration flight record, was fatally injured in a fall from his biplane in Chicago last Wednesday.

A military court has been called to investigate the slaying of John Elisy, a Syrian who it is reported, was killed by Captain Blackman, of the Michigan National Guard, near Jackson prison last Friday night. The victim was suspected as a party to a conspiracy to blow up the walls of the prison.

Wm. Haywood, general organizer of Industrial Workers of the World, was arrested at Boston, Mass., on a warrant issued as the result of an indictment charging him with conspiracy in connection with the strike of the textile workers at Lawrence, Mass.

Six persons were drowned near Chicago, Sunday, and five others are missing. The victims went for a pleasure sail on Lake Michigan and were caught in a lake squall. They, however, returned to within 100 feet of the shore before the tragedy occurred.

Three persons were killed and 150 injured by a tornado near Syracuse, N. Y. The storm also caused a property loss estimated at \$25,000.

Captain Bartlett, of the Steamer Neptune, who headed a gold-hunting expedition to Baffin Land, has returned to St. Johns, Newfoundland, reporting the loss of one of his ships and the discovery of extensive coal deposits. No gold, however, was discovered.

Three persons were killed and two others probably fatally injured in a railroad wreck at East Rochester, N. Y., last Sunday morning.

At the power boat races at Buffalo last Saturday, the 20-foot hydroplane, Baby Reliance II, made a new record by maintaining a speed of 46.15 miles for over a 35-mile course.

The Methodist Episcopal Conference for the Detroit district of Michigan completed its session at Alpena, Mich., Monday.

In a statement made public by the census bureau there was a total of 13,345,545 foreign-born white persons in the United States at the time the 1910 census was taken. Of that number 595,524 were living in Michigan.

Farmers along the river Raisin are much agitated over the destruction of fish in that stream by the sugar company at Blissfield dumping refuse containing strong acid therein. The acid is killing thousands of large whitefish.

On Monday the federal authorities began taking testimony in Chicago in a suit started to dissolve the International Harvester Company.

Farmers supplying milk to Detroit patrons are dissatisfied with present prices. The demands made by the local board of health for improved quality adds to the cost of production to a degree that no margin of profit remains. Many dairymen declare that the output will be decreased unless better prices are paid.

Foreign.

General Count Maresuke Nogi, supreme military councilman of Japan, and his wife, killed themselves last Friday night in accordance with an ancient Japanese custom as a final tribute to their de-

parted Emperor, Mutsuhito. The tragedy created a profound sensation and expressions of sorrow have come from every quarter.

The funeral of Emperor Mutsuhito was held on September 13. Unusual preparations were made by the country in paying their last respects to the dead monarch. The entire route from Tokio to Yokohama was electrically lighted. Warships in the harbor fired salutes and enormous crowds were gathered.

Maneuvers between the Mexican rebels and the federal troops have been reported in northern Mexico near the border line this past week. Early news indicated that the United States government had agreed to an arrangement whereby the federal forces of Mexico would be allowed to pass through this country in order to gain advantage over the rebels. It is also stated that the rebels captured and burned a passenger train on the Southern Pacific railway at Nogales, Arizona. The town of Ojinaga, directly across the border from Presidio, Texas, was gallantly defended by the federalists last week, but every hour it was anticipated that a rebel victory would result. On Sunday the federal troops won a costly victory at Oaxaca, the rebels in retreating sacked the town of San Felipe and Etha.

Terms of peace are practically agreed upon between Italy and Turkey. The terms are understood to be an acceptance by Turkey of Italy's occupation of Tripoli, the retention of a Mediterranean port by Turkey and a strip of territory reaching to the interior, the cession to Turkey of some portion of Italian territory near the Red Sea in exchange for Tripoli, and the recognition of the spiritual suzerainty of the Sultan in Tripolitania.

THE WEST MICHIGAN STATE FAIR.

Perfect fair weather during the entire week contributed to an unusually large attendance at the West Michigan State Fair. The grounds were thronged with visitors from both city and country, the crowd being exceedingly large on both Wednesday and Thursday. The show itself was of the usual high standard which has been set by this fair in previous years. Although the exhibits in the live stock department were not as numerous as has sometimes been the case, perhaps owing to the earlier date of the fair and probably also to some extent to the severely hot week which preceded the fair.

In the horse department the elimination of harness classes decreased the exhibits to some extent, although there was a very good showing of horses, big exhibitors from outside the state were not attracted to the same extent as in previous years. The quality of the exhibits, however, was very good and the exhibition space was very well filled.

In the cattle department the dairy breeds showed up strongly with a fair exhibit of beef breeds, the exhibits averaging very good in quality.

The hog exhibit was not large owing no doubt to the very unfavorable weather conditions which have prevailed in the high price of grain which has not stimulated the fitting of hogs to a great extent. The several breeds were, however, well represented, many of the good Michigan herds being seen and a few from outside, including an exhibit of Mule Foot hogs by an Ohio breeder, the first that has been seen in Michigan and an exhibit which attracted a great deal of attention from fair visitors. Considerable comment was heard from live stock men who are well informed with regard to the breed characteristics and type of this comparatively new breed of pure-bred hogs, the individuals averaging much finer and smoother in type than the average live stock man had in mind as the type of this breed. This herd showed good uniformity with smoothness and rather fine bone, the type being intermediate between the bacon and large types, which are characteristic of the better known breeds.

The sheep exhibit was rather larger than the swine exhibit, an overflow tent being used for that portion of the exhibit which the regular space would not house. There was a goodly sprinkling of the old Merino types, a fairly good showing of Rambouillets, a good exhibit of the middle wool mutton breeds and representative exhibits of coarse wools. The bulk of these exhibits were from the state, although there were some show flocks present from the big circuits, making competition keen in nearly all classes.

The poultry exhibit was especially fine, the two large buildings assigned to the housing of this exhibit being insufficient in capacity and making it necessary to use a tent for the overflow. Notwithstanding the fact that this fair came at an unfortunate time so far as making poultry exhibits of good appearance is concerned, due to the moulting season, it was a grand exhibit in appearance as well as character and did great credit to West Michigan farmers, as well as to the management of this department of the show.

The machinery exhibit was large and well placed, a new feature in this exhibit being a number of different makes of farm tractors, which attracted considerable attention notwithstanding they were at the extreme end of the machinery exhibit. As usual at the big fairs in recent years, the gasoline engine was in evidence everywhere in its many types and sizes, suitable to different uses upon the farm, and not a few of the machinery exhibits were illustrated in action by the use of this power.

The horticultural and agricultural exhibits were a credit to Western Michigan, the commodious building in which they were housed being at all times pervaded with a delicious aroma of ripe apples which have given Western Michigan its effective slogan, "Where fruit with flavor grows." The Western Michigan Development Bureau had a fine exhibit of apples in boxes and jars of fruit. The

(Continued on page 245).

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 twice a month. Every article is written especially for it, and does not appear elsewhere

JUST FOR A NIGHT—BY HELEN I. CASTELLA.

Of course, if it was to do over again—but that's no way to start the story. We all know that if we had the power of second choice, or the right to recall our hasty acts, we would do quite differently the second time, and without a doubt the world would be a very commonplace, prosaic old place indeed without any of the startling climaxes which invariably follow upon our indiscretions.

To this day nobody knows just who to put the blame on, or the praise either, for that matter, although I must confess that every one of the family was quite willing to assume their share of the latter.

But to start at the beginning, Nina sat all through breakfast with an open letter before her and cried. Salty tears flavored her orange, they trickled down into the oatmeal, they added their piquant flavor to the bacon, and still they were not exhausted. Finally, after mopping her eyes for perhaps the twenty-fifth time, she got up and spread her handkerchief over the chair back to dry. Phil then pushed back his chair and made a noisy pretense at departure. "Well, sorry I can't suggest anything to help you out. So long, sis. Good-by, everybody."

Nina didn't even deign him a parting glance. Brothers were horribly devoid of sympathy. It was to Aunt Katherine that she turned her tragic, tear-stained face. "Do tell me what I am going to do!"

"It seems dreadful," began mother, in a half shocked, half indignant voice, "to be so ashamed of one's home." But her young daughter interrupted her.

"It's not that at all! You know yourself that I have plenty of friends, and they all know that we haven't any money, and that it's a mighty hard pull for you and Aunt Katherine until I get through college, but of course they are the people who have known me all my life. You don't suppose that I am going to have Evelyn Markham come here, do you? She and her mother? To this little, sixteen-dollar-a-month house, in a side street—back street, I should say! Why mother, Evelyn is an aristocrat! She is the one girl in college of whom I stand in awe! Her mother sends her, every month, a check for one hundred dollars, just for spending money. Think of it! One hundred dollars!"

"Well, I think it's a sin," said mother, bluntly. "That's what I think of it. And, moreover, I don't think it shows good judgment on your part to pick out such a girl for your particular friend. I thought I brought you up more sensibly!"

"Oh just listen, Aunt Katherine." Nina turned toward the aunt who had a warm place in her heart for her pretty young niece. "As if I picked Evelyn out! Why, I wouldn't have dared! No, dear mother, it was Evelyn herself who first showed a partiality for me, and all the girls in our particular set are just a little bit jealous, let me tell you. But what in the world she and her mother want to stop off here for, just over night, on their way home from Canada, is more than I can tell. And she writes that they will be delighted to spend the night with me, so that her mother will have an opportunity of meeting my mother and the rest of the family. Of course, to Evelyn, this isn't a bit out of the way, for she lives in almost a palace. I've seen lots of pictures of their place."

"And what does she suppose you live in?" Perhaps mother's voice was just a trifle sarcastic as she asked the question, for Nina flushed clear up to her eyes.

"Well, mother, of course she knows we are not rich, and that I am going to teaching right away next year, as soon as I graduate, and I've never really lied about anything, but you know you can make things sound a little better than they really are if you tell it right. Why,

mother, our house isn't anything like as large or as handsome as their garage! If I only could get word to her in some way, but they've already started, and they will be at the station tomorrow evening by seven, and what in the world am I going to do?"

That was Nina's cry all day long. "What am I going to do? What will I do?" It seems there are times when mothers fail to rise to an emergency. It was so in this case. By the end of the day mother was saying quite tartly, "Well, I don't see that you can do anything but let them come. They can have my bedroom, and I—" but at that Nina

they would have to hunt up a hotel, and maybe Evelyn would think, they, too, could come to my cousin's. Most probably all her relatives are wealthy."

"Probably," sotto voice from mother. "Well," said Aunt Katherine. This time her face brightened up considerably. "Couldn't we get hold of one of those yellow signs, scarlet fever, or something like that, and then about half-past six I'll paste it on the front door, and we'll pull all the shades down, and—"

"Well, my father's Abraham! Katherine Jennison, are you losing your mind? Nina, don't I smell the beans? And the

row. Phil stole several glances in the direction of his down-hearted sister, and then he began to talk. His conversation was chiefly about a house he had taken a prospective customer through that day—its elegant furnishings, its completeness, ready for occupancy, although the present owner was abroad, where he had been for more than a year.

"We have it up for sale, just as it stands, furniture and all," said the boy, enthusiastically, "and I believe I've got a customer for it. The man I took through today. If he buys it I tell you it'll mean something for me, because Jellinghouse is away. He won't be back until Friday, and I've been tending to the business of the office all alone. I was wishing today I could take you folks through the house, just so's you could see what a dandy place it is. I've got the keys here in my pocket." He took them out and laid them casually on the table. The brother's and sister's eyes met. The same thought was in each. Nina bent over her plate with a peculiar look.

It was after supper when she and Phil got together on a corner of the porch to whisper over what at first seemed to Nina to be a diabolical plot. "Oh, Phil," she half breathed, a shade of hope in her whole voice. "It would be lovely, but I don't believe we could ever persuade them to do it!"

"Course we can," said Master Phil, reliably. "I'll put it to them. You wait!"

If anyone had told Mrs. George Washington Framingham that before she retired to bed that night she would have consented to remove herself and family and contents of her larder on the following day, and occupy another person's property over night just for the purpose of satisfying her young daughter's ideas as to the proper way of entertaining her guests, that lady would straightway have informed them that they were crazy. Nor yet would she have believed anyone who told her that she and Aunt Katherine would spend the greater part of the next day in roasting a pair of chickens, in preparing dainties which could be easily warmed up, and yet deceive one's palate into supposing they had just popped, first-hand from the oven, in making layer-cake, fresh peach pie, and grape preserves.

It was five o'clock when she and Nina and Aunt Katherine turned the key in the lock of their own tiny habitation and started forth with baskets, a suit-case, and Aunt Katherine's black leather bag which she insisted on carrying herself.

"I guess I have to take my toilet things," she snapped, when remonstrated with for burdening herself with so much.

There was a walk of about two minutes after they alighted from the car, and then, just as they rounded the corner, they saw Phil standing on the front steps, and mother cast agonizing glances around, and Nina's knees began to tremble and shake beneath her. Phil was talking to a policeman!

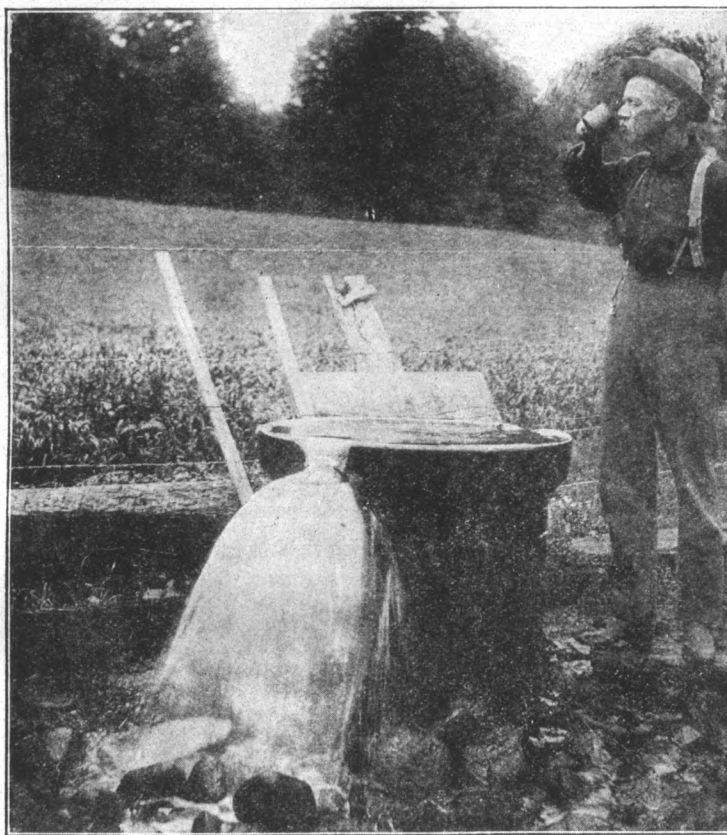
"Oh, where will we go?" began mother, excitedly. "And what will we do? Just when I thought I could put this heavy suit-case down! Oh, to think that it's come to this! That I am running from a policeman! Oh, if I had only done what my conscience dictated!"

But Phil, at that moment catching sight of them, beckoned with his bunch of keys, and Aunt Katherine took the lead, saying grimly, "Come on. Remember Joan of Arc, and Mary Queen of Scots, and Stephen!"

The policeman moved off as they neared the steps, and Phil swung the heavy door back and ushered them in. They were all quite weak. They flopped down in the hall on anything which came handy, and the boy's smile widened into

THE DRAUGHT OF NATURE.

BY CORA G. CARREL.



Up from the heart of Mother Earth,
Straight from the source of its mystic
birth,

Pure as the offspring of the cloud,
Dimpling, gurgling, laughing aloud.
Up, straight up for the thirsty soil;
Up, straight up for the sons of toil.
Up for the weary, laden beast;
Up for the greatest, up for the least;
Up in its beauty, up in its power;
Inexhaustible, hour by hour
Over the brink of the earthen bowl
Pouring the wealth of nature's dole;
Rainbow tints in the shining day,
Silver pure when the skies are gray,
Slipping away by the shades of night,
Rollicking on in the sun's bold sight;
Singing the song that the sirens sing,
Luring life to the living spring.

wrung her hands and wailed again, "Oh, don't tell me any more! How can I ever face Evelyn and her mother in this little box of a house? Why, my tongue would stick to the roof of my mouth! I would not be able to say a word! Oh, Aunt Katherine, do suggest something!"

"Suppose you meet them at the station and say that the family are all out of town, and that you are staying with a cousin, or something," said the aunt, thus appealed to, not daring to look at the mother.

"I wouldn't have the nerve," replied the girl, with a shudder. "Why look,

Freely it gives though the drouth be great;
Volumes it pours when the storm clouds
mate.

Be a hard drinker, if you will—
Come to it often, take your fill!
Never the stream of the laden vine
From the terraced hills of the vaunted
Rhine.

With its tingling spur to sluggish brain
As it courses madly through pulsing vein,
Gives to the eye the radiant light,
Gives to the arm the strength and might,
Gives to the soul the sense of power,
That the draught of nature holds in
dower.

Nothing it takes for what it gives,
Exacts no penalty, but he lives
Long and well who drinks of it deep,
And fair are the dreams of his restful
sleep.

irons are hot if you want to press your pink lawn."

Nina cast a despairing glance at her aunt. The front door opened just then and Phil came in whistling merrily as though the world were a very pleasant place to live in, with no calamities or troubles of any kind floating through the air. Phil was always hungry, and as soon as he came in the family sat down to supper. Mother passed the stew, which today consisted of more vegetables than meat. Frankly, mother had economized on the menu, not knowing just what might be expected of her tomorrow.

an expansive grin. "Say, you want to keep up your nerve," he said, genially. "I thought I'd tell him the house was going to be occupied over night, in case they suspected burglars, don't you know, so I showed him my cards and things from the real estate office, and told him I was expecting some prospective buyers who wanted to test the house before paying any money down."

Mother got up and took a long searching look at herself in the hall mirror. "I belong to a respectable family," she said, sternly. "And I've been a church member in good standing all my life. Of course, I'm not telling these lies, but you two are my own flesh and blood. It wouldn't surprise me a mite to find myself branded like Cain! You show me where the kitchen is, Phillip, and if I live through tonight and tomorrow morning, I want the rest of you to let me alone and not speak to me for a week."

Phil's remark, as he led the way to the dining-room and kitchen was enigmatical. "Well, you wanted me to go into the real estate business," was what he said.

After her brother had departed to the station to meet the Markhams, Nina and her aunt hurriedly made up the beds, for some reason assigning a lovely bedroom up on the third floor to the Markhams. Nina said afterwards that sometimes Providence puts it into our heads to do certain things, but her mother emphasizes emphatically that Providence had nothing to do with this affair, first or last. "The Evil One started it," she will say, sternly, "by putting a desire into Nina's head to appear more than she was."

"Yes, but who ended it, Mom?" Phil will ask, with a twinkle, and to this question his mother is strangely deaf.

The Markhams were delighted with the reception which was accorded them, and they were delighted with the dinner, anyone could see that. If they thought that the Framinghams were a particularly nervous family, of course they made no comment. If they thought it strange that out of the half dozen clocks scattered round on mantel-pieces, etc., not one was going, it is presumed they thought this was a family who took no account of time. During the course of the evening it grew so oppressively warm that Mrs. Markham did suggest, after looking around and seeing that every door and window was closed tight as a drum, that they have a little air. But no one moved to act on the suggestion, and mother threw such an appealing glance at Aunt Katherine that Phil felt called on to explain.

"You see, next door to us there's a private asylum," he began, lowering his voice just a little. "It's very private, of course, but some of the cases are quite dangerous, and we don't open the windows after dark. We think it's better to be a little uncomfortable and feel sure that we're safe."

"Oh, yes, to be sure! Please don't open them for the world!" begged both Evelyn and her mother.

Mrs. George Washington Framingham's lips moved, but whether in prayer for herself or her son it would have been hard to say.

It was shortly after that when the Markhams retired. They said they were very tired, and they would have to get up early to make their train, etc., but Nina, who went up with them, came down and reported that they looked under the bed, and in both closets, and back of the bureau, and as she was coming down stairs she heard something like a heavy object being dragged across the floor to the door.

Mother arose, and with a stately "Good-night" retired to the room which had been allotted her. "Come on, Aunt Katherine," said Nina, "Let's you and I go to bed. You, too, Phil, because you know we ought to get up very early in the morning and lose no time in getting off ourselves after they go."

Aunt Katherine didn't look like an underhand woman, or one who was deceitful in any way, but I have heard of criminals who, having started on a career of depravity, found it hard to stop, and possibly it was some mysterious influence like that which forced the lady into the complication in which she seemingly involved herself. In the first place, she went upstairs peaceably with Nina and, as the girl started to undress, she dawdled around, investigating bureau drawers, and drumming nervously on the window-sills. Finally she said, with a much exaggerated yawn, "I believe I'll go sleep in that little room at the end of the hall.

It won't be so warm as here, two in a bed."

"But you won't have any covers," remonstrated Nina.

"Oh, I'll do all right. I won't need much this kind of a night. I'll run down and get that red tablecloth that was over the basket, and put under me. I can put it in the wash Monday, and 'twon't be harmed a mite."

Nina didn't make any objections, and with a grim look of satisfaction on her face, Aunt Katherine took her black bag and departed from her niece's room, closing the door carefully behind her.

It was no secret to the family that the middle-aged spinster aunt had a revolver, but had Mrs. Framingham imagined for an instant that her sister was prepared to add murder to the category of crimes of which she already stood convicted, she would flatly have refused to come. The little woman now, weapon in hand, sped down the stairs and along the hall to a small room in the rear, which the owner evidently used as a den. Her plan, which had reached maturity before she ever set foot in the house, was to sit up all night, in case that something unforeseen should turn up. But first she went into the kitchen and procured for herself the red tablecloth, in case her niece should be poking around and discover that she had not come up to bed.

Hour after hour she sat there, her nerves too much on the alert to doze, and she had just gotten up to move her limbs, which were cramped from sitting so long, when, what was that? Surely she had heard a sound, as though someone was fitting a key in the lock. In an emergency like this mother would have prayed, but Aunt Katherine forgot her prayers; she even forgot the revolver; her brain was paralyzed with the one thought that the catastrophe which she had been dreading had come—here was the owner of the house!

He switched on the electric light and deposited his two large suit-cases on the floor. Peeping through the crack of the door the half-frantic woman saw him, a typical traveler, with a slouch hat pulled down well over his eyes, and a raglan overcoat. Taking a few steps forward, he surveyed himself in the mirror and gave a sigh of relief at finding himself again under his own vine and fig tree.

And so they were to be exposed just when the hour of victory was so near at hand! Was there any way to save the situation? Aunt Katherine's lips came together in a grim line. She could try it, anyway, and if she failed, well, there were worse places than jail, she supposed. Upon a chair, just back of the door, she climbed, red tablecloth in hand. It wasn't likely that anyone, be he man or woman, would return to his house, after an absence of a year, and go peaceably to bed without at least investigating each room on the main floor. Nor was she mistaken. Along came Mr. Owner, humming softly to himself, turning on the light in each room as he entered. He stood on the threshold of the den, and in an instant the red tablecloth descended on him like an angry cloud, completely enveloping him in its folds, and something, wirey, determined, (to his imagination he felt as though he were in the clutches of a huge spider), pushed him rapidly across the floor and into a compartment, where he was released, and the door slammed to and locked and bolted.

The excited woman leaned against the wall for support, then, getting down on her knees, she put her mouth to the key-hole. "Mister," she called, doing her best to keep the quake out of her voice. "Don't be alarmed, I beg of you. I give you my word we will depart peaceably in the morning, leaving you in possession of the house. I deeply regret that I had to do a thing of this kind, but under the circumstances—"

But the language which greeted her made her hold her hands to her ears in horror. She sped down the hall after the suitcases, carrying them to a place of concealment behind the parlor door. "At any rate," she said to herself grimly when, after having turned off the lights, she went back to her place in the den, "he may own the house, but he don't know how to talk to a lady!"

Now what was going to become of them? Phil would lose his position, of course, and there would be that much gone from the slender resources of the family, and perhaps the boy couldn't get anything else to do, for Mr. Jellinghouse certainly wouldn't give him a recommendation. Perhaps, oh horrible thought, perhaps Nina wouldn't be able to go back to college and finish her last year, but instead would have to go out and take

a position in a store, while she and her sister would do plain sewing to help along! All these thoughts flew with lightning-like rapidity through Aunt Katherine's brain as she sat there, listening with bated breath for a sound from the little pantry alongside the kitchen, and again listening to the weird creakings and rustlings which seemed to come from everywhere, above, below, outside and in.

But her long vigil was nearly over. The morning light was just breaking across the sky when the second thing happened, and this time Aunt Katherine stiffened in her chair and her arm fell limp and helpless across the table, until her fingers coming in contact with something cold restored her scattered senses, and she bent forward where she could be sure to a certainty.

Someone was again coming in the front door! Not quietly, cautiously, as had the owner, but puffing and blowing with the exertion of carrying his heavy valise up the steps, this individual worked his way through the door and felt all around the wall for the electric button. When he touched it the light flooded the hall, and he straightened up and looked directly into the barrel of as pretty a little revolver as any woman would want to handle. "Hell!" said the newcomer, and he took a step backward. Of course, that isn't a nice word to use, and I oughtn't to put it in, but it's what he said, and if there's anything else expresses the same meaning, I don't know what it is.

Outwardly Aunt Katherine was stern and judicial. Inwardly she was quivering like the proverbial "bowful of jelly," but her words were rattled off so glibly that one might almost have supposed she learned them by rote.

"I am a desperate woman!"

"So am I, lady," said the fat man, taking out a large silk handkerchief and mopping his perspiring brow freely. "Very desperate. So put down that there toy, and git! See?"

"No, I do not see," firmly. "And moreover, I am using this house at present, and it seems well that I am, if I am the means of preventing a robbery. I will permit you to take yourself off quietly, sir, if you go at once."

The fat man's eyes nearly popped out of his head. "Say, are you crazy?" he yelled. "Things have come to a pretty pass when a man can't come into his own house near morning without being held up by a revolver! I'll have that Jellinghouse strung up for this, sure's my name's Jimmie Powdermaker!"

Aunt Katherine weakened just the least mite, but her hold on the revolver never relaxed. "This is not your house," she said firmly. "The rightful owner is at present in hiding until morning, when we are going away, and he will take possession. You can go down the cellar and hide until morning, but you'll have to give me your word that you won't make any noise."

At this, Mr. Powdermaker fairly danced up and down on the floor in his rage. "You impudent hussy!" he shouted. "So it's not my house, isn't it? It's your house, I suppose! Who are your we? Bring on your gang! Bring a dozen of them! Fifty of them, I'll fight them all! Yes, and I'll fight you, too; I'm not afraid of your penny gun!" He made a sudden movement toward her, and the poor lady, whose overwrought nerves were already giving way, dropped in a heap at his feet, and the revolver hung limply in her hand. Thus relieved from the uncertainty of gazing into cold steel, the man began fussing around the parlor and kicked at the suit-cases which stood behind the door.

"All ready to skip, were you?" he said, sneeringly. "I wonder how much of my valuables you've got stored away in your bags?"

Aunt Katherine arose to her feet with dignity. "Those, sir, belong to the rightful owner of this house, who is at present in the pantry, waiting for morning when I have promised to release him."

The fat man turned around and looked at her, a new light dawning on his face. "Sufferin' cod-fish," he said, under his breath. "I sure had one narrow escape! Because the law don't hold them responsible!" His tone now changed toward the lady. He addressed her as though he were soothing a baby. "Yes, yes, rightful owner of the house, of course! Come on, let's you and I see what's in the bags! Don't want to? All right, you watch me, and I'll show you." He kept one eye warily on her, but as the cover came off the first suit-case, disclosing to view the contents, his mood changed.

RIGHT HOME

Doctor Recommends Postum from Personal Test.

No one is better able to realize the injurious action of caffeine—the drug in coffee—on the heart, than the doctor. Tea is just as harmful as coffee because it, too, contains the drug caffeine.

When the doctor himself has been relieved by simply leaving off coffee and using Postum, he can refer with full conviction to his own case.

A Mo. physician prescribes Postum for many of his patients because he was benefited by it. He says:

"I wish to add my testimony in regard to that excellent preparation—Postum. I have had functional or nervous heart trouble for over 15 years, and a part of the time was unable to attend to my business."

"I was a moderate user of coffee and did not think drinking it hurt me. But on stopping it and using Postum instead, my heart has got all right, and I ascribe it to the change from coffee to Postum."

"I am prescribing it now in cases of sickness, especially when coffee does not agree, or affects the heart, nerves or stomach."

"When made right it has a much better flavour than coffee, and is a vital sustainer of the system. I shall continue to recommend it to our people, and I have my own case to refer to." Name given by Postum Co., Battle Creek, Mich. Read the little book, "The Road to Wellville," in pkgs. "There's a reason."

Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.

A Merry Christmas for that Boy of Yours!



Your boy's Christmas will be the happiest ever if you will send him THE BOYS' MAGAZINE. It is a gift that lasts a whole year. THE BOYS' MAGAZINE is chock full of just the kind of reading you want your boy to have. Clean, inspiring stories written by such noted boys' authors as Hugh Pendexter, Everett T. Tomlinson, Wm. Heylinger, etc. Practical and instructive departments devoted to Electricity, Mechanics, Photography, Carpentry, The Boy Scouts of America, Stamps and Coins. THE BOYS' MAGAZINE is beautifully illustrated throughout—each issue has a new handsome cover in color. It is THE BOYS' MAGAZINE, the highest authority on Athletics. Every boy should read his ideas of true, manly sportsmanship.

FOR ONLY \$1.00 we will send you THE BOYS' MAGAZINE for a whole year and a copy of the most useful and practical book you ever read, "Fifty Ways for Boys to Earn Money," and this Electric Engine. This engine is a perfect piece of workmanship. It is considerably larger than illustration. Runs 1,000 revolutions a minute on one dry battery. Safe, easy to operate. A marvel of mechanical and scientific ingenuity. Send in your subscription today, and the engine and book will be forwarded at once, all transportation charges prepaid. Satisfaction, or money refunded.

The Scott's Redfield Co., 565 Main St., Smithport, Pa. THE BOYS' MAGAZINE at all news-stands, 10c a copy.

All Wool Black or Blue Serge Suit Only \$12.00



Why pay your local clothier \$15 to \$18 for no better suit? The cloth in these garments is all wool serge, medium weight for year round wear, has a fine diagonal weave surface and will not easily wear shiny. Are lined with a very fine black serge and interlined with heavy canvas and hair cloth.

We guarantee every suit for one year, and agree to save you from 20 to 40 per cent on what you would pay at the regular retail prices. The Lansing State Savings Bank will tell you we are reliable.

Remember, we absolutely guarantee you a fit and perfect satisfaction or your money refunded. As we specialize on

blue and black serge suits at \$12, you get the greatest clothing value ever offered for the money. Be sure and write today. State color desired. Give breast measure over vest, waist measure for trousers and inseam from close up in the crotch to the top of your shoe heel. Send postoffice or express money order. We prepay all express charges. Further information and samples furnished upon request.

NATIONAL MENSWEAR CO. Station A, Lansing, Michigan

WANTED FOR U. S. ARMY—Able-bodied, unmarried men, between ages of 18 and 35; citizens of United States, of good character and temperate habits, who can speak, read and write the English language. For information apply to Recruiting Officer, 212 Griswold Street, Detroit, Mich. Heavensrich Block, Saginaw Mich. 1st and Saginaw Streets, Flint, Mich., 144 West Main Street, Jackson, Mich., Huron & Quay Streets, Port Huron, Michigan.

"I've got you now!" he roared. "Burglar's tools! Bring on your gang! Pretty lot they must be to use you as a hold-up for a man. Oh, you're a wonder, you are!"

Just then a voice was heard, descending the stairs. "Aunt Katherine, are you up? I thought I heard you singing. Let's get breakfast and have it all ready, so that we can go away right after."

Aunt Katherine jumped for the man's arm and held it as though in a vise. "Don't say a word," she hissed, rather than spoke. "Promise that you won't say a word till after they're gone, and I'll give you one of the best breakfasts you ever ate! Come here, Nina dear. This is Cousin Jimmie, from the west! fore. He just came, an hour or so ago, fore. He just came, an hour or so ago, and he's hungry, so we must see about breakfast."

Nina shook heartily the hand which Cousin Jimmie feebly held out. "Why, isn't that nice!" she said, with enthusiasm. "Are all these bags yours, and these things your mining tools? Well, the idea, and you carried them all yourself! My, I wish Phil could go west and learn how to do things!"

Cousin Jimmie went along out in the kitchen with them and sat down in the rocker which Aunt Katherine moved out to the middle of the floor. She enveloped herself in a big gingham apron and started in to fulfill her promise about getting him the best breakfast he had ever eaten.

Poor mother! She might as well have been eating ashes as the delicious ham and eggs, the hot muffins, or the coffee! Who was that fat man sitting there in the chair but someone who was to lead them all to the station house when this miserable farce was over? His eyes roamed around the table as though he were trying to unravel a complication, but he was afraid to speak, for every time he looked at the lady in the white shirt-waist with the wilted collar and her frizzes out of curl, she laid her hand on her lips and motioned him to silence. That is, when they were unobserved. If anyone was looking in their direction, however, she made some pleasant remark about Texas!

It was not until the Markhams had gone, after affectionately embracing the female members of the family, and telling everyone what a delightful time they had had, that Aunt Katherine plunged into explanations.

She told him about Nina's false pride, and she told him how the family weakened. She told him about their little box of a house, and she told him about Phil's

MY GRANDPA.

BY RUTH RAYMOND.

My grandpa is my oldest friend,
And when he walks with me
We're just two boys, so we pretend,
And everything we see
We talk about, for grandpa knows
How birds build little nests,
And where the first spring blossom grows,
And which wild fruit is best.

He tells me stories of the days
When war was in our land,
And teaches me some soldier plays,
To shoulder arms and stand;
To march, and halt, and fire-away,
When captain gives command;
My grandpa is a veteran gray—
In war he lost his hand.

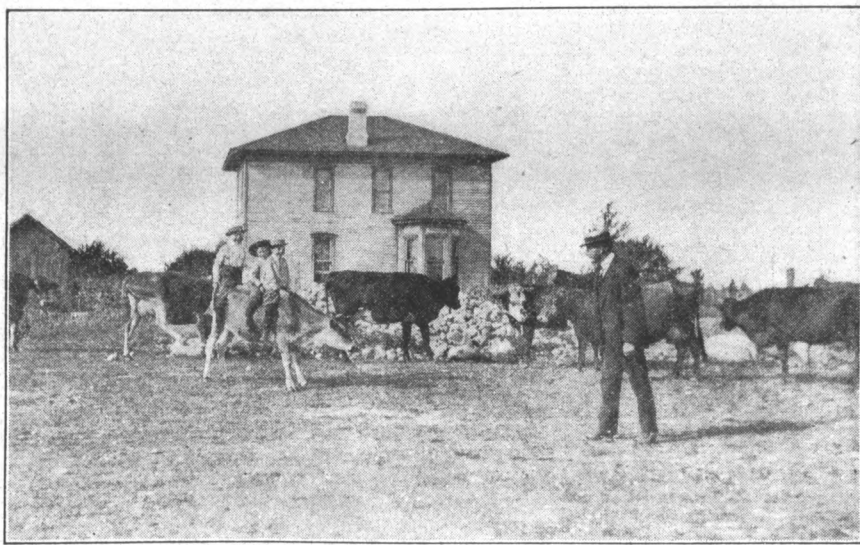
He does not like some things, I know,
That thoughtless people do,
He says the world is more for show
And folks are not as true
As once they were, when simple ways
Made all the neighbors kind;
He often longs for those old days
That come again to mind
When we are walking up the lane,
Or through the pasture green,
Or watching while men cut the grain
With some new-styled machine.

My grandpa seems so good to me
That I have formed the plan
That like my grandpa I will be
When I am grown a man;
I'll love the right and hate the wrong,
And help the poor who need,
And banish sorrow with a song,
For that is grandpa's creed.

Jimmie, pausing to wipe the perspiration from his face. He opened the door on a crack and peeped in. Then he opened it a little wider and stuck his head in. Aunt Katherine, her curiosity getting the best of her, wriggled under Mr. Powdermaker's arm and put her hand on a piece of white paper, pinned to the table. A broken window told its own story. The lines contained in the note were brief:

"Dear Lady:
I'd like to wait until morning, but on second thoughts concluded to leave my baggage for security and call again. I've been up against a good many things in my life-time but you're a new one on me."

Mr. Powdermaker's "Humph," was expressive. Again he addressed himself to Phil, who was quaking in his shoes. "On your way to the office you better stop at the police station and tell them to send an officer around here. 'Madam,' this time it was Aunt Katherine toward whom he looked, 'I will trouble



When Papa Caught us Riding on the Back of Bess, the Little Jersey.

good position, which they had hoped would lead to better things, but which she was now afraid he would lose because of the threats Mr. Powdermaker had made against the firm of Jellinghouse for not guarding his property in a more secure manner. "And now," she finished tragically, (no one had spoken a word during her recital), "what is to become of that man locked in the pantry?"

"Son," said Mr. Powdermaker, addressing himself to Phil who looked a little white now, now that he realized into what jeopardy he had placed his position, "hunt around and get a clothesline. I think you and I, between us, can tie the fellow up before we hand him over to a policeman." Banging on the pantry door, he shouted in most stentorian tones: "Hey, you! Get ready to come out! Your time's up!"

There was no response from within, and no noise of any kind. "Look out there, you wimmen folks! No doubt he's a dangerous criminal!" cautioned Cousin

you for your address before you leave. I may see you again."

They were eating their supper that evening, a very subdued and chastened family, when the door-bell rang. Nina went to answer it, and when she came back she had a curious expression on her face.

"It's Mr. Powdermaker," she said slowly. "And he has a big box of candy under his arm, and a bouquet of flowers in his hand, and he asked for Aunt Katherine."

The case concerned a will, and an Irishman was a witness. "Was the deceased," asked the lawyer, "in the habit of talking to himself when alone?"

"I don't know," was the reply. "Come, come, you don't know, and yet you pretend that you were intimately acquainted with him?"

"The fact is," said Pat dryly, "I never happened to be with him when he was alone."

Amatite



All Over
The United States & Canada
Is Giving Satisfaction

From Alaska to Florida
—in city and country—
Amatite Roofing gives the
same genuine satisfaction
and lasting service.

If you intend to build,
use Amatite. You will do
away not only with all roofing
troubles, but with all
unnecessary roofing expense,
because Amatite needs no
painting or attention after it
is laid.

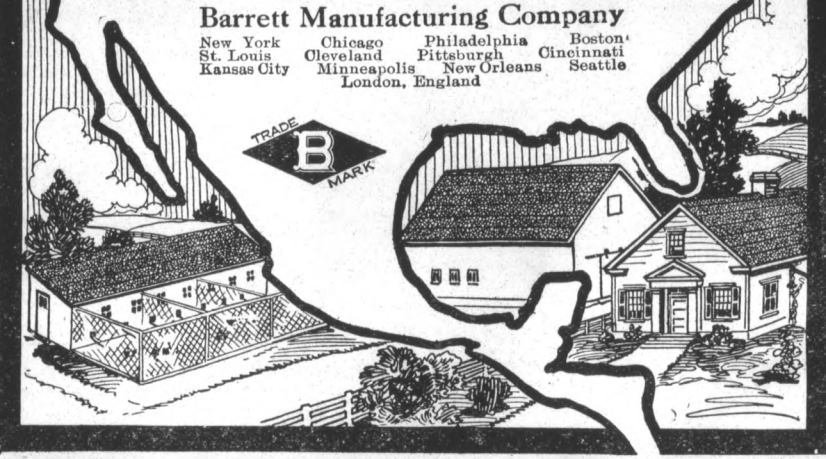
It has a wear-resisting
mineral surface on top in-
stead of paint. Amatite is
easy to lay, fire retardant,
attractive and absolutely
waterproof.

Free Sample

Send for sample and make
roofing comparisons, and
know roofing before you
buy. The man who knows,
buys Amatite—always.

Barrett Manufacturing Company

New York Chicago Philadelphia Boston
St. Louis Cleveland Pittsburgh Cincinnati
Kansas City Minneapolis New Orleans Seattle
London, England



"Packed Full of Painting Facts"

That is the way some one has described our booklet
"Handy Book on Painting," which we send to any farmer
requesting it.

Dutch Boy Painter Pure White Lead

and pure linseed oil make the most serviceable paint you
can buy for any use. This book tells just how to mix and
apply them. Tells how to determine the quantity of paint
you will need for your house, the number of coats to apply
and how to get the colors you want, etc. You hire a good
painter for important jobs, but every house owner should
know these paint facts for himself. It is knowledge that
will mean money in your pocket and a better job of painting.

Send a Postal for the Book

Ask for Farm Painting Helps No. 568

If there are children in your home or your
neighbor's, ask also for the Dutch Boy Painter's
Book for the Children.

NATIONAL LEAD COMPANY

New York Boston Buffalo Chicago
Cincinnati Cleveland St. Louis San Francisco
(Philadelphia, John T. Lewis & Bros. Co.)
(Pittsburgh, National Lead & Oil Co.)



4% to 5%

Safe and Sure

is certainly better than a possible 7 percent or 8 per-
cent which you may and also may not get. You can
absolutely depend on getting your money regularly
when you invest in the only kind of securities we
offer—the highest grade of

Municipal Bonds

(Many of them Tax Free.)

These bonds, payable from taxes, backed by the entire
wealth of rich counties, cities and school districts, contain
every element of a desirable investment — SAFETY, CON-
VERTIBILITY and ATTRACTIVE INCOME. They are the
same kind of Bonds which

The U. S. Government Accepts as Security
for Postal Savings Deposits

But instead of the 2% which the Postal Banks pay, these
Bonds will yield, as stated above, from 4% to 5%—and you get
it regularly.

Write for Free Booklet The New First National Bank, Dept. 4
Columbus, Ohio



The Longer Your Suspenders Wear the Fewer Pairs You Have to Buy

Constant strain causes wear. Remove the strain and the wear is reduced.

Rigid back suspenders do not give and take; the strain is constant and some one part has to stand it all.



do away with most of the strain and what little there is, is evenly distributed to each part by the **sliding back**. It is a very simple and practical device which makes the President the most comfortable and durable suspender.

Wear a pair for a month. If you don't like them we will buy them back at the price you paid.

Light, medium and extra heavy. Extra lengths for tall men. Signed guarantee on each pair.

Price 50c Everywhere

The C.A. Edgarton Mfg. Co.
SHIRLEY GUARANTEED SUSPENDERS

5 Main St.

Shirley, Mass.

Is Your Home Safe From

LIGHTNING
Let Your Protection Be Guaranteed

The Dodd System takes everything into consideration in rodding a building—chimneys, pipes, flues, tin gutters, telephone wires, etc. Safety depends upon it. Right installation is everything. Don't be misled. Our patent

Woven Copper Cable Rod

is the standard of the world, but the best rod alone will not save you. It must be scientifically installed. 2000 Fire Insurance Companies endorse the Dodd System. Tens of thousands of buildings protected—not one has ever been destroyed. Our erectors are specially trained and regularly licensed. Every job guaranteed, with money refund agreement. Once is enough to rod your buildings. Have the job done right by a responsible concern. Send for our great free lightning book to-day. Address

DODD & STRUTHERS

721 6th Avenue,
Des Moines,
Iowa.

DODD System of Protection
Read Our Great Free Book on Lightning

Chaffeur, Repair Man, Tester, Salesman and Demonstrator

We guarantee to qualify you for all of above positions in a short time or we will refund your money. Phone, call or write for particulars.

Michigan State Auto School,
The Old Reliable School,
11 to 17 Selden Ave., near Woodward, Detroit

ABLE bodied men wanted for the U. S. Marine Corps, between the ages of 19 and 35. Must be native born or have first papers. Monthly pay \$15 to \$30. Additional compensation possible. Food, clothing, quarters and medical attendance free. After 30 years service can retire with 75 per cent. of pay and allowances. Service on board ship and ashore in all parts of the world. Apply at U. S. Marine Corps Recruiting Office, 161 Griswold St., 50 Monroe Ave., 52 Woodward Ave., 143 Gratiot Ave., Detroit, Mich.; Hamilton National Bank Building, corner Calhoun & Main Sts., Fort Wayne, Ind.; 125 Monroe Ave., N.W. Grand Rapids, Mich.; Post Office, Lansing, Mich.; Corner Superior & Adams Sts., 701 Summit St., Toledo, Ohio; 509 Phoenix Block, Bay City, Mich.; 2 E. Main St., Battle Creek, Mich.; Post Office, Manistee, Mich.

CEDAR FENCE POSTS.
GEORGE M. CHANDLER, Onaway, Michigan.

Government Farmers Wanted—\$80 monthly. Examination Oct. 16. Many needed. Write OZMENT, 17 F. St. Louis, Mo.

Wedding Invitations and At Home Cards—The most artistic at reasonable prices. Write for samples and prices. J. H. McKENDRICK, 21 John R St., Detroit.

THE GOSSIPING LEAVES.

BY CHAS. E. JENNEY.

The leaves are whispering secrets today: Listen and hear what they have to say.

"Sshhh—don't tell it, but really 'tis so; The Cottonwood leaves have all got beaux.

The Cottonwood tree keeps them well in sight, But they're going to elope with the Wind some night.

Have you noticed how gray Miss Bayberry's getting?

That Maidenhair dyes, I could almost be betting.

Mrs. Oak-leaf's new dress is russet, I hear.

Some ruffled, of course, but rather severe.

Did you notice how Ivy-leaf blushed with delight

At Jack Frost's seeing her home last night?

Just look at those Lily-pads wade in that puddle.

Oh, it's going to rain, and we'll be in a muddle.

Well, drop in again when you're going by.

Did you hear—must you really—all right, then. Good-bye."

And that is but part of what the leaves said—

Leaves yellow, leaves orange, leaves russet, leaves red.

WHY THE SKY IS BLUE.

Why is the sky blue? has been asked so often of Prof. L. R. Ingersoll, of the physics department of the University of Wisconsin, that he has prepared the following brief explanation of the phenomena:

"It would seem as if the explanation of such a universally observed fact should be generally well known, but the truth is that the real reason for our sky colors and beautiful sunset tints has been known even by scientists for only a comparatively few years, although the general principles of color have been understood for a long time.

"A leaf appears green because it reflects or sends back to us more of the green than of the other colors which go to make up the white light with which it is illuminated. White paper or paint appears white because it reflects all colors equally well, and black looks black because it absorbs all colors, sending back none.

"All these facts have been known for many years but they apparently led to no explanation of sky color for the simple reason that the air itself is colorless. Lord Rayleigh, the English scientist, finally attacked the problem from a somewhat different standpoint and so discovered the true reason for sky color. Realizing that even the purest air always contains more or less fine dust suspended, he studied the effect of such particles on a beam of light and found that they could turn aside or shatter in all directions a certain small share of this light and that the finer the particles were, the more blue would be the shattered light. The general blue of the sky is due, therefore, to this shattered light turned aside in all directions by these fine particles of dust in the atmosphere. The higher we go the finer the dust we should expect to find and consequently the deeper the blue color. This is the reason for the deep blue or even the indigo blue sky seen from high mountain tops. Conversely, the lower levels of the air have relatively larger dust motes and these turn aside all colors equally, hence the whitish appearance of the horizon sky.

"The sun and the surrounding clouds at sunset appear red because the light has been robbed of so much of its blue color by its passage through the great thickness of air through which we see the rising or setting sun. Anything that tends to increase the amount of fine dust or smoke in the air enhances the beauty and brilliancy of the sunset, as was illustrated in the years 1883 and 1884 after the eruption of Kragatoa, which literally filled all the air in the world full of very fine dust."

"How did that couple ever make love, for neither one is talkative?"

"That may be so, but, you see, she has such a speaking countenance, while his money talks."

The pastor of a small country flock was generally accounted a rather dull and prosy preacher. Returning from market one day with a small trout he accosted a neighbor.

"Good morning, Jones," said the minister; "let me show you a fine trout. I'm using these for brain food."

"Tha-th-that's a nice little f-f-fish," was the reply, "but what you really n-n-need, elder, is a wh-wh-whale!"

No hill too steep
No sand too deep

Why Jackson cars are so very comfortable

When we speak of comfort in Jackson cars, we speak of a quality as sure and well defined as their power, or their speed, or their durability.

Jackson cars are noted for their ease of riding, as you well know.

Because our engineers do not build for speed or power or long life alone; they build for comfort, too.

They begin to put comfort into their cars when they draw the first designs.

They know what makes a car comfortable—know it better, perhaps, than any other engineering staff in the country.

They know that a car with the wheelbase of the "Olympic" should have 34-inch wheels to be most comfortable.

They know that full elliptic springs ride from 83-1/3 to 100 per cent easier than any other type, so they put four of them in the Jackson.

They know that a certain slant to the seat cushions and shoulder-high seat backs are most comfortable; so we use them.

They know that 10-inch upholstery adds to the seat comfort; so we make it that thick.

But they haven't overlooked or slighted the mechanical details either, as you'll see by the smooth, silent running of the car, and by its pulling power and good speed.

We want you to write for the 1913 Jackson literature, and the name of the nearest dealer, so you can ride in the new car and see what a splendid production it is.

JACKSON AUTOMOBILE CO., 1460 E. Main St., JACKSON, MICH.

Jackson "Olympic"—\$1500

35 horsepower, unit power plant; long-stroke motor—4 1/2 x 4 1/4 inches. 115-inch wheelbase; 34 x 4 inch tires. Full elliptic springs, front and rear. Deep, roomy body, with 10-inch upholstery. Gasoline tank under dash, supplied from storage tank at the rear, with pressure pump. Total capacity twenty gallons. Equipment of Disco Self-starter, mohair top, top hood, ventilating windshield, speedometer, oil and gasoline gauges on dash, Prest-o-lite tank with automatic electric lighter; Firestone universal quick-detachable demountable rims, extra rim, tire carrier, robe rail, foot rest in tonneau, pump, jack, tire outfit and tools. Trimings, black and nickel.

"Stronger Than The Law"



Show this Advertisement to Your Dealer.

You can take a saw, hatchet or knife and dissect the "Stronger-Than-The-Law" shoe and you'll find it honestly made of good leather through and through. It is a "Star Brand" Shoe.

The uppers are made of Chrome-tanned leather—as nearly water-proof as leather can be made. You can't tear this leather and you can hardly wear it out.

The counters, heels and double soles are of the finest sole leather. This shoe is put together so it won't rip. It will keep your feet dry and give you double wear.

The "Stronger-Than-The-Law" has the largest sale of any work shoe in the world. It is the strongest and longest wearing shoe made. It is both comfortable and good looking.

The "Star Brand" dealer in your town has one of these shoes cut up to show how it is made. Take this advertisement with you and ask to see the cut shoe.

Address Dept. F-7

ROBERTS, JOHNSON & RAND
MANUFACTURERS Branch of International Shoe Co. ST. LOUIS

When writing to advertisers please mention the Michigan Farmer.

The Real Taft

LET'S look for a moment upon the *Man* side of this Presidential Contest. It's a mighty important deciding factor after all.

Platforms may be built and policies framed that are full of glowing promises.

But a platform, after all, is only words.

The man behind the words either gives them *living action* or proves them a hollow mockery.

The great American privilege is to discount assertions which lack the proof.

And, in this matter of before-election promises, the public has become a pretty critical judge.

"Who is going to do it?"—and "What has he *already* done to *prove* that he will do it?"—

These are the questions the people of America are asking seriously right now.

You, Mr. Farmer, want an answer to that question.

You are used to dealing man-to-man—out in the open places—where you can read in the other fellow's eye what he is, and where he stands.

You know that the prettiest *reading* platform ever written, the finest future-administration program ever mapped out, is worthless unless there is a *straight-seeing* man, with a *steel-backbone* to carry it out.

A man with the courage to do his own thinking—to fight his own fight—without bluster or buncombe—without chasing moonbeams.

That man in the present contest is William Howard Taft.

* * *

And that you may know him better as a *Man*—that you may decide from that knowledge whether or not he is *your* kind of a *Man* for president—these personal facts are given.

For thirty years Mr. Taft has been active in public life.

But with him *public life* and *publicity* have meant two entirely different things.

He not only refuses to seek notoriety, but he continually avoids it.

He hasn't any desire to see his name "on the front page," nor his portrait in colors on every dead wall.

He is not the man behind the megaphone.

This is not from mock modesty—but because Mr. Taft prefers to let the things he does stand on their own merits and prove in their results.

And because he has some "old-fashioned ideas" about the dignity of his office.

He doesn't send for reporters to tell the world of his greatness—nor for camera men to catch his latest pose.

* * *

Mr. Taft frankly admits that he is not a politician—which is true.

He is not a politician, but he *is* a statesman and a born judge. His grandfather and his father were both judges. His father left the Superior Court Bench to become a member of Grant's cabinet.

So William Howard Taft came by his judicial temperament, and broad, intelligent vision on public and corporate matters by inheritance.

Beginning with the practice of law, he was made Judge of the Superior Court, then Solicitor General at Washington, and after that Judge of the Sixth Federal Circuit—in direct line for the Supreme Bench.

But it was what Mr. Taft did in the Philippines that proved more than anything else in those early days, his real manhood, his courage, his sympathy and patience, his judicial fairness, his gift of leadership.

When President McKinley asked him to give up the bench and his prospect of promotion to the Supreme Court, and to "shoulder the white man's burden"—to go and teach the Filipinos self-government—

He put his own ambitions aside, and took up the thankless task.

The Filipinos were hostile, suspicious. They resented his coming. At first he was in serious personal danger.

His three years' work on the islands would have taken the heart out of a weaker man. But he remained.

How Taft won the Filipinos' friendship and confidence—how he convinced them that he was working unselfishly for them, and not against them—is history.

He gave them schools; honest courts of justice.

He secured for them the rights to buy lands on easy terms.

He was the Big Father to all the Islanders—and when he left, after starting them so well in the way to self-government,—it was to become Secretary of War and of our Insular Possessions, where he could still guard over them.

In Cuba, Mr. Taft restored peace between the warring factions and directed the reorganization of the self-government there on a practical, successful basis.

His work in connection with the Panama Canal showed his wonderful foresight. As Secretary of War he made the peaceful completion of the Canal possible by pacifying the Panama Government and people, who were suspicious that our Government had gone to the Isthmus to build a rival State, instead of a Canal.

As President, he has advanced the work upon the Canal more than anyone before him, and he now looks forward to its completion in seventeen months.

His whole administration has been a record of *doing things*.

Mr. Taft during his administration has cut out every needless governmental expenditure. He has introduced economies wherever possible. Has added to the country's income.

Under his administration the *shortage* of nearly fifty-nine million dollars in the U. S. Treasury at the end of Roosevelt's administration was changed to a *surplus* of over forty-seven million dollars in 1911.

Taft's record as a *Man* and as an Executive is clean.

It stands for sincerity and justice—betterment of conditions for every one.

It stands for Progress.

—Without regard to popular applause.

* * *

The Third Term Candidate has been touring the country preaching the gospel of a "change."

He has attacked Mr. Taft from every angle.

His pet charge—the shot that he fires again and again—is that Mr. Taft is "boss-ridden"—that he is clay in the hands of others.

From what Mr. Taft's record proves him to be, this is the most foolish of charges.

No Sir, Mr. Taft is certainly *not* "boss-ridden," nor driven by any interest but the people's interests.

There never was a president who stuck straighter and truer to his own ideas and principles.

There never was a president who more completely and positively refused to be influenced against his own convictions.

And nobody knows this better than Mr. Roosevelt.

For if Mr. Taft had been weak-spined, docile,—a puppet in Roosevelt's hands,—*there would never have been a new party*.

* * *

President Taft does not "play politics."

His political advisers, who have urged him to do this thing and that for policy's sake, have found him not to be moved the fraction of an inch.

That he would "rather be right than President" is not a mere saying with him. He lives up to it in every action every day of his life.

Like Lincoln, he does the thing without fear, on his own decision,—*"as is given him the power to see the right."*

* * *

President Taft knew when he asked for a Tariff Board that he would injure his political chances. But that didn't stop him.

It didn't prevent him from lifting the Tariff investigation clear of politics, and appointing a commission of competent men of all political creeds to get at the heart of the

actual net costs of production and manufacture, at home and abroad.

Mr. Taft fought for this Board almost single handed, and against his political friends,—against Congress. But he won.

He was the first President to lay his hand upon real Tariff needs.

The first President to show the nerve to go into the Tariff in an absolutely scientific way.

For example, his Tariff Board has given the government the first thorough and complete report on wool and cotton that was ever secured.

Such a body must be maintained. For without it there cannot be a just and safe revision that will consider equally and fairly the interests of everyone.

* * *

President Taft proved himself not a politician when he made a working weapon of the Sherman Law, which his predecessor had used for oratory and effect, but not for action—

When he brought to time The American Tobacco Company, The American Sugar Refining Company, the U. S. Steel Corporation, The Standard Oil Company, and many other corporations that were in violation of the "Anti-Trust" Law.

Mr. Taft secured forty-five indictments during his first three years in office, as opposed to a total of thirty-three indictments secured during the administrations of Harrison, Cleveland, McKinley, and Roosevelt—or all the indictments secured since the Sherman Law went into effect.

President Taft did not *talk* on the Monopoly Question—he *acted* on it.

And the result is, that independent manufacturers in all of these different lines today, have a fairer show than they ever had before.

He protected the Wool Industry in America, by his veto—in the face of loud popular objection—of the Democratic Wool Bill.

Under his administration agricultural study and development increased every year, till last year the farmers had the benefit of the greatest amount ever spent by the government on agricultural work—Sixteen Million Dollars.

But, note please, this year the "farmer-loving" (?) Democrats, represented by a Democratic House, *cut down* the agricultural appropriation, instead of giving it a well warranted increase.

That's a sample of the vaunted Democratic "friendship for the farmer."

* * *

Mr. Taft saw the weakness in the present Patent laws—the opportunities they give for monopoly in manufacturing. He recommended laws that would tend to control special patent privileges.

* * *

Yet Mr. Taft had always supported legitimate business—large or small.

His wise and just Tariff policy—his protective Americanism,—has given a confidence to National industries they have never felt before.

Mills, mines, and factories, are running full time; there are no financial troubles. The farmer's market—the home market—is right at his door—ready to consume practically his entire production. And his products bring a higher value than ever before in the history of the country.

* * *

These things all prove the standard of the *man*.

They prove his sterling personal worth, his keen judicial sense, his broad-gauge policies, his business understanding.

And they certainly prove that the country is safe with Mr. Taft at its head—

—And they prove that there is an even better and bigger Prosperity ahead, under the policies of this quiet, firm and forceful man, who knows his mind, and is not to be turned from his own wise decisions.

REPUBLICAN NATIONAL COMMITTEE
CHARLES D. HILLES, Chairman
JAMES B. REYNOLDS, Secretary

Woman and Her Needs

At Home and Elsewhere.

HARVEST HOME FESTIVAL and FROLICS

BY MARY MASON WRIGHT.

AFTER the fruits of the earth have been garnered, and all are rejoicing in nature's bounteous gifts, it is an excellent time for the country hostess to entertain friends and neighbors. These harvest-home festivals and parties should be informal affairs. All imitations are bad, so the country hostess should be original, and not strive to copy the formal receptions, luncheons and dinners given by the city hostess, which are usually expensive, and take several servants to carry through successfully. Harvest home festivals, corn and pumpkin carnivals, or Jack-o-lantern parties are all delightful ways in which to entertain one's friends whether from the farm or the city.

Nature during the autumn months has provided lavishly in way of material for decoration of house, porch or barn. Nothing can make more appropriate or effective decorations than the gay autumn leaves, the pretty grasses and golden grains, late vines and berries, corn husks with their red and yellow ears, branches of oak with acorns, the decorative varieties of vegetables and fruits, milkweed pods, cat-tails, and the golden rod, wild-asters and other late flowers that may be found by many country waysides. There are great artistic possibilities in these common things for the bright hostess. If the festival is to be held on Thanksgiving day select the best material, and that which is richest in color, and lay aside for your scheme of decoration. Vines with their bright berries may be gathered in October and suspended in the cellar where they will keep nice until used; autumn leaves can be preserved for the occasion by running them over with an iron that has first been passed over paraffin wax. In using fruit for decoration choose the brightest and most perfect red and yellow apples, russet pears, and purple, red and white grapes. Polish the fruit with soft flannel until they shine. Vegetables should be thoroughly cleaned, and also polished.

A great, roomy barn is just the place for a harvest-home festival that is held in September or October, or before the need of a fire is felt. The first step in the preparation of a barn party is to make the barn as spotlessly clean as possible; then decorate lavishly with bunting, flags, branches of autumn leaves, vines, stalks of corn, sheaves of grain, glowing pumpkins and other vegetables, fruits of red and yellow corn, and such like. Be sure everything unsightly is well covered. A continuous divan can be made around the walls by using baled hay or straw, and covering it with rugs and cushions. If the barn is roomy and you wish to divide it into two departments—one for the games, and one from which to serve the refreshments—it can be readily done by making portieres of autumn leaves, sewing yellow or brown leaves on a red muslin or cambric foundation. Or a temporary framework can be made of lath for the partition, and covered with autumn leaves or with vines, grape vines with clusters of the purple fruit hanging on them, or the bitter-sweet vine with its bright berries make a nice covering. Even cornstalks can be arranged to make an excellent partition. Jack-o-lanterns and carriage lamps, or ordinary lanterns decorated to suit the fancy, should be used for illumination. Too much light will detract from the scene, so the light should be subdued. A red light can be obtained by pasting red paper over the openings in the Jack-o-lanterns.

At a harvest-home festival there should be a harvest queen to preside over the games, and crown the victors. All sorts of games, old and new, can be played. If liked the guests can be asked to come in costume to represent certain vegetables or fruits. A prize or two could be awarded for the best costume, or the best representation; or the guests can be asked to come dressed in red and yellow, the autumn colors. The skirts of the women can be made of turkey red calico or cambric, and the blouses out of yellow calico or cambric; while the men

can be dressed in khaki trousers, or else khaki leggings over their trousers, white blouse shirts with red neckties, and red caps.

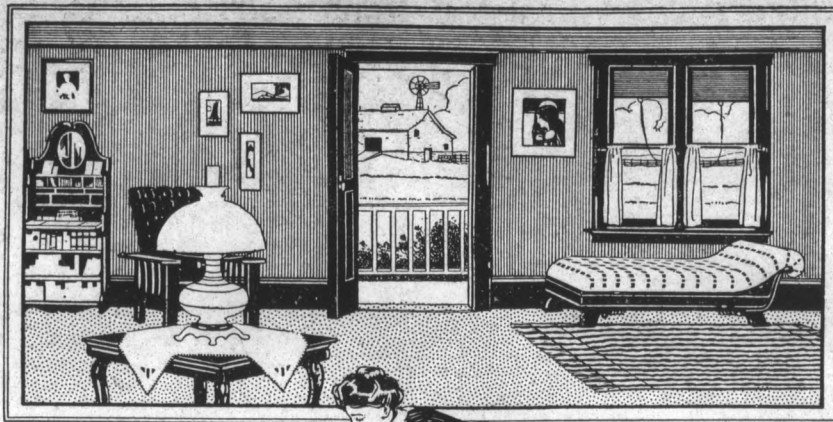
Rake, corn and pumpkin drills are all appropriate for such a festival. Harvest-home songs can be sung, and some will not consider the entertainment complete without instrumental music and dancing. The refreshments for such an occasion should be of the homely, substantial sort, such as sandwiches of various kinds, or else buttered rolls with cold meats, doughnuts, nutcakes, gingerbread, tarts, fruits, lemonade, sweet cider and buttermilk. The refreshments can be served in buffet style if liked. Decorate the table by nailing lath to the four legs which should stand about four feet above the top. On top of these wire Jack-o-lanterns. Place in the center of the table a bowl filled with golden-rod or wild asters. Have pumpkin shells and wooden trenchers piled high with sandwiches, cakes, fruits, and such like; also a stack of wooden plates, or paper ones, and plenty of Japanese napkins, and let the guests help themselves. If preferred the guests can be seated and served by waiters. If tables are used it is best to improvise long narrow tables out of pine boards and barrels arranged along the sides of the barn.

A pumpkin frolic or Jack-o-lantern party can be made a very jolly affair. A bolt or two of green and yellow cheesecloth or bunting will be needed for decoration, festoon it about the veranda, parlor and hall, and suspend and place Jack-o-lanterns wherever they will prove most effective. A row of pumpkin jars should be filled with golden-rod or wild asters and arranged along the edge of the veranda. Pumpkin jars or vases filled with autumn flowers should be placed here and there in hall and rooms. In each corner of the room place a corn shock, and pile pumpkins of various sizes around the base of them. You can have at this party "Old Lady Bountiful and Her Pumpkin Plentiful." The "Pumpkin Plentiful" is made by selecting a huge pumpkin, cutting off the top, and hollowing out to a thin shell. Place in it small souvenirs of various kinds wrapped up in pumpkin colored crepe paper tied with green ribbons. "Old Lady Bountiful" can be dressed in a yellow and green costume, a mask on the face and a sunbonnet on the head, and preside over the "Pumpkin Plentiful." Each guest is asked to select a ribbon and pull, then there is much merriment while the packages are being opened and the contents revealed.

The old game of "Button, Button, Who's Got the Button?" can be changed for the occasion to "Pumpkin Seed, Pumpkin Seed, Who's Got the Pumpkin Seed." Guessing contests such as, guessing the weight of a large pumpkin, or the number of seeds it contains are always popular. If liked, part of the evening can be spent in carving Jack-o-lanterns. To make this more interesting each one can be asked to carve out a particular face, or to have the Jack-o-lanterns to represent certain characters. After all have finished arrange them in a row, and let the company vote on which is the best representation.

A table spread with white, and decorated with yellow and green may be placed either in the house or on the porch. The centerpiece for the table should be a large pumpkin bowl filled with fruits or vegetables, and surrounded by parsley. If liked, the supper can be served in pumpkin dishes lined with paraffin paper, or if you wish something more informal and jolly the refreshments for two can be placed in hollowed out pumpkins, with lids put back on. Burn in the top the initials of a girl and boy, then let the partners find the pumpkins decorated with their initials. Have at each plate a little Jack-o-lantern made out of an orange, if a table is used. The ice cream can be served in small pumpkin shells lined with paraffin paper.

A corn party is an appropriate form of entertainment for the autumn months, and is easily arranged for. Decorate the



Nothing will brighten up your floors more attractively than Sherwin-Williams Inside Floor Paint

It is easy to apply, for it comes ready-mixed in liquid form, and it is made in a wide range of handsome, serviceable colors. No finish is better for kitchen, bedroom or hall floors, where a painted surface is desired. It is a paint that dries hard over night, and possesses remarkable wearing qualities.

Our new Portfolio of Plans for Home Decoration



will give you some valuable suggestions about the decoration of your home, both inside and out. It will be found just as interesting by the housewife who wants to brighten up a chair as by the farmer himself with the problem of house painting before him. You will be surprised at some of the effects made possible by the many Sherwin-Williams Finishes—and all at a low cost. We will be glad to send the portfolio free upon request.

SHERWIN-WILLIAMS PAINTS & VARNISHES

Best dealers everywhere. Address all inquiries to The Sherwin-Williams Co., 669 Canal Rd., Cleveland, O.

Wheel Grease AND Grime

Quickly Taken off with —



After greasing the farm wagons, a little Old Dutch Cleanser will start that blackened grease and grime from your hands. It works just as well on any kind of stains and farm work discolorations. Moisten hands, sprinkle with Old Dutch Cleanser, and wash in clean water. Saves twice the effort and time.

Many other uses and full directions on large sifter can—10c.



Why Not Have The Best Light?

STEEL MANTLE BURNERS. Odorless, Smokeless. Make the home cheerful and bright. Three times as much light as an ordinary burner. Everyone guaranteed. Just what you need! If your dealer doesn't keep them send his name and address with your name and address and we will mail you as many as you wish at 25c each.

AGENTS WANTED EVERYWHERE. THE STEEL MANTLE LIGHT CO. 344 Huron Street Toledo, Ohio.

WANTED—Immediately, men and women for Government Positions. Full examinations everywhere. Prepare now. Trial examination Free. Write Ozment, 17 R. St. Louis.

FOR BATHING AND FRESHENING THE EYES DR. ISAAC THOMPSON'S EYE WATER IS indispensable. To weak and inflamed eyes and granulated lids. It gives almost instant relief. 25c SOLD EVERYWHERE. BOOKLET FREE. JOHN L. THOMPSON, SONS & CO., 161-5 River Street, Troy, N. Y.

Mention the Michigan Farmer when writing to advertisers.

rooms with a dado of cornstalks with the ears left on and the husks turned back. Have pumpkin jars filled with tips of cornstalks and with cat-tails. Huge ears of red and yellow corn make attractive decorations, and can be suspended here and there about the rooms, and from the plate rail in the dining-room. Maize-colored cheesecloth, draped here and there and caught up with bunches of golden-rod, or with ropes of corn adds to the artistic effect. Corn kernels can be dyed any color desired by soaking in dye water for several days and then may be strung to make pretty portieres.

On the table use napkins and doilies made out of corn husks. There is a beautiful blending of colors in the inner husks, and pretty baskets, cases, and such like may be woven out of them. A woven corn husk basket over a wire framework, or a pasteboard foundation can be filled with yellow apples, pears, bananas and oranges, and makes a delightful centerpiece for the table. Corn husks can be colored any color desired, and we have seen flags made entirely out of corn husks.

At one corn party a corn drill was given by the girls and boys. The girls were dressed in beautiful corn husk costumes over a foundation of cheesecloth, with strings of red and yellow corn around their necks and shoulders; while the boys carried a cornstalk in one hand and a yellow or red ear of corn in the other. A short program in which "corn is king" can be carried out, with plenty of music between. Guessing contests will add to the interest, and there can be a hunt for red ears of corn hidden here and there about the premises.

Some of the things that are appropriate to serve at such a party or festival are: Corn oysters, corn popovers, corn fritters, hominy croquettes, scalloped corn, corn muffins, Johnny cake, corn meal mush and maple syrup, popcorn and milk, popcorn balls, cornstarch cake, and cornstarch ice cream served in corn husk cases.

HUMAN WELFARE QUERIES.

Household Editor:—I have been very much interested in the Michigan Farmer. I find it a great help in regard to poultry farming and also household recipes. Would you try to print a recipe for sweet Gherkin pickles, the ones the packers put up?—M. E. S., Middleton.

I am indebted to Fannie Merritt Farmer, the well-known Boston Cooking School lecturer and writer, for the following recipe for gherkins. I have used it many times with the best success. Wipe 400 small cucumbers and soak in a brine made of one cup of salt to two quarts of boiling water for 24 hours. Drain, wipe and soak six hours in one gallon of boiling water and add one tablespoonful of alum. Drain and cook the cucumbers in the following mixture: Two quarts of vinegar, four red peppers chopped, two tablespoonfuls of mixed spices, two tablespoonfuls whole cloves, two four-inch sticks of cinnamon broken in pieces, first boiling the mixture eight minutes. Put the pickles in a crock and strain the vinegar over them. These are to be made with very small cucumbers, not more than two inches long. Do not let the cucumbers boil in the spiced vinegar, just cook up and dip out.

Subscriber:—To make dill pickles. Lay in a crock a layer of medium-sized cucumbers, then a layer of dill leaves and so on until the crock is filled. Pour over all a brine as for ordinary pickles and set in the cellar. When ready to use take out the cucumbers, rinse in cold water and finish as you do common pickles.—Mrs. M.

SHORT CUTS TO HOUSEKEEPING.

By putting a teaspoonful of salt in a quart of apple sauce it will take less sugar and give an extra good taste to the sauce.—Mrs. T. S. C.

Any woman can make for herself a dustless mop almost, if not equal, to any purchased at the stores, by cutting old stockings or underwear into narrow strips, soaking them for a few minutes in a half pint of kerosene oil into which has been mixed three tablespoons of raw linseed oil, and hanging them out in the air to dry. After being aired fit them into a mop handle and use, shaking off the accumulated dust when necessary. Being so cheap, when they become too soiled for further use, one has no guilty qualms at throwing one aside, and making another. A dust cloth treated in the same manner is also very handy.—P. W. McC.

Without hearts there is no home.—Byron.

Going to Build?



NO one intending to build, remodel or make alterations this fall or winter can afford to be without the two big complete books we send out free of cost—our new Catalog of Millwork and Building Material—and our Handsome Plan Book. These are money-saving Books—money-making books! 3000 superb illustrations and 8000 building bargains never before equalled. Everything we sell is brand new, crisp and clean. Not a stick of wreckage or second hand stuff. We ship direct to you—sell you at actual wholesale prices. Thus we save you from 33 1/3% to 50% on every shipment we make. Don't think of paying the steep prices your local dealer asks. Deal direct with us—and pocket that big difference in dollars and cents! We have everything you will need—lumber, flooring, doors, windows, mouldings, porchwork, building paper, hardware, tinware, roofing, paint, metal shingles, etc. Our Free Plan Book shows splendid views and floor plans of 50 beautiful modern houses and barns, prices from \$360.00 to \$6000.00. It shows you how to actually save about half what you expected to pay. Expensive plans, working drawings—specifications and list of materials complete FREE! Learn how to secure them. Just fill in coupon now!

H. H. Munger
President

TWO BIG FREE BOOKS
Write Today, NOW!
PLAN BOOK OF HOMES FOR YOU
MILLWORK CATALOG 8000 PRICE BARGAINS



\$880
We will furnish complete all lumber, millwork, hardware, spouting, paint—everything except masonry and labor to build this 8-room house, and include plans free. Design A 101. Surely this is a most tempting price for such a cozy home.



\$971
We will furnish complete all lumber, millwork, hardware, spouting, paint—everything except masonry and labor to build this 8-room house, and include plans free. Design A 135.



\$333
We will furnish complete all lumber, millwork, hardware, spouting, paint—everything except masonry and labor to build this barn, and include plans free. Design A 145. There's a big saving here for you!

Storm Sash—Storm Doors

Forming double doors and windows keep warm air in—keep cold air out. Home comforts save their cost in coal prices. Our Big Free Catalog shows other sizes and styles. Don't suffer with cold this winter—Get our storm doors and windows—NOW!

2 Light Storm Sash
22 x 28, Glazed, \$0.96
22 x 30, Glazed, 1.05
24 x 28, Glazed, 1.05
24 x 30, Glazed, 1.11
24 x 32, Glazed, 1.20

4 Light Storm Sash
12 x 26, Glazed, \$0.98
12 x 28, Glazed, 1.04
12 x 30, Glazed, 1.14
For Ventilator add 10c Net

Storm Sash fits in Frames of Windows of same size glass.
Our Catalogue Shows 150 Additional Sizes and Prices.

Storm Doors

2 ft. 8 in. x 6 ft. 8 in., glazed, \$1.95.
2 ft. 8 in. x 6 ft. 8 in., panel, \$1.44.
Our catalogue shows other sizes and prices.
House windows with glass, 58c up. White Pine.

Window and Door Frames

\$1.10 and Up
Frames for Windows

22 x 28, 2 light, \$1.33
22 x 30, 2 light, \$1.38
24 x 28, 2 light, \$1.37
24 x 30, 2 light, \$1.40
24 x 32, 2 light, \$1.48

Drip cap frame, 1 1/8 casing, 2 x 8 sill, clear lumber, complete knock down, easily put-up. Pileys set in 15c extra.

Door frame, 2 ft. 8 in. x 6 ft. 8 in. and under, \$1.70.
Door frame, 3 ft. x 7 ft. and under, \$1.80.
Catalogue shows all sizes and prices.

LOOK AT THESE BARGAINS

Selected at Random from Our New Catalog

Wearwell Paint
Perfect guaranteed house paint—single gallon cans only
\$1.25
We have all kinds of paints at wholesale prices.

Corner Block, Two Cents
of all kinds ready for quick shipment.

Stair Glazed Windows
This is just one more of our Big Bargains for only
\$2.15

OAK FLOORING
Quarter Sawed White Oak, to cover one sq. ft.
12c
FANCY FLOORING
Quarter Sawed White Oak, to cover one sq. ft.
12c

Clear Fir Turned Porch Post 4 x 4, 8 Ft. 50c
Angle Newel \$1.60

To Get
Our Two Big FREE BOOKS Just Fill In This Coupon. We send them to you by return mail.

Name.....
Address.....

Gentlemen—Please send your FREE books listed below, to—

Chicago Millwork Supply Co.,
1420 W. 37th St.,
Chicago, Ill.

CATALOGUE—No. 58, of Building Material
PLAN BOOK—No. 68, House and Barn Plans

CHICAGO MILLWORK SUPPLY CO.
AMERICA'S GREATEST SASH AND DOOR HOUSE
1420 W. 37TH STREET, CHICAGO

You Are Going to Need New Shoes

in a few days. Your old ones may have been all right for the dry summer months, but they are past. Cold rains are coming, and you can't keep comfortable in those old leaky shoes. If they are not comfortable, how miserable life must be.

Keep Dry Shod by Wearing

Rouge Rex Shoes

Not only are Rouge Rex Shoes comfortable; they are sightly and serviceable; the most economical footwear produced, all because from the tannery to the finished product they are handled under minimum expence with the maximum of efficiency as a standard.



Get into a pair and see how they wear.
"Wolverine leather will put together."
They're solid all through, and they're made right.
Ask your dealer for them. Write us if he does not handle them.

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



"RANGER" BICYCLES

Have imported roller chains, sprockets and pedals; New Departure Coaster-Brakes and Hubs; Puncture Proof Tires; highest grade equipment and many advanced features possessed by no other wheels. Guaranteed for 5 years.
FACTORY PRICES direct to you others ask for cheap wheels. Other reliable models from \$13 up. A few good second-hand machines \$3 to \$8.
10 DAYS' FREE TRIAL We ship direct to you on approval, freight prepaid, anywhere in U. S. without a cent in advance. DO NOT BUY a bicycle or a pair of tires from anyone at any price until you get our big new catalog and special prices and a marvelous new offer. A postal brings everything. Write it now.
TIRES Coaster-Brake Rear Wheels, lamps, parts and sundries half usual prices. Rider Agents everywhere are coining money selling our bicycles, tires and sundries. Write today.
MEAD CYCLE CO. DEPT. C77 CHICAGO

DON'T PAY TWO PRICES

Save \$5.00 to \$22.00 on
Hoosier Ranges and Heaters
Why not buy the Best when you can buy them at such low unheard-of Factory prices. Our new improvements absolutely surpass anything ever produced. Save enough on a single stove to buy your winter's fuel. Thirty days free trial in your own home before you buy. Send postal today for large free catalog and prices.
Address
Hoosier Stove Co.,
180 State St., Marion, Ind.

The New York World 3-a-week and the Michigan Farmer Both 1 year for \$1..65

You get practically a New York daily and the best farm paper at an extremely low rate. Send all orders to
THE MICHIGAN FARMER,
Detroit, Mich.

Please mention the Michigan Farmer when you are writing to advertisers and you will do us a favor.

From the Ends
of the Earth

To the Ends
of the Earth



The richest stores of the world are piled up on the wharves and in the receiving rooms of MONTGOMERY WARD & CO. From the South Seas, from the far East, from the fashion and industrial centers of the Old and New Worlds come the products of all the nations. By caravan and canal boat, by huge merchantmen and transcontinental trains these, the world's offerings are gathered to be valued and distributed at the lowest price it is possible to send them to you, through the cheapest possible medium.

From the ends of the earth to the ends of the earth MONTGOMERY WARD & CO.'s Catalogue carries the message of higher quality goods at low prices and of old fashioned honesty in every transaction.

And so comprehensive is this book, so big and yet so practical and simple, so rare in offerings that the most isolated purchaser can actually buy as well and wisely as he or she could were the big department stores brought right into his or her sitting room.

Millions use this Catalogue—Still more millions will want it in 1913 than ever wanted it since 1872—40 years ago—when the first customer purchased from WARD'S.

Get the 1913 Catalogue—spend only five minutes with it—glory in its splendid offerings of the world's greatest store of merchandise gathered under one roof, and you'll realize that not only is this the greatest book ever published, but the one which can be of the most practical assistance and benefit to you day in and day out in saving the dollars. Your dollars were hard to get. Why not get the most out of them? The 1913 Catalogue will show the way. Send for your copy today.

MONTGOMERY WARD & CO.

DEPT. C11

Chicago Kansas City Ft. Worth, Texas

Yours for Bigger, Better Hog Profits

As a hog raiser—your every thought is of profit—and anything that tends to increase revenue from your hogs deserves all the investigation you give it. Darling's Digester Tankage mixed with hog feed will produce at least

30 Pounds Net Gain on Every Hog

and you can be sure of this gain without spending a single penny more than you are NOW spending. Our booklet "Hog Cents" tells HOW. Write. Tell us to mail YOUR copy TODAY. Simply address:

Darling & Company,
4302 Ashland Avenue Chicago

SEND FOR
THE BOOK
THAT TELLS
HOW

HOG
CENTS

My Chatham Mill
Grain Grader and Cleaner

Loaned free for 30 days—no money down—freight prepaid—cash or credit. It grades, cleans and separates wheat, oats, corn, barley, flax, clover, timothy, etc. Takes cockle, wild oats, tame oats, smut, etc., from seed wheat; any mixture from flax. Sorts corn for drop planter. Rids clover of buckhorn. Takes out all dust, dirt, chaff and noxious weeds from timothy. Removes foul weed seed and all the damaged, shrunken, cracked or feeble kernels from any grain. Handles up to 80 bushels per hour. Gas power or hand power. Easiest running mill on earth. Over 250,000 in use in U. S. and Canada. Postal brings low-price buy-on-time proposition and latest Catalog. I will loan 500 machines, "first come, first served." Write today if you want to be one of the lucky 500. Ask for Booklet 80.

THE MANSON CAMPBELL COMPANY, Detroit, Kansas City, Minneapolis

Cash
or On Time

FARMS AND FARM LANDS FOR SALE OR EXCHANGE

Our New York Improved Farms are the best and cheapest. Send for illustrated list. B. F. McBurney & Co., 703 Fisher Bldg., Chicago, Ill.

FOR SALE by owner: 40 acres good improved land, good buildings, fine spring water, near school and market. \$3000. R. J. BROWN, R. No. 2, Scottville, Mich.

FOR SALE—by owner, 100-acre farm, on electric line between Ypsilanti and Ann Arbor. For particulars write: C. E. Holmes, Ypsilanti, R. F. D. No. 5, Mich.

Fertile Farms and unimproved lands in Delaware, diversified farming, live stock, delicious fruits and ideal homes. For information only. Address, State Board of Agriculture, Dover, Delaware.

For Sale—By Owner—120-acre farm in Oceana Co., 40 acres improved; 30 timber; balance pasture; good productive soil; near school and town. A. D. CLARK, Hesperia, R. No. 4 Michigan.

FARMS WANTED—We have direct buyers. Don't pay commissions. Write describing property, naming lowest price. We help buyers locate desirable property FREE. American Investment Association, 3 Palace Bldg., Minneapolis, Minn.

I Bring Buyers and Sellers Together. Farms, business places and all kinds of property. Bought, sold and exchanged. No matter where located if you want to buy, sell or trade, write me. Established 1881. Frank P. Cleveland, 948 Adams Express Building, Chicago, Illinois.

CENTRAL MICHIGAN. Write for list of stock and Grain Farms, also our booklet "Facts about Central Michigan", giving complete information regarding the finest farming district in Central Michigan. HOLMES REALTY CO., Lansing, Mich.

GOOD 180 ACRE FARM FOR SALE. 80 acres improved, 20 acres pasture, 80 acres timber, good soil and buildings, big orchard, 1 silo, 3 barns, large house and other outbuildings. Sold with or without crops. Come now when crops are growing. For information write Albert Dietz, R. 1, Box 28, Hawks, Mich.

WHY PAY RENT when you can buy the Best Land in Michigan at from \$7 to \$12 an acre near Saginaw and Bay City. Write for map and particulars. Clear title and easy terms. Stafford Bros., (owners) 16 Merrill Bldg., Saginaw, W. S. Michigan.

FREE Literature will be sent to anyone interested in the wonderful Sacramento Valley, the richest valley in the world. Unlimited opportunities. Thousands of acres available at right prices. The place for the man wanting a home in the finest climate on earth. Write to a public organization that gives reliable information. Sacramento Valley Development Association, Sacramento, CALIFORNIA.

320 Acres, \$2400, Easy Terms.

Good River Bottom Farm.

Here is a fine farm in the beautiful Lake country between Pentwater and Big Rapids; at this low price it is the chance of a lifetime for some one; level fields, brook-watered pasture for large herd of cows, several hundred cords wood, quantity timber, large number cedar posts and R. R. ties, easy drive to R. R. station, stores, etc.; small house, barn, hen house; owner has other business, cannot care for it; if taken now only \$2400, easy terms. Further details and traveling directions to see this and many other farms in Michigan, Wisconsin and other states, page 37, "Strout's Farm Catalogue '35," 2nd Edition, copy free. Station 101, E. A. STROUT FARM AGENCY, 407 S. Dearborn Street, Chicago, Ill.

FOR SALE THE CHANDLER LANDS

Consisting of

20,000 Acres

of cut over Hardwood Lands

Located in Presque Isle and Cheboygan Counties, Near railroad and market, finest of farming lands, prices from \$5 up, according to improvements and location.

THAD. B. PRESTON,
Trustee for Merritt Chandler, Onaway, Mich.

BIG PROFITS

No doubt about the profitable returns from Early Vegetables. Oranges, Grape Fruit, Celery and Sugar Cane in the famous Manatee County, Brooksville and Anntalaga, Hammock Area. Lands can be secured reasonably yielding several crops annually. Delightful and healthful climate. Water plentiful. Good schools and churches. Quick transportation to big markets. Write for descriptive booklets.

J. A. PRIDE, Gen. Ind. Agt.
Seaboard Air Line Railway,
Suite 333 NORFOLK, VA.

IN THE SOUTH

FOR INFORMATION AS TO LANDS IN

The Nation's Garden Spot—
THAT GREAT FRUIT and TRUCK GROWING SECTION—
along the

Atlantic Coast Line RAILROAD

in Virginia, North and South Carolina, Georgia, Alabama and Florida, write to
WILBUR McCOY, A. & I. Agt. for Florida, Jacksonville, Fla.
E. N. CLARK, A. & I. Agt. for Virginia and the Carolinas, Wilmington, N. C.

(Continued from page 236).

general horticultural display was fine, some unique exhibits being made which would be well worthy of extended description did space permit.

The agricultural division of this exhibit was equally good, showing the numerous products of Western Michigan farms to good advantage. Even the corn exhibit was creditable, notwithstanding the backward season and the early date of the fair, numerous exhibits of ripe dent corn being seen, including bushels of ears of excellent quality.

Not the least interesting section of this important division of the show was that made by the Michigan Agricultural College, where at all times a representative was on hand to serve the fair patrons in any way possible. This included exhibits from the agronomy department, including samples of grain with interesting data concerning same, samples of soil for comparison, etc. Likewise the department of botany had an interesting and educational exhibit, including live specimens of the ten worst weeds of the state, also poisonous plants, mushrooms, etc., with regard to which information was furnished to all who were interested. Simple experiments were also in progress of an interesting and educational nature, as well as an exhibit illustrating plant diseases.

The vehicle exhibit included a number of makes of automobiles and large exhibits of horse vehicles, harnesses, etc. In this building was also housed the special dairy exhibit which was good as usual. There were also a number of special exhibits which were attractively and tastefully arranged.

As usual, the Grand Rapids merchants put up an attractive exhibit in the art hall, while the second floor was devoted to educational exhibits from the schools of Western Michigan.

The entertainment features of the fair were good, including fast automobile races in which the record for the track was lowered. The midway was quietly conducted and the fair was a clean and attractive one. Altogether the management of the West Michigan State Fair are to be congratulated upon this season's event.

The Marquette County Fair, held at Marquette, Sept. 3 to 6, inclusive, was blessed by fine weather and visited by record crowds. While this county is not a farming county, so to speak, it has been demonstrated that some lines do fine here. The fruit was exceptionally fine, also a good exhibit of poultry. Some good Holsteins from the Michigan State Hospital at Newberry, and a flock of good Hampshire Down shown by S. B. Carrol, of Trout Creek, were among the best in the stock line.

The Cheboygan County Fair will be held Sept. 25-27, at Wolverine. This event is purely agricultural and horticultural and we invite all to see what can be grown in this part of our great state. We want to invite especially that class of men who are expecting to locate a home soon.—D. E. Culver, Sec.

CROP AND MARKET NOTES.

Newaygo Co., Sept. 7.—August was another wet and cold month, but September has come in very hot, with no rain up to date, and it looks as though September will be favorable for maturing the corn crop as well as beans. Lots of potatoes and beans ruined on the low grounds. Threshing is progressing with a poor yield of wheat. Oats are fairly good. A large second crop of clover just cut. Hay is high in price for so early. The cucumber crop is not as good as usual owing to the cool weather. Local prices: Wheat, old, 97c; oats, old, 40c; new, 30c; corn, shelled, 80c; rye, 60c; eggs, 20c; butter, 25c; pork, 6 1/2 @ 9 1/2 c; chickens, 10c.

Mecosta Co., Sept. 11.—September has not to date been quite so wet as July and August, yet we have had plenty of rain. Crops are growing better now than they have any time this summer. Should frost stay away until the first of next month we will have a good corn crop and fairly good potato crop. Wheat was almost a total loss owing to the wet weather which would not permit of getting it in until most of it was sprouted. Rye was also damaged, and the oats was a short crop owing to dry weather the fore part of the summer. No horses on the market here. There has been about five car loads of horses brought in here during the past year. Cows are selling for from \$20@50; feeders and fat cattle from 3@4 1/2 c; hogs up to 8 1/2 c; butter-fat, 28c.

Sanilac Co., Sept. 13.—The rain of September 1 concluded our wet weather. Since that date we have had some very hot weather. The results are the corn and bean fields are making rapid progress toward ripening. The dry weather also aided in clearing up the harvest fields, which has been such a long drawn out task. Clover fields have made a grand growth. Pasture is good. Butter has made an advance of 2c, 26c being the present price. Farmers are buying feeding cattle to fill their stables but prospects are that rough feed will be plentiful so few are willing to sell. Markets for all produce are quiet and dull.

Genesee Co., Sept. 5.—After the departure of August with its 27 days on which rain fell this county has had two weeks of fine weather. This will probably mature the corn crop as so far no frosts have visited this section. Many silos will be filled, the yield promising to be very good in spite of the gloomy outlook earlier in the season. Beans are about ready for harvesting. Wheat seeding now being done under particularly favorable conditions. Help to secure autumn crops is extremely scarce. Pastures are excellent and live stock is looking well. Potatoes promise well, digging not yet begun to any extent. Sugar beets not quite up to the average.

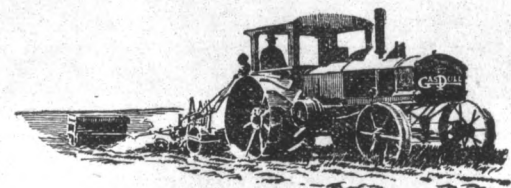
The Many-Job Tractor

Hundreds of farmers are now showing their work through with these

GAS PULL Tractors.

One of these handy machines will fit any farm, from 100 acres up. Pulls 4 to 6 plows in stubble.

It will fill your silo, grade roads, haul wagons, run a separator, baler, or husker-shredder. And its low price will surprise you.



15 Drawbar h. p. Light, Handy, Cheap.
Variable Speeds. 30 h. p. at the Belt.
Weight 11,000 lbs. Does a Week's Work in a Day.

Write today for prices and catalog.

RUMELY PRODUCTS CO., Inc.

Battle Creek.

Home Office—LaPorte, Ind.

This 3 1/2-Tons-Per-Hour Hay Press Carries Its Own Power Plant

\$10 TO \$15 A DAY NET PROFITS

Not content with merely building the fastest-baling Hay Presses on earth, we have added gas-power equipment by putting a high-class Gas Engine right on the same truck with the Press. This gives cheap power in abundant quantities. You can bale up to 2 1/2 to 3 1/2 tons per hour at lowest cost of operation and no time lost getting ready for business. Compact and easily moved. Don't have to set up or line up with engine. Solid steel machinery. Some owners of Sandwich Motor Presses made \$10 to \$15 a day last season, nearly double the usual profit. The big feed-opening of the Press takes double-size charge of hay. It's a self-feeder—direct from fork. Friction clutch sprocket on press. Can start or stop press instantly. Simple block dropper—lever brake. Simple, smooth and easy running, yet it bales 35 per cent more than any other press of same rated size. Nothing like it for windrow work.

Engine is hopper cooled type—requires little water. Heavy steel roller, chain drive. Chain delivers full power of engine. No belts to lose power or cause trouble. Comes completely and fully equipped. Engine can be removed for other work. No amount of money can buy a better gas engine. Can furnish outfits with 4, 5, 7 and 9 horsepower engines.

Sandwich Motor Press

Horse Power Presses

Our Steel Belt Power Press, our Two-Horse Full Circle, Self-Feed Presses and our "New Way" Horizontal Press are pacesetters in horse power presses. Wood frame or steel frame

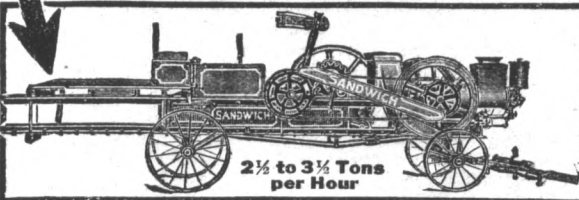
—as big or little as you wish. Our catalog pictures and describes each style. And each press is reasonably priced.

Postal Brings Booklet

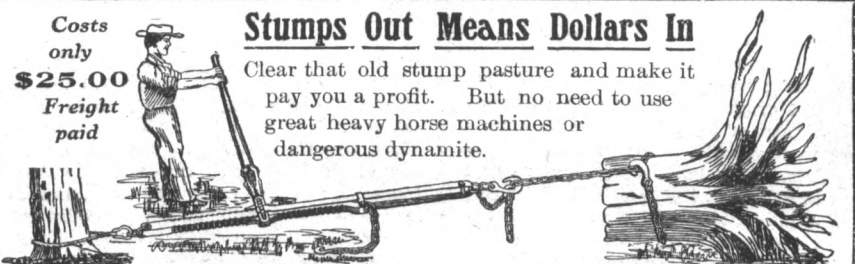
Send your name and address on postal today and our latest Book, "Tons Tell," will be put in your hands by next mail. This Book not only describes our many Hay Presses, but shows the huge profits, in hay baling. Baled hay is now bringing skyscraper prices. Most everybody wants theirs baled. No trouble to get plenty of business and the profits are large and well, get the book—it's free.

Branches: Box 231 Kansas City, Mo.
Box 201 Council Bluffs, Ia.

Sandwich Mfg. Co.,
201 Main St., Sandwich, Ill.



2 1/2 to 3 1/2 Tons per Hour



The One Man Stump Puller is built on the scientific principle of compound leverage. A five-pound pull on the lever means 600 pounds on the stump. One man alone or with a boy can clear an average acre a day, increasing the value of the land. One man alone can carry, set up and operate it. Has a hundred uses around the farm—pays for itself in a week. Guaranteed for a year—send \$25.00 now or send postal for descriptive book and proof. Live Agents Wanted.

THE ONE MAN STUMP PULLER CO., 413 Lud St., Escanaba, Mich.

WANTED

Agents to represent The Michigan Farmer. You can make good pay for your spare time this fall and winter by taking subscriptions for The Michigan Farmer. We make a special trial offer with large commission to allow you to introduce the paper to those not taking it. Then later you can make another larger profit by renewing these same trial subscribers. Send at once for our liberal terms.

THE MICHIGAN FARMER, Detroit, Mich.

THE DAIRY

CONDUCTED BY COLON C. LILLIE.

ALFALFA OR CLOVER FOR SILAGE.

I shall be short on corn for ensilage this year on account of poor seed, and I should like to know if the third cutting of alfalfa and the second cutting of June clover would be all right to mix in with the corn fodder?

Kent Co.

P. M. D.

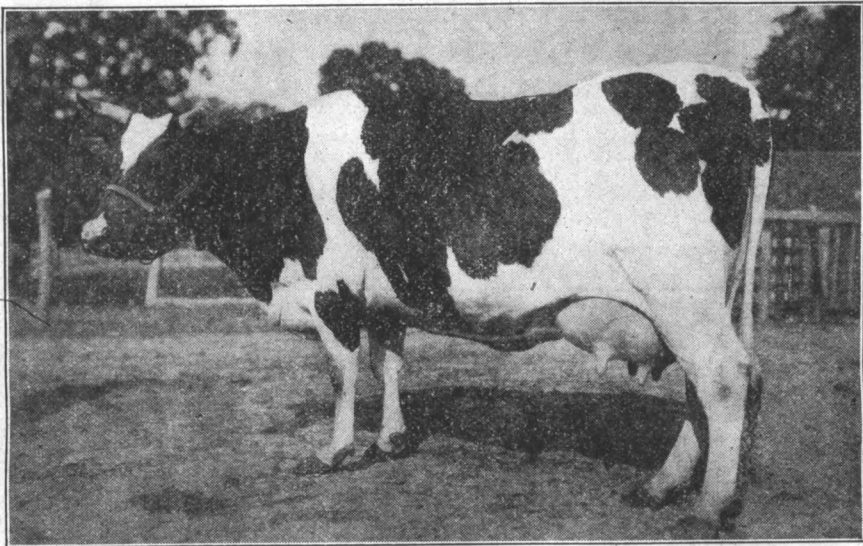
Both alfalfa and clover can be successfully made into good silage by cutting them when they are green and placing them in the silo. It is better to run them through a cutter box and chop them up fine so that they will settle down close together and exclude the air. They can be put in, however, with a fork and by taking a great deal of pains to tramp them you can make fairly good ensilage. However, if the weather was at all favorable I would prefer to make the second crop of both the red clover and of alfalfa into hay and then put what corn I had into the silo. I believe you would get fully as much feeding value out of the alfalfa and the clover if it was made into hay as you would the other way, and it would handle much easier. Of course, if the weather was bad and it was impossible to cure it into hay then put it into the silo. If you haven't got corn enough to fill the silo, why you can feed what you have, feed a less amount

as you possibly can cut it and put it into the silo and you will never know the difference in the feeding value of the silage.

Cabbage and cabbage leaves would make very good silage. I think they ought to be cut up or you would not get them packed close enough to exclude the air and probably a large part of them would spoil. Of course, if you had any considerable depth in the silo it would only spoil on top because they would heat up and settle down and exclude the air, but it would be much better to cut them up. I think you could run cabbage heads through the ensilage cutter, and this would chop them up so that they would be fine enough to settle down and make good ensilage. This would be genuine sauer kraut for the cows. Now a crop like this one can save by putting into the silo and he can't save it in any other way, but oats and peas you can save in another way, and have already saved them, and I would not think of putting them into the silo. The corn crop is the best crop for silage. It is a crop hard to cure late in the fall, especially if the weather is bad. By putting it into the silo you get it out of the way of the inclement weather and save it with the least possible loss.

FEEDING THE DAIRY CALVES.

In growing one's own dairy cows a very important part of the program is to give the calves the right amount and



The Wisconsin Station has found that as a rule the Larger Cows within a Breed Yield the Greater Net Returns.

each day and supplement with the clover hay and alfalfa hay. You don't add to the food value of a plant by putting it into the silo.

OATS AND PEAS, ALSO CABBAGE, FOR SILAGE.

As I am just about to erect a silo and this will be my first experience in filling one, I thought I would write to you for a little advice as my corn is rather late and I do not think it will mature. If I understand it right, the ensilage will not be so good when the corn is too green. I am just cutting some oats and peas mixed, and as the silo is not ready I am making hay of it. Would you advise me to mix this with the corn when I fill it? I am going to have lots of loose cabbage heads, and leaves, will it be all right to put them on top of corn in silo? If so, will it have to be run through ensilage cutter or not?

Alger Co.

D. B.

It wouldn't do to put the oats and peas, after they have been dry cured, into the silo and mix with the corn. It would make the mass so dry that it would not keep well. Of course, if you took particular pains to wet this it would probably keep but after you have cured the oats and peas for hay what is the use then of putting them into the silo and curing them over again into another form of food. You want some dry feed to feed with the corn silage, so keep the oats and peas for hay. You can put oats and peas, when you cut them green, into a silo and make pretty good ensilage out of them, but it don't keep as well then as corn because the stems are hollow and they don't settle down and pack close enough to exclude all of the air. I don't think you will have any trouble in keeping your corn. It will probably get mature enough so that it will make good silage. I would not cut it until after the ears have glazed and some of them have begun to dent unless it was touched by frost. In fact, I would leave it and run the risk of getting it nipped by the frost. Be already to cut the corn and then leave it until the frost comes. Just as soon after the frost

quality of feed. Habits of life are early formed and these may pertain as well to mastication and digestion as to conduct. By giving the calves food that will encourage a large digestive capacity one is more certain to get cows with this desirable dairy quality. Hence the importance of looking after the feeding of the calves.

When the calves are a few months old particular attention should be given to their roughage feed. If they do not have a sufficient amount of grass or good nitrogenous hay, of which they are likely to take liberal quantities, the calves will not grow a large paunch at a time when it can most easily be developed. It is better to supply them with the necessary nutrients by feeding more of the bulky feeds and less grain, since the former tends to produce this vigorous digestive system.

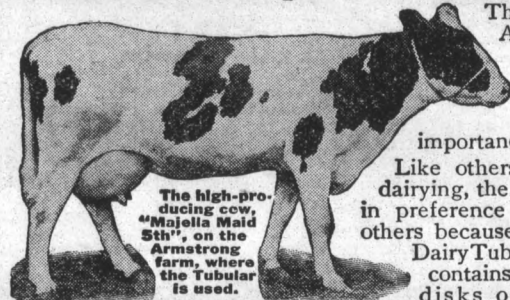
Milk ought to be continued at least for six months. After the first two weeks skim-milk may be substituted gradually for the whole milk. When the calf is four weeks old skim-milk may be fed entirely and continued until the animal is six months or older. Grain is necessary to supplement the skim-milk. As soon as the skim-milk is started the calf should be tempted with a little grain. Oil meal is a good grain for this purpose; bran, ground oats and even ground corn are often used with success. Gradually increase the grain so that when the calf is receiving a full ration of skim-milk it will get about one-half pound of grain per day. Should one change from one grain to another the change should be gradual.

The calf will be greatly benefited by exercise. The functions of the alimentary canal cannot properly be carried on unless the muscles are called upon to do work. By giving the calves plenty of range their natures will cause them to take what exercise is necessary to keep their bodies in a healthy condition. But in giving them range, one should not fail to provide protection against storms.

Wayne Co.

A. H.

FROM DEBT TO \$20,000 Uses SHARPLES Tubular Cream Separator Exclusively



The high-producing cow, "Majella Maid 5th", on the Armstrong farm, where the Tubular is used.

other contraptions, has twice the skimming force of other separators, skims faster and twice as clean, and pays a profit no other can pay. Mr. Armstrong says:

"Austinburg, O., May 29, 1912.—The Sharples Tubular has done fine work all the time. J. F. Armstrong."

Now you understand why owners of other separators are discarding their machines by carloads for Tubulars. Follow the example of the Armstrongs and the many others who have succeeded. Buy a Tubular for the sake of double skimming force, easy cleaning and all the profits.



THE SHARPLES SEPARATOR CO.
WEST CHESTER, PA. Branches: Chicago, Ill.
San Francisco, Cal.; Portland, Ore.; Dallas, Tex.
Toronto, Can.; Winnipeg, Can. Agencies Everywhere

Get quick
reply by
asking for
Catalog 152

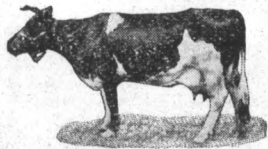
That, and more, is what J. F. Armstrong & Sons, of Austinburg, Ohio, have done. Like other shrewd farmers, they have succeeded because they know profit is of far greater importance than first cost.

Like others making most money from dairying, the Armstrongs chose the Tubular in preference to all others because the Dairy Tubular contains no disks or



The Only Piece in Dairy Tubular Bowls

MAPLECREST HOLSTEINS Beat the WORLD'S RECORDS The Three Most Wonderful Cows the World Has Ever Produced! ALL DAUGHTERS OF ONE SIRE



BANOSTINE BELLE DEKOL
Champion butter cow of the world.
Semi-Official Yearly Record:
Lbs. of milk 27,404.4
Lbs. of butter fat 1,058.34
Lbs. of butter, 80 percent fat 1,322.925
Average percent fat for year 3.86



HIGH-LAWN HARTOG DEKOL
Stable mate of Banostine Belle DeKol.
Semi-Official Yearly Record:
Lbs. of milk 25,592.5
Lbs. of butter fat 998.340
Lbs. of butter, 80 percent fat 1,247.925
Average percent fat for year 3.90



DAISY GRACE DEKOL
World's Champion Junior 4-year-old.
Semi-Official Yearly Record:
Lbs. of milk 21,718.3
Lbs. of butter fat 962.795
Lbs. of butter, 80 percent fat 1,203.493
Average percent fat for year 4.43

WE HAVE JUST A FEW CHOICE BULL CALVES FOR SALE

Write for free booklet and detail information.

MAPLECREST FARM

DAN DIMMICK & BRO., Props., E. CLARIDON, OHIO
Address all correspondence to Box E, Kalamazoo, Mich.



HARRIS MAKES CONTENTED COWS!

DE LAVAL CREAM SEPARATORS

The best of all
dairy investments
Saves \$10. to \$15.
per cow every year

The De Laval Separator Co.
New York Chicago San Francisco

THE LARGEST AND BEST LINE OF
WELL DRILLING
MACHINERY in America. We have been making it for over 20 years. Do not buy until you see our new Illustrated Catalogue No. 14. Send for it now. It is FREE.
Austin Manufacturing Co., Chicago

FENCE PRICES BUSTED 15c PER ROD

buys this High Grade Hog Fencing; heavier than usual kinds offered. 26 inches high, 7 bars, weighs about 6 lbs. to a rod, all heights at proportionate prices. 45 inch Poultry Fencing, 27c strongest built, per rod.

\$1.25 PER 100 GALVANIZED WIRE
Lbs. for

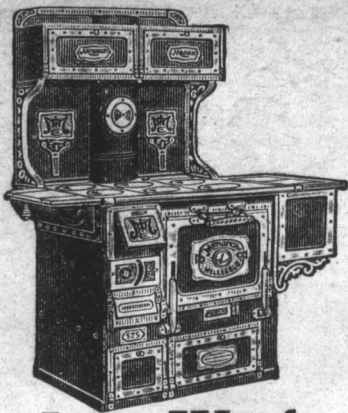
This price is for No. 6 gauge. Other sizes in proportion. This is our Galvanized Wire Shorts, put up 100 lbs. to a bundle, suitable for Fencing and general purposes.

BARBWIRE
Best and strongest; standard weight. Made of No. 12 gauge, galvanized, put up 100 lbs. to a reel, per 100 lbs. **\$1.95**

FENCE CATALOGUE FREE Quotes low prices on Fencing, Wire Gates, Lawn Fencing, Fence Posts, etc., Chicago House Wrecking Co., Dept. L-42 Chicago

When building your silo build one for good
THE IMPERISHABLE SILO
Patent Vitrified Clay Blocks
Decay-proof, storm-proof, expense-proof
Write for free catalogue today.
NATIONAL FIRE PROOFING COMPANY
Agricultural Dept. A. Pittsburgh, Pa.

WODWALBOARD SAVE ONE HALF BUILDING EXPENSE
WRITE US FOR SAMPLES, PRICES—NAME OF NEAREST DEALER
M^C HENRY—MILLHOUSE MFG. CO.
SOUTH BEND, INDIANA



Less Work
Less Fuel, Better Cooking
 Banish kitchen drudgery. Do your work in half the time with half the effort. Give your cooking skill the best opportunity to prove itself. The

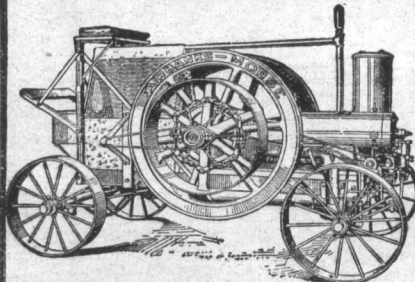
Monarch Malleable Range

is the housewife's best helper. In construction, workmanship and design, it is years ahead of all other ranges. The Monarch is made of malleable iron and steel. It has complete triple walls— asbestos and steel. The top and oven heat quickly, saving fuel. Every seam is riveted tight—no bolts or stove putty to loosen and fall out. The Duplex Draft and Hot Blast Fire Box insure even heat and full use of all the fuel. The polished top never needs blacking.

Many more Monarch advantages are fully explained in our two free books. Mail us postal now! Address

Malleable Iron Range Co.,
 721 Lake Street, Beaver Dam, Wis.

Take the Power to the Job



Fairbanks-Morse Portable Oil Engine

A Great Machine for

Threshing Pumping
 Ensilage Cutting Hay Baling
 Ginning Shredding
 Clover Hauling Corn Shelling
 Wood Sawing Feed Grinding

Kerosene, Gasoline or Low Grade Distillate

Buy one yourself or in partnership with neighbors. In many cases the engine will save its cost in a year

10 to 25 H.P. Other types, 2, 4, 5, 6 and 8 H. P. Write for prices and catalog No. AR 601

Fairbanks, Morse & Co.

Chicago Detroit

Wagon and Portable Scales, Gasoline Engines, Pumps, Water Systems, Electric Light Plants, Windmills, Feed Grinders.



SUPERIOR DUPLEX MILL

Grinds twice as much as any other mill of same size with much less power. The double grinding rings with saw tooth grooves grind corn on cobs or in shucks, shell corn, kafir corn, sheaf oats, alfalfa, rye, oats, barley, cotton seed, coarse or fine. Force feed never chokes. Self-sharpening. Easy to operate. Extra grinding rings free with mill. Built to last a lifetime.

Complete line. Capacity 5 to 120 bu. an hour and operates on from 1 1/2 to 25 H. P. For gasoline or steam engines. Fully guaranteed.

Write today for Free Illustrated Catalog.

SUPERIOR MANUFACTURING & MILL CO.

20 East Street Springfield, Ohio

SCIENTIFIC SWEEP MILL

This No. 6 triple geared, double acting sweep mill has more capacity and will do better work than any other two-horse mill; it

Turns Corn TO DOLLARS

Avoid waste, and make big profits by grinding your feed with one of our mills. We make power mills also for engines of any size. Send for free catalog.

THE BAUER BROS. CO., Box 409 Springfield, Ohio

Money in Feed Grinding

Grind feed for your neighbors and earn the cost, with good profit added, of one of these durable, speedy

Star Grinders Sweep or Belt

Feed your own stock on ground feed. It keeps them healthy and fat. Send today for booklet and special low price list. Address

The Star Manufacturing Co.

11 Depot St., New Lexington, O.

WANTED A man or woman to earn \$6 to \$15 per day. All or spare time, nothing to sell. Send stamp for particulars. M. S. I. A., Indianapolis, Ind.

POULTRY

MAKING CRATES FOR SHIPMENT OF EGGS.

An attractive shipping crate has much to do with fixing the price of any product. The old saw, "appearances are deceptive," seldom applies to attractive packages of farm products. The person who will take the trouble to prepare a neat package may be depended upon to be equally careful and painstaking about the quality of the goods which he puts into it. Buyers know this instinctively. A good product is worthy of an attractive package. It is unfair to good hens that lay good eggs to put their product into a rickety shipping box. The box alone will be sufficient to class them with the ordinary, every-day store eggs, thus reducing their selling price; therefore, a suitable package should always be supplied. If a shipping box that costs only a few cents in money and a few hours in time will increase the price of eggs even a fraction of a cent per dozen, and if such a crate holds several dozen, not many shipments will have to be made in order to pay for the package. Then the satisfaction of knowing that a thing is done right is worth much.

Everyone who has had much experience in shipping poultry or eggs to market, or for hatching, and who has used attractive boxes and ecops, neatly tagged and stenciled with the name of the farm or the shipper and his address, can give numerous instances of orders received from people who have been attracted by the package at the express office or the railroad station. A neat package also insures more careful handling because it indicates fragile contents.

A well-stenciled crate is a guarantee of good quality within. It is the earmark of honesty. The man who has poor products to sell keeps his name out of sight. Every product which is worthy of a reputation should be suitably and attractively stenciled. Attractiveness is not the only value added by the use of a stencil. A conspicuous stencil-mark will save the loss of many crates in shipment, because they are less apt to be overlooked and carried by the station or put off at the wrong place.

When and How to Make Serviceable and Attractive Crates.

A good time to make the crates is on a rainy day. But, like most "rainy-day jobs," it is likely to be put off, and therefore may never get done. A serviceable and attractive crate that has withstood the test of time for shipping eggs to a wholesale and private trade is described below. Such crates can be made at home by any person with ordinary skill.

Common standard egg crates are purchased at the store for from five to fifteen cents each, including the paper liners. Be particular to select crates which have solid ends. The material for the sides, top and bottom should be first quality 3/4-inch Georgia pine ceiling. For the bottoms of the small crates, the sides of the purchased crates can be used, if well nailed. If a 30-dozen crate is to be made, one side of the purchased crate should be removed, and a new side made, using the Georgia pine ceiling. Then the other side is removed and renewed; then the bottom, after which the lid is made. This is held solid by cleats of the same material nailed on the upper side at each end. The lid is hinged with 3-inch strap hinges and held down by a 3-inch hasp. The hinges should be screwed into the cleats in order to give greater strength. One and one-half-inch finishing nails, should be used for the sides, 1 1/2-inch box nails for the bottom, and No. 4 wire nails or screws should be used on the cleats. Cleats should be nailed across the top and bottom on each end to fortify and to stiffen the crate. The upper cleats serve as side handles.

After the crate has been completed it should be sandpapered in order to smooth off the rough edges and the ends, and then oiled. The crates are much neater in appearance and are more easily cleaned if they are oiled and shellacked, instead of being painted. They can be made in sizes holding multiples of three dozen each, that is, 3, 6, 9, 12, 15, up to 30 dozen. Therefore, a 3-dozen case would be one filler deep, a 6-dozen case two fillers deep, and so on, all the crates holding up to 15 dozen being of the same length and depth and differing only in height.

New York.

T. A. TEFFT.

WINCHESTER

Rifle and Pistol Cartridges

It is plain to understand why Winchester cartridges, generally speaking, shoot better than other makes. It has to do with the reputation of Winchester rifles. You see, Winchester cartridges adapted to Winchester rifles are made to get the best possible results out of them. As the same equipment, organization and system are employed in making all Winchester cartridges, it naturally follows that Winchester cartridges do the best shooting in all firearms. Winchester cartridges are made for all calibers and makes of rifles, revolvers and pistols and are sold everywhere. They cost no more than inferior kinds.

ASK FOR THE RED W BRAND



When You Feed the Stock

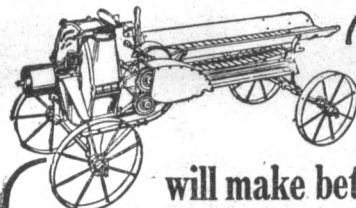
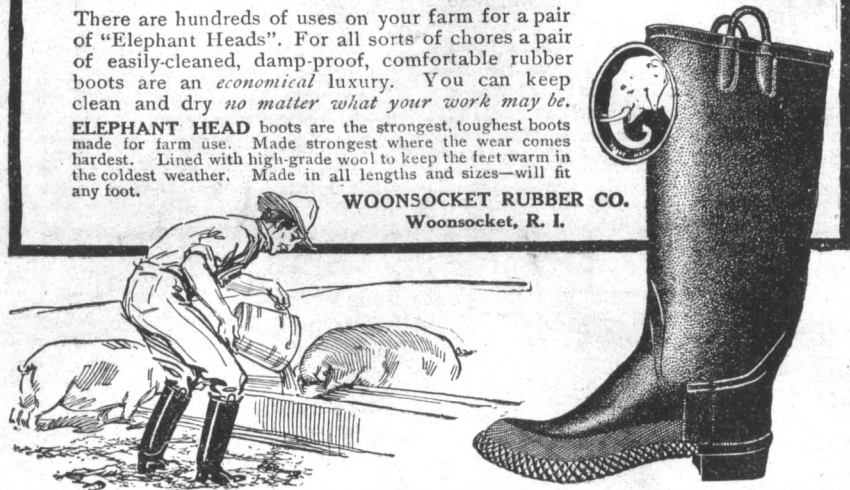
you will appreciate a pair of

WOONSOCKET ELEPHANT HEAD RUBBER BOOTS

There are hundreds of uses on your farm for a pair of "Elephant Heads". For all sorts of chores a pair of easily-cleaned, damp-proof, comfortable rubber boots are an economical luxury. You can keep clean and dry no matter what your work may be.

ELEPHANT HEAD boots are the strongest, toughest boots made for farm use. Made strongest where the wear comes hardest. Lined with high-grade wool to keep the feet warm in the coldest weather. Made in all lengths and sizes—will fit any foot.

WOONSOCKET RUBBER CO.
 Woonsocket, R. I.



FILLS YOUR SILO

Better
 Quicker
 Cheaper

The KALAMAZOO ENSILAGE CUTTER—the machine of exclusive features—will save time, labor, money for you, and

will make better ensilage—The Positive Feed, CENTER SHEAR

CUT, extra heavy construction, Steel Mountings and the powerful Blower Attachment, are a few of the many reasons why you will buy a KALAMAZOO, either now or after you have experimented with the old-fashioned machines. The KALAMAZOO is the machine with the NEW ideas. Write for our Special Money-Saving Proposition and your copy of our Illustrated Booklet, describing fully the many superior and EXCLUSIVE FEATURES of the KALAMAZOO ENSILAGE CUTTER

KALAMAZOO TANK & SILO COMPANY

KALAMAZOO, MICH., Dept. 12 MINNEAPOLIS, MINN.

BOWSER

(Sold with or without elevator)
CRUSH ear corn (with or without shucks) **GRIND** all kinds of small grain. Have Conical Shape Grinders. Different from all others.

LIGHTEST RUNNING

(Our Circular Tells Why)

Handy to Operate. 10 Sizes—

2 to 25 h.p. Capacity 6 to 200 bushels.

We Also Make Sweep Grinders.

FREE Booklet on "Values of Feeds and Manures."

D.N.P. Bowser Co., South Bend, Ind.

FEED MILLS

Eggs for Hatching from Standard Silver, Golden and W. Wyandottes, 15, \$2; 30, \$3. Browning's Wyandotte Farm, B. 30, Portland, Mich.

Barred Rock Eggs—Great Laying Strain and prize winners, 15 eggs, \$1.00; 30, \$1.75; 100, \$5. W. C. Coffman, R. 6, Benton Harbor, Mich.

WHITE Wyandottes—The most beautiful and useful of American breeds. Send for 1912 circular A. FRANKLIN SMITH, R. F. D. 9, Ann Arbor, Mich.

Prize Winning Barred Rocks, R. I. Reds, Mammoth Pekin and L. Runner ducks for sale. Eggs \$1, \$2, \$3 per set. Utility \$5 per 100. EMWOOD FARM, R. R. No. 13, Grand Rapids, Mich.

LILLIE FARMSTEAD POULTRY

B. P. Rocks, R. I. Reds, and S. O. W. Leghorn eggs for sale, 15 for \$1.25 for \$1.50; 50 for \$2.50.

COLON C. LILLIE, Coopersville, Mich.

Improve Your S. C. Reds by buying cocks or cockerels whose ancestors have high egg laying records. Sturdy, vigorous fellows \$3 to \$5.

MONTREON POULTRY FARM, Blissfield, Mich.

Eggs Buff & White Orpingtons, Buff & White Leghorns, Barred & White Rocks, R. I. Reds and Black Minorcas. Circular ready. H. H. KING, Willis, Michigan.

Crystal White Orpingtons—the great winter layers. Yearlings whose ancestors have high egg laying records. Sturdy, vigorous fellows \$3 to \$5.

WILLIS HOUGH, Pine Crest Farm, Royal Oak, Mich.

DOGS.

HOUSES FOR HUNTING Fox, Coon, Skunk and Rabbits. Send 2c stamp. W. E. LECKY, Holmesville, Ohio.

FERRETS.

6000 FERRETS FOR SALE—Price list free. Book on ferrets 5 cents. C. J. DIMICK, Rochester, Ohio.

10,000 Ferrets for Sale—Write for price list and catalog. It's free. DeKleine Bros., Jamestown, Mich. Box 41.

HORTICULTURE

CLUB-ROOT IN CABBAGE.

I have 14 acres of cabbage, some planted early on land which had been cropped for years. Those planted later are on drained muck land which had been in pasture for years. Many in both places are affected with stump rot. The earlier planted are the worst. All looked very thrifty until this came. What is the cause and what is the remedy? By answering you will confer a great favor, not only to myself but to others who also have the same trouble.

Eaton Co.

J. V.

It must be stated that the presence of the disease in this cabbage field is a surprise. Having been in pasture and other crops for several years previous it would be supposed that no live germs could be in the soil. The best informed biologists tell us that in two or three years after infection the germs will have died. But they also point out that plants allied to the cabbage, such as mustard, cauliflower, rape, turnips, etc., may also be hosts of this disease; and if the ground has grown these plants the infection may have come through them. Or the disease may have gotten into the patch by the planting of diseased plants, or the spreading upon the ground of litter from plants that were diseased.

One helpful practice of truck gardeners and cabbage growers is to starve the disease out. This is done by a rotation of crops, the rotation being so planned that cabbage or allied plants does not occupy the soil oftener than once in three years, preferably longer. Where the strictest attention is given to this phase of the work much less damage occurs. But the care should reach to the wild mustard that grows in waste places if it is to be of the greatest value.

A supplementary practice is to add lime to the soil. For some years men have known the retarding effect of lime upon the disease. Many growers have gained considerable faith in the treatment where the lime is applied in quantities ranging from two to five tons per acre. More experimentation should be done with this practice, but the evidence at hand leads to the conclusion that lime is helpful, and when used liberally in a proper rotation the results are quite certain to be satisfactory.

PRUNING PEACHES—GRAFTING PLUMS.

Can you tell me if I should cut back this year's growth of peach trees that I set out last spring, that is, 1912? They have made a growth of about two feet, some of the branches being not over 18 inches long, others possibly 30 inches. A fruit tree agent told me the other day that I should cut these back right away in order to harden up the wood. I would like to know for sure, before I do so. Also, I have on my place a hedge-row of plum trees bearing plums yellow in color, very sweet and about an inch in diameter. They appear to have been cultivated at some time now past, and it has occurred to me that I could perhaps graft them with some more desirable varieties I have, and transplant some of them. Can I use the tips that I cut from my young plum trees this fall after the leaves have fallen, as scions? They would be this season's growth. Can I expect success from root grafting them this winter? Ordinary cleft grafts and budding would seem to be rather hard in this case, since I can't get at the stocks to cultivate them and they do not make very vigorous growth.

Jackson Co.

F. D.

The general practice is to cut back the peach trees late in the winter or early in the spring. The terminal buds of the peach are more vigorous than are the lateral buds. If the terminals are permitted to grow unhampered the result is a little bushy growth on the end of long, bare limbs, due to the weak lateral buds dying out to the advantage of the terminals. By cutting back the growth from one-half to three-quarters of that made during the previous season, it is possible to have a compact top with vigorous shoots throughout. Where heading-in is done during the fall many of the shoots are apt to be partly winter-killed, thus making it necessary to prune them back again in the spring. There could be no harm resulting from pruning back these branches this fall, but you would perhaps save time by leaving the work until late winter or early spring.

One could expect a fair degree of success by handling the plum trees as is suggested by the inquirer. Stone fruits, however, are not quite as successfully grafted as are the pome fruits like the apple; but with the work carefully done, the result should not be discouraging. You should cut the scions late this fall

for use in grafting next spring. Root grafting on whole roots in the winter is practiced quite generally and in the same manner as root grafting of apples, but it does not appear to be as reliable for the plum as crown grafting. When root grafted the plants appear to start slowly.

AUTUMN GARDENING.

If partial to young onions, now is the time to set out the top onion for supplying the table with this fresh vegetable almost as soon as the melting snows reveal the location of the bed. These onions are perennial, increasing from the roots, but very much more through the clusters of "sets" which appear at this season from the ends of the leaf stems. A bed of them once started will continue to flourish for years, but the product is more tender and appetizing if renewed every fall, the small bulbs being planted or sowed in rows in the same way that the spring "sets" are started.

These top onions never mature large bulbs, but are more like the scallions, though the base of the stem, which is blanched for a considerable distance, is appetizing to anyone fond of young onions. The early ones displayed on the market are quite likely to be of this type unless grown under glass. They are slightly stronger in flavor than the tender varieties, but if soaked in salt water for a couple of hours before serving this trouble will be remedied.

We are apt to forget the weed destroying in our labor to save the fast maturing vegetables, forgetful of the fact that every weed allowed to mature seed renders the work of another year very much greater. If there are vacant spaces where the wheel hoe can be used, good. A single working with the weed cutting attachment will finish hundreds of weeds, and with very much more ease than the work could be done with the common hoe, besides saving much time.

Chickweed comes as a simple and harmless weed, and yet if allowed to have its own way it soon monopolizes the surface of the ground, creeping along where no dignified plant would strive for position, and eventually choking out everything in its path. It will continue to thrive long after the frosts have cut down all vegetables, and is the first thing to appear in spring. It matures seed quickly, and all in all, it is a decidedly bad weed. The only way to get rid of it seems to be to wage war against it at all seasons.

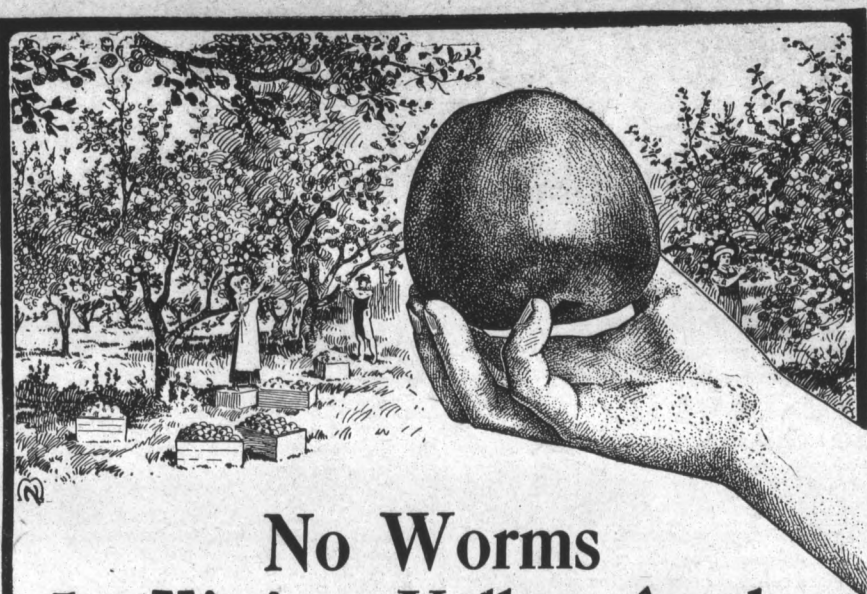
If the beans get caught in an early frost, those large enough to use as shell beans yet not mature enough to dry, may be saved by parboiling and then drying as usual. Tomatoes may be picked from the vines and ripened in the window. But a more satisfactory way is, when certain that they cannot longer exist outside, to pull the plants up by the roots and hang them in the woodshed or cellar. They will then ripen a few at a time, and one may in this way have fresh fruit for weeks after the natural season is ended. Melons may be packed away in the haymow when not fully ripe, and thus aid in the celebration of the Thanksgiving feast.

A large pailful of fertilizer from the stable should be placed over each root of rhubarb after the tops die down. This will protect it from freezing, and during the first warm days of spring it may be worked into the soil, and thus help to hurry on the tender stems which are so appetizing. Parsnips are better left in the ground, the freezing never injuring them in the least, but giving to them an added sweetness. The same may be said of salsify.

Save only the best of any vegetable for seed, and there are some varieties which it is cheaper to buy than to raise. As a rule, any seed-raising which calls for extra work on the part of the plant is at least a questionable economy. Thus the cucumber exerts more energy in maturing a single fruit than in furnishing many of pickling size, while the ripe tomato or squash does duty for seed without in the least increasing the drain upon the plant, or interfering with its food producing work. As a rule, it is cheaper to buy seed of cabbage, beet, turnip, and other biennials rather than go to the extra work of planting out the second year.

Pennsylvania. BESSIE L. PUTNAM.

The chief requirement of a cooling room for the storing of fruit upon the farm is thorough insulation. The air inside the room maintained at a low temperature and low humidity is in the right condition for preserving perishable products. Dead air spaces on all sides, including top and bottom of the room, are most economical in construction and give the highest insulating efficiency.



No Worms In Kittitas Valley Apples

Kittitas Valley, Washington is free from fruit pests. Here grow the finest apples in the world, excelling in size, color, flavor and keeping quality.

Good land can be bought at a reasonable price. After the fifth year a regular income of \$500 an acre can be counted on and there's big money in vegetables and small fruits while you're waiting.

The enterprising orchardist who gets into this wonderful country now while it is new will never regret his move. Good orchard land is plentiful—the climate is temperate and healthful—winters mild—summers cool.

A new irrigation ditch, known as the Hi Line Canal, carrying water for 75,000 acres of high-class fruit and truck gardening land, is now under construction.

The heart of Kittitas Valley is traversed by the new trans-continental line—the

Chicago, Milwaukee & St. Paul

and

Chicago, Milwaukee & Puget Sound

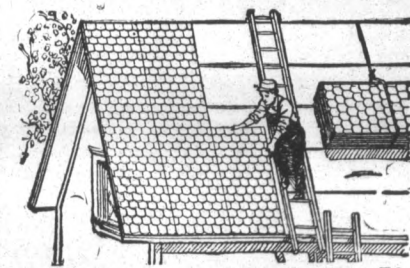
Railways

Low round trip homeseekers' tickets on sale the first and third Tuesdays of every month. Send for descriptive literature and full information.

O. E. SHANER, Immigration Agent
750 Marquette Bldg.

F. A. MILLER, General Pass'r Agent
CHICAGO

Edwards STEEL Shingles Last Longest Cost Least



Fireproof—Rotproof—Rustproof
Put 'Em On Yourself

Roof that building of yours with genuine Edwards "Reo" Steel Shingles! Can't rust, can't rot, can't catch fire, can't leak. Guaranteed against lightning by our \$10,000 Guarantee Bond. Never need repairs or paint. Outlast three wood-shingle roofs and five composition roofs. Now selling at low factory prices—all freight paid. Put them on yourself. Don't hire carpenters or mechanics.

Edwards "REO" STEEL Shingles

are Open-Hearth Steel, finest quality. Made absolutely rustproof by our world-famous "Tightcote" Process (explained in catalog). Come in large sheets, 24 inches wide, 5 to 12 feet long. Nothing to do but nail the sheets on old roof or sheathing. Edwards Patented Interlocking Device covers all nails, makes permanent water-tight joints, unaffected by heat, cold or dampness.

You'll have the handsomest, most lasting roof in existence. 100,000 buildings now roofed with "Reo" Steel Shingles. Write for our big, free Catalog 967, and Factory Prices. Send dimensions of your building; let us quote price, delivered to your railroad station. You'll be amazed at how cheaply and easily you can roof your house or barn with "Reo" Steel Shingles.

The Edwards Mfg. Co., 917-967 Lock St., Cincinnati, Ohio
Makers of Steel Shingles, V-Crimp Roofing, Imitation Brick Siding, Etc.

12 for 98¢ Worth \$1.85

FRUIT TREES

MATCHLESS GARDEN COLLECTION—1 McIntosh, 1 Ben-Hur Apple, 1 Elberta, 1 Champion Peach, 1 Montmorency, 1 English Morello, 1 Napoleon Cherry, 1 Roosevelt, 1 German Prune, 1 Orange Quince, 1 Bartlett, 1 Seckel Pear. All first-class, 2 yr., 4 to 5 ft., for \$98. Write today for FREE illus. Catalog of Guaranteed True to Name Trees. 300 acres. 23 years growing trees.

MALONEY BROS. & WELLS CO. 31 Main St., Danville, N. Y.

AGRICULTURAL LIME

The government and experiment stations advocate the use of LIME to increase the productivity of the soil. Most soils need LIME. We manufacture a LIME containing the proper analysis to be most beneficial to the soil prepared ready for use. QUALITY THE BEST. PRICES RIGHT. Send for booklet, sample and prices.

Agents Wanted.

SCIOTO LIME & STONE COMPANY
Delaware, Ohio.

Weedless Field Seeds are what we are trying harder than ever to furnish our customers. FREE Samples will show that we come pretty near doing it. In many varieties we DO IT. Home-grown Timothy, Alsike, Mammoth, Red, new crop. Also Alfalfa, Vetch, Rape, etc. Write today. If you have seed to sell, send samples.

O. M. SCOTT & SON, 46 Main St., Marysville, Ohio

POTATOES—CAR LOTS or LESS

We want them. address THE E. L. RICHMOND CO., Detroit, Michigan.

ALWAYS mention the MICHIGAN FARMER when you are writing to advertisers.

FRUIT TREES!

Plant this fall and get trees into bearing one year sooner. We have a fine stock of Peach at 40¢, Apple and cherry at 30¢, Pear and Plum at 15¢ and up. All kinds of Shade Trees, Berry Plants, etc., at lowest prices for best stock and fruits. Catalog free. Send for it. Ernst Nurseries, Box 2, Moscow, O.

BAGS

WE BUY OLD BAGS SOUND AND TORN
We Pay The Freight
IROQUOIS BAG CO.
724 Broadway, Buffalo, N. Y.
Reference Citizens Bank.

FARMERS' CLUBS

"MEMORY DAY."

Memory Day is a day set aside by the Michigan Legislature for the decoration of the graves of loved ones of our families without regard to their membership in any association or order. The date is September 30, which is just four months from the observance of Decoration Day. It is hoped that the National Congress will soon comply with the request made and thereby extend the idea by declaring the day as applied to the whole country. It is not a legal holiday and does not in any measure affect commercial or manufacturing life.

The intent of the observance of this day is to extend the sentiment connected with Decoration Day to the recognition of the claims of all the dead. It is fitting that it should be placed at the close of the summer, as it thus in no manner detracts from the interest rightfully belonging especially to the soldier dead; and since it affords a fine opportunity for the cleaning up and beautifying of the cemeteries in which dear ones rest, before the autumn frosts make totally unsightly the abundant verdure of summer, and before the winter snows shall have spread their blanket of white over the seared vegetation.

The thought of thus caring for the universal dead on Memory Day, grew out of the affectionate care of a public minded farmer of Clinton county, Michigan, who has for years devoted himself to the memory of a dear wife, who in an early day left college with him, and entered the wilderness where they made the home farm, on which he and she long resided happily, and where he now lives, waiting for their happy reunion. The little rural cemetery in which she lies buried, is, next to the pleasant farm-home made possible by her long years of devotion to it and him, the pride and care of this gray old lover. The effort which he is now making to extend the tender sentiment of care for the loved departed, is in a measure a tribute to her memory. He is hoping that he may, by the free use of means afforded by a successful farming career, so interest others as to induce them to offer commensurate tributes to the dead whom they cherish dearly in memory.

Starting from the thought of the interest of the originator of "Memory Day," this should be a fitting opportunity for starting an interest in rural communities especially, which shall result in the yearly autumnal decoration of rural cemeteries, which are in many localities sadly neglected. The sweetly cherished memory of their personality should prompt the observance of the day in many localities in which there is a good public spirit.

Do you cherish the memory of a loved one lying in a more or less neglected cemetery by the side of the road? If so, why not be the first in your community to suggest the effort at observing this "Memory Day?" Make a simple program, talk with your neighbors about it, and give them a copy of this appeal which will be sent you free of charge for the purpose, and arrange for the afternoon if no more, to be spent at the cemetery by as many of the community as can be interested. The result may not be striking at the outset, but it will be better as the thought grows on the public mind. If the enterprise is entered upon with interest, all will feel better for knowing that the resting place of the dead has received the care which the sentiment associated with death suggests—that these are not dead dead, but living dead.

Mr. John T. Daniells, the originator of "Memory Day," will be glad to receive enquiries concerning the project, and to offer such suggestions covering the matter as may seem helpful. He has had prepared by the Michigan poet, Will Carleton, a beautiful poem, entitled, "Memory Day," and a song with the same title, written by the great song writer, Eden Reeder Latta, and set to music by Professor Charles H. Gabriel. These will be furnished free of cost to any who are interested, and who would use them in simple exercises connected with the observance of "Memory Day." Address John T. Daniells, R. F. D. No. 39, St. Johns, Mich. This and all material to be used in connection with "Memory Day," is for free distribution, is not for sale, and there is no financial scheme connected with it.

Clinton Co. REV. J. E. GREGORY.

GRANGE

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

SOME GOOD SUMMER MEETINGS.

Ingham Pomona patrons have held two rousing summer meetings during the season, the first, contrary to all precedent, being held outside the county—in Livingston county by special invitation of West Handy Grange, in which Grange a number of Ingham Pomona patrons hold membership. This meeting occurred in June and in spite of the busy season about 150 members were in attendance. Caring for farm animals, cultivation and care of corn, canning cooked and uncooked fruits and equal suffrage were some of the subjects receiving attention.

The August meeting, at which social and entertainment features wholly occupied the time, was held by LeRoy Grange. The lines at the head of the program were faithfully adhered to, especially those which read, "A cordial welcome we are sure to find With feast prepared for body and for mind."

The feast for "body" was all that the most fastidious epicure could desire, daintily served on small tables with a suffrage napkin at each plate. After dinner the patrons joined in singing suffrage songs and Miss Ida Chittenden, who has charge of the State Grange equal suffrage campaign, gave a very convincing talk, alluding to woman's condition upon the farm, ranging from the practical slavery of primitive times to her comparative emancipation of the present day. Miss Chittenden gave many reasons, which her hearers accepted as valid and sufficient, why women should be given the ballot. After another song Bro. E. A. Holden presented the subject, "Do farmers send their boys to the Agricultural College as generally as they should, and if not why not?" which was quite generally discussed. Homer Murphy, Jr., of Locke Grange, gave an excellent talk on the progress of the state, citing the apparent progress being made in the right solution of the vexed liquor problem. Bro. Huston discussed the progress of the nation during the present administration, and Bro. John Mathewson gave some observations on the progress of Germany—due to co-operative effort on the part of her farmers—gleaned during a recent trip to that country. He made the point that there is great need of more effective co-operation on the part of the farmers of this country. The next meeting of the Pomona will be held with Holt Grange on Saturday, Sept. 14, where a warm welcome will be extended to all patrons.—Mrs. E. J. Creyts, Lect.

Clinton Pomona's Annual Picnic.

The annual picnic of Clinton County Grange was held at the fair grounds, St. Johns, with a very large number of patrons present. The state speaker was George B. Horton, chairman executive committee of the State Grange, who gave one of his characteristic talks, pointing out ways in which the farmer may improve his condition. He spoke in part as follows: "At the present time it is the duty of every farmer to give attention to the tariff, informing himself as well as he can on this intricate subject. He should also pay considerable attention to the matter of good roads, lending his influence to the betterment of the roads in his community. Another matter to which all farmers who are in the least progressive should give careful thought is the schools, seeing that good teachers are employed and that the school buildings are well equipped with all things that are needful in this age to the best education of the child. Taxation is one of the big questions which should occupy a granger's thought and a matter that should be thoroughly discussed at Grange meetings."

It was the opinion of the speaker that the farmers of Michigan are impoverishing the soil to their own detriment and that of coming generations. The farmers of Clinton county were urged to consider more carefully the maintaining of the fertility of their fields. More intensive farming was advocated.

He believed that the tendency of farmers to leave their rural homes, after they have given up active farm work, and move to town is wrong. After long years of rural living farmers can gain small interest in the affairs of a town or city, and for this reason should continue to live in the community they have assisted in building up. He believed that it would be more natural for men who have concluded their business careers in the city to move into the country where life is quiet, to spend their declining years in peace. Mr. Horton concluded his address by enumerating some of the things that the Grange has accomplished for this country, and he has much faith in the future possibilities of the organization to accomplish reforms and make our state and federal government better servants of the people.

The Annual Plowing Match conducted by Marion Center Grange, of Charlevoix county, is announced to occur on Thursday, Oct. 17, the committee in charge of the event having been appointed at one of the August meetings.

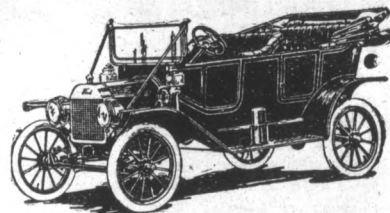
COMING EVENTS.

Pomona Meetings.

Lenawee Co., with Working Grange, Thursday, Oct. 3.
Kent Co., with Cascade Grange, Wednesday, Oct. 23. N. I. Moore, state speaker.



Dig down to the bottom of the automobile question—and the chances are you'll buy a Ford—just as thousands of other farmers have done. It's the one car that will stand the severe tests of farmer use—without excessive expense.

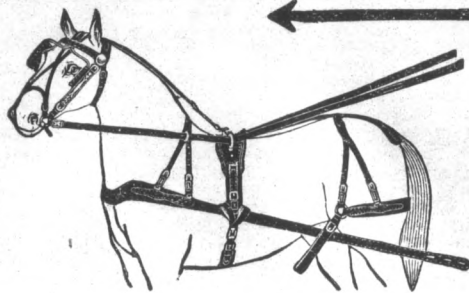


75,000 Ford cars already sold this season—one-third of America's product. Four different bodies—all built on the one Ford chassis—five-passenger touring car—torpedo runabout—delivery car and town car. Get catalogue No. 313 A from Ford Motor Company, Detroit, Michigan.

\$12⁶⁷

Nickel Trimmings

\$13⁴⁵ In Rubber Trimmings



Buys This Superb Single Harness

Sears, Roebuck and Co.'s Special Harness Bargains. Send your order today direct from this advertisement. Don't delay a minute. Stylish, serviceable harness that you can depend upon. Williams' Quality Harness, backed by Sears, Roebuck and Co.'s absolute guarantee, now offered at these amazingly low prices. Just ONE of the many big bargains we show in our big FREE Harness Book.

Blind bridle, 5/8-inch box loop cheeks, overcheck; 7/8-inch by 1-inch lines; V shaped breast collar, line rings on double neck strap; 1 1/4-inch single strap traces; 1 1/8-inch single strap breeching, 5/8-inch double hip straps, 5/8-inch side straps; scalloped turnback with crupper sewed on; flexible tree single strap gig saddle; Griffith style bellyband and shaft tugs. Weight, packed for shipment, about 21 pounds.

No. 10K108 Price of harness, nickel trimmed, solid nickel \$12.67 hook and terrets.

No. 10K109 Price of harness, imitation rubber trimmed, 13.45 genuine rubber hook and terrets.

Order Direct From This Advertisement.

Harness and Saddlery Book FREE.

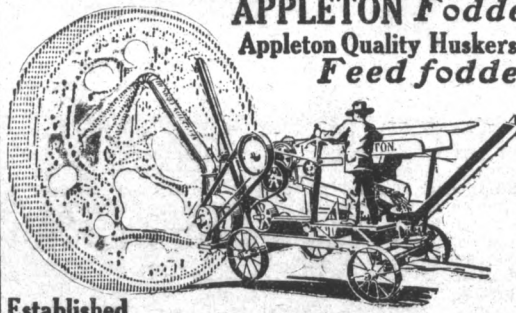
In any event be sure to send your name and address TODAY, AT ONCE, for our large FREE Harness Book, showing the world's largest and most popular line of harness, saddles and saddlery goods. Don't neglect this by all means. The moment we hear from you we will promptly forward you this big book, free and postpaid. Simply send your name and address, BUT DO IT NOW.

SEARS, ROEBUCK AND CO., CHICAGO, ILLINOIS

APPLETON Fodder SAVING MACHINES

Appleton Quality Huskers, Silo Fillers and Fodder Cutters

Feed fodder in place of hay



Keep it clean and sweet by using an Appleton Husker. Simplest and easiest Husker to operate. Cleanest husking. Sold with Cutter or shredder Head, or both. Down or mounted. Guaranteed, under equal conditions, to do more and better work, size for size, and to last longer than any other Husker on the market. Write today for free catalog.

Established

1872 APPLETON MFG. CO., 520 Fargo St., Batavia, Ill.

APPLETON QUALITY

MARKETS

DETROIT WHOLESALE MARKETS.

September 18, 1912.

Grains and Seeds.

Wheat.—The wheat market is slightly stronger than a week ago. Most of the bearish news is from this side which consists of large crops being gathered in the different wheat sections and the delivery of large quantities of wheat at western grain centers. The bullish news is made up of the strong demand for flour, causing millers to seek cash grain, and the urgent request coming from abroad due to a shortage on the European markets. South America is shipping in little wheat and most of the European countries report a smaller crop than has usually been produced. Altogether, conditions have caused cash wheat to advance while futures remain about the same as a week ago. The visible supply increased nearly 4,000,000 bushels. One year ago the price for No. 2 red wheat on the local market was 90c per bu. Prices for the past week are as follows:

	No. 2	No. 1	Red.	White.	Dec.	July.
Thursday	1.06½	1.05½	1.09½	1.13		
Friday	1.07½	1.06½	1.10½	1.13½		
Saturday	1.07½	1.06½	1.10½	1.14		
Monday	1.07½	1.06½	1.09½	1.13½		
Tuesday	1.07	1.06	1.09½	1.13½		

Corn.—The improved outlook in this crop has lent the trade a bearish tone. Recent weather conditions have encouraged the crop and increased the probability of a larger portion of it maturing. As a result prices have declined about six cents during the week. Early this week indications of frost offered a little strength, but as little or no damage resulted from this source, prices dropping 3c on Monday and 2c on Tuesday. A year ago the price for No. 3 corn was 68½c per bu. Quotations are as follows:

	No. 3	No. 3
	Corn.	Yellow.
Thursday	81	83½
Friday	80	82
Saturday	80	82
Monday	77	79
Tuesday	75	77

Oats.—Oat offerings continue liberal, thus giving an easier tone to the trade. Prices show a half cent decline from last week. A large crop of oats in Europe is curtailing the trade from that quarter. One year ago the local price for standard oats was 45½c per bu., or 10c above present quotations. The visible supply shows an increase of over 1,000,000 bu. Following are the quotations for the week:

	Standard.	Oat.
Thursday	35½	35
Friday	35½	35
Saturday	35½	35
Monday	35½	35
Tuesday	35½	35

Beans.—But little activity is apparent in this trade. Cash beans were marked down 20c last Saturday. Although much damage has been done this crop by excessive rains this season the past several days has improved the outlook. Following are the nominal quotations for the week:

	Cash	Oat.
Thursday	\$2.70	\$2.30
Friday	2.70	2.30
Saturday	2.50	2.30
Monday	2.50	2.30
Tuesday	2.50	2.30

Clover Seed.—The tone of this trade has improved. The few days of hot, clear weather favored filling, but the rains since have made the outlook appear more discouraging than it has been thus far this season. As a result prices have advanced from the low level reached last week. Alsike shares in the higher values. Quotations are as follows:

	Oat.	Alsike.
Thursday	\$10.75	\$11.75
Friday	10.75	11.75
Saturday	10.75	11.75
Monday	11.00	11.75
Tuesday	11.00	11.75

Rye.—An improved demand for this grain advanced prices last week 2c, No. 2 rye now being quoted at 73c per bu.

Timothy Seed.—The gradual decline in quotations for timothy seed has finally been checked and the price remains the same as one week ago, it being \$2.10 per bu. for prime spot.

Flour, Feed, Potatoes, Etc.

Flour.—Market is active with prices unchanged.

Straight	\$5.20
Patent Michigan	5.80
Clear	4.50
Rye	5.00

Feed.—All classes of feed continue steady with last week. Carlot prices on track are: Bran, \$28 per ton; coarse middlings, \$28; fine middlings, \$31; cracked corn and coarse corn meal, \$34; corn and oat chop, \$31 per ton.

Hay and Straw.—Hay is weaker and rye straw higher. Quotations are: No. 1 timothy, \$16.50@17; No. 2 timothy, \$15@16; clover, mixed, \$13@16; rye straw, \$10@10.50; wheat and oat straw, \$8@9 per ton.

Potatoes.—There is promise of a good crop of potatoes in most sections of the country and prices are depressed in most of the large markets. Detroit's decline amounting to 15c. They are going slowly at 35@40c per bu. The ruling price for southern offerings is \$2 per sack.

Provisions.—Family pork, \$22@23; mess pork, \$26; clear, backs, \$21@24; hams, 15½@16½c; briskets, 12½c; shoulders, 13c; picnic hams, 12½c; bacon, 16½@18c; pure lard in tiers, 12½c; kettle rendered lard, 13½c per lb.

Dairy and Poultry Products.

Butter.—The advanced price in creamery butter noted last week has been maintained, with first creamery a half cent higher. The condition of the trade appears to be on a firm basis of supply and demand. Dairy stock remains steady. Quotations are: Fancy creamery, 29c; first creamery, 27½c; dairy, 21c; packing stock, 19c per lb.

Eggs.—This product continues firm. There is little change in the output and the demand is given strength by the increase in meat prices. Current receipts candied, cases included, are quoted at 24c per dozen, the price given a week ago.

Poultry.—The tone of this trade is easy. There is very little activity due to the supply being sufficient to care for an inactive demand. Broilers are down a little as is also true of ducks. Quotations are as follows: Broilers, 16c per lb.; hens, 13@13½c; No. 2 hens, 9@10c; old roosters, 9@10c; turkeys, 15@16c; geese, 8@9c; ducks, 12@13c; young ducks 14@15c per lb.

Veal.—All grades steady. Fancy, 13½@14c per lb; choice, 9@10c.

Cheese.—Market steady. In wholesale lots, Michigan flats, 14½@15c; York state flats, 16½@16½c; limburger, 14@15c; domestic Swiss, 17½@18½c; brick cream, 14½@14½c.

Fruits and Vegetables.

Peaches.—Offerings restricted and prices advanced under a good demand. Fancy Elbertas, \$2.50; AA, \$2.25; A, \$2; B, \$1.50 per bushel.

Pears.—Bartletts are quoted at \$1.50@1.75 per bu.

Plums.—Steady. Per bu., \$1.25@1.60.

Apples.—New apples are quoted at \$1.75@2.25 for fancy, and \$1@1.50 for common; poor, 75c@1 per bbl. Good apples by the bushel are selling at 40@60c.

Grapes.—More's Early, per 8-lb. basket, 15c; Champion, 14c; Worden, 16c.

Honey.—Choice to fancy comb, 15@16c per lb; amber, 12@13c.

Tomatoes.—Per bushel, 40@50c.

Onions.—Per bushel, 75c.

OTHER MARKETS.

Grand Rapids.

Four hundred loads of fruit and farm produce were offered on the city market Tuesday morning. Tomatoes were in good supply but sold readily at 60c. Fifty loads of potatoes went at 40@50c. Other produce sold as follows: Cucumbers, 40@50c; corn, 10c; cabbage, 25@35c; cauliflower, \$1 per doz; celery, 15c; watermelon, 40c; muskmelon, 50c@1. Fruit brought the following prices: Peaches, \$2.25@2.50; pears, \$1.50; plums, \$1@1.75; apples, 50@65c; grapes, \$1.25 per bushel. Hay is worth \$12@15; dressed hogs, 10½@11c. Live fowls are quoted at 10c.

Chicago.

Wheat.—No. 2 red, \$1.05@1.07; Dec., 90½c; May, 95½c.

Corn.—No. 3, 68½@69½c; Dec., 52½c; May, 52c.

Oats.—No. 2 white, 35@35½c; Dec., 32½c; May, 34½c.

Butter.—Receipts are somewhat lighter than usual at this season, holding the market very firm at last week's advance. Quotations: Creameries, 24@28c; dairies, 22½@24½c.

Eggs.—The better grades of eggs have made a further gain of ½c during the past week. Market firm. Quotations: Firsts, 21½c; ordinary firsts, 19½c; at mark, cases included, 17½@18½c per doz.

Potatoes.—Gradually increasing receipts is lowering values, the loss for the week running from 2c to 5c. Michigan stock quoted at 45@48c; Minnesota, 40@45c; Wisconsin, 40@48c.

Beans.—There is an undertone of strength in this market and last week's outside quotations are being firmly maintained. Pea beans, choice, hand-picked, \$3 per bu; prime, \$2.90; red kidneys, \$2.50@2.75.

Hay and Straw.—All grades of hay except clover are lower. Oat straw higher; other kinds lower. New timothy hay selling about \$2 per ton lower than old. Quotations: Timothy, choice, \$19@20; No. 1, \$17@18; No. 2 and No. 1 mixed, \$14@16; clover, \$7@12; No. 2 and no grade, \$5@7; alfalfa, choice, \$16@17; No. 1 \$14@15; No. 2, \$10@13. Straw—Rye, \$7@8; wheat, \$6.50@7; oat, \$7.50@8.50.

New York.

Butter.—Market firm under another advance of 1c on the better grades of creamery. Quotations: Creamery, special extras, 29¾@30c; do., firsts, 27½@29c; seconds, 25½@27c; factory do., June make, firsts, 23@23½c.

Eggs.—All offerings meeting a good demand at prices ranging from 1 to 3c above last week's figures. Fresh gathered extras, 29@31c; extra firsts, 26@28c; firsts, 24@25c per dozen.

Poultry.—Dressed—Firm, with prices practically unchanged. Fresh killed western chickens, 18@24c; fowls, 15@17½c; turkeys, 16@17c per lb.

Boston.

Wool.—There continues to be an active market for wool. The volume of trading past week was less than for the former week, but still of sufficient size to indicate a strong interest in the trade. There continues to be an insistent demand for fleeced wools, there being indications that the supply will be short of the wants of manufacturers. A considerable quantity of Michigan ½-blood was sold at 28½c. Michigan mediums are quoted at 30c and fine unwashed at 21½@23c. There is a moderate demand for all kinds of territory wools. Pulled wools are quiet.

Elgin.

Butter.—Market is firm at 28c per lb., which is an advance of ½c over last week's quotation.

THE LIVE STOCK MARKETS.

Buffalo.

September 16, 1912.

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

Receipts of stock here today as follows: Cattle, 225 cars; hogs, 102 double decks; sheep and lambs 110 double decks; calves, 1,500 head.

With 225 cars of cattle on our market here today, and with the weather very rainy and warm, and without a load of strictly good cattle in the whole day's receipts, we quote the market 10@15c per cwt. lower than last week.

We quote: Best 1,350 to 1,500-lb. steers \$9@9.50; good prime 1,200 to 1,300-lb. do., \$8.50@8.75; do. 1,100 to 1,200-lb. do., \$8.25@8.65; medium butcher steers, 1,000 to 1,100, \$7@7.50; butcher steers, 950 to 1,000, \$6.50@7; light butcher steers, \$6@6.25; best fat cows, \$5.50@6; butcher cows, \$4.50@5; light butcher cows, \$3.50@4; trimmers, \$3@3.25; best fat heifers, \$7@7.50; medium butcher heifers, \$6@6.50; light butcher heifers, \$4.50@5; stock heifers, \$4@4.25; best feeding steers, dehorned, \$6@6.50; common feeding steers, \$4.75@5; light stockers, \$4.50@5; prime export bulls, \$5.75@6; best butcher bulls, \$5.25@5.50; bologna bulls, \$4@4.50; stock bulls, \$4@4.50; best milkers and springers \$6@70; common kind do., \$35@40.

Receipts of hogs here today were very liberal, something over 100 double decks, and the general run of the hogs poor in quality, lacking much in weight, and a scarcity of choice 200-lb. hogs was noted here today. Supplies at western markets were not excessive, but with so many of one kind here, market suffered a severe setback, general sales being 25@35c below Saturday's best time. Best hogs selling at 9c generally, with a few decks of selected yorkers a little more, with a good many of the ordinary hogs from \$8.75@8.90. Pigs, as to quality, sold from \$8.25@8.50; roughs generally, \$7.50; stags \$6.50@7. The closing market was extremely dull on anything but the best. Good many pigs and full eight or ten double decks of yorkers going over unsold. The prospects not very favorable on the ordinary grades of hogs.

The sheep and lamb market was fairly active today, with prices about a quarter lower than the close of last week; most of the choice lambs selling from \$7.50@7.60. Yearlings, \$5@5.75. Look for about steady prices the balance of the week.

We quote: Choice lambs, \$7.50@7.60; cull to fair do., \$5.50@7; yearlings, \$5@5.75; bucks, \$2.50@3; wethers, \$4.75@5; handy ewes, \$4@4.25; heavy ewes, \$3.75@3.85; cull sheep, \$2@3; veals, choice to extra, \$10.75@11; fair to good, \$7.50@10.50; heavy calves, \$4.50@6.

Chicago.

September 16, 1912.

Cattle. Hogs. Sheep. Receipts for week...50,777 101,250 130,725 For previous week...45,098 98,679 134,629 Same week last year...57,488 91,766 165,856 Shipments for week...16,935 27,212 28,878 For previous week...17,643 28,605 27,894 Same week last year...22,260 11,817 77,543

The cattle run today embraced about 8,000 head from the western ranges, and a new high record was made for the best range steers by the sale of a consignment at \$9.65. The top for natives was \$10.85, choice beeves remaining firm, with no large supply. Otherwise the steer market was slow, weak and partly a dime lower, although early sales of fat cows and heifers looked a little higher in several instances. Hogs broke 5@10c with fair animation, sales ranging at \$7.90@8.90. The average weight of the receipts for two weeks in succession has been 235 lbs., which compares with 225 lbs. a year ago and 259 lbs. two years ago. Sheep and lambs were in active general demand at former prices.

New record for prime heavy beeves, \$10.90, and \$10.35 for yearlings, also a new price, were stellar features of last week's market. All below prime grade beeves, however, sold lower, Jewish holidays, which shut off the Kosher demand for big steers and generous runs of immature cattle in the west being bearish factors. Market for the common to choice steers closed 15@25c lower in most instances and bulk showed a 25c decline while some light steers went at 30@40c decline. Range cattle run of 11,000 on the other hand, had strong demand and sold 10@15c higher. Prime range beeves equalled previous record price of \$9.50 and bulk of 1,100 to 1,250-lb. westerns went at \$7.25@8.10. These were kinds which came in direct competition with the medium to good handy weight native steers, later of value at \$8.10@9.25. Bulk of the good 1,200-lb. steers sold at \$9.50@10, while for native grassers it was a \$6.50@7.85 deal, but kinds below \$7 had a small claim to killing quality. Feeder cattle market was weak on a big supply and influenced by heavy runs of feeders at western points. Thin steers of class below choice declined 15@25c from the week before, selling at \$5@6.50 while the choice 800 to 1,040-lb. feeders held at stationary rates, these making \$6.75@7.45. Stockers went at \$4.75@5.55 for poor to fair and selected stock steers landed up to \$6.60. Fat cows sold at \$5.50@9, latter being a record, and most heifers made \$5.75@7.50. Canner cows brought \$2.50@3.25 and cutters \$3.50@4.20. Bulls declined 25@35c, selling at \$3.75@6.60. Calves were also off \$1 at the close, choice making \$11 against a top of \$12 recently. Milk and springers were \$3@5 lower than the week before and \$10 off from top point this season, selling at \$35@85, a bulk of good cows at \$55@70.

Hogs declined last week, the light and butcher weights going down mostly 25c from top levels recently, but there was packer partiality for heavy and mixed packing classes and these were maintained on a price basis little different from levels shown at the start of the month. More generous receipts have been had since the market turned higher a short time back, but now that packers have punished prices a shut off in the runs

is expected. The good call for packing hogs is significant of free action in land trade and there is no complaint of dull consumer call for loins and hams. The hog meats are moving freely into consumer channels by reason of the public having cut down on beef consumption since price of the latter commodity has gone to new record high level. Matured hogs are scarcer than usual at this time of year and the trade is looking for small supplies in the next two months, which strengthens belief in the final materialization of much higher prices. The government report on stock hogs for Sept. 1 stated that there are 9.2 per cent fewer of them now than a year ago and hog condition as to health is 92, against 95.7 a year ago and 95.2 for the past ten-year average. Light hogs sold at a premium over other grades, topping at \$9 and common lights going down to \$8.40. Mixed packing made \$8.10 and \$8.50, medium and butchers at \$8.55@8.95 and the heavy packing kinds went at \$7.90@8.35 with pigs at \$6.10@7.75 and light-lights up to \$8.25@8.50.

Lambs had decidedly the best demand in ovine trade, advancing 25@40c in last week while yearlings went 25c higher and the ewes and wethers declined 10@15c from the previous week's basis. Range stock continued to predominate in the supply and quality was good. Only a small run of feeder stuff has been at market thus far in the month and for the year to date there is said to be a shortage of 180,000 feeder sheep and lambs received at the five principal western markets. Prime range lambs sold at \$7.50@7.75 with a fair to good kind at \$7.15@7.40 while feeders paid \$6@6.70 for a small crop of thin western lambs. Native lambs sold at \$5@7.60 and native and range yearlings at \$5.50@5.75. Plain to fair wethers brought \$4.25@4.65 and culls sold down to \$3.25@3.75. Native and range ewes of fair to good grade sold at \$3.50@4.35 and culls at \$2.50@3. Feeding yearlings made \$4.75@5.50 and feeding wethers \$3.90@4.50.

In horse trade some improved general demand was shown for all above common work and animals and strong prices were paid last week, although the trade did not quote sales materially higher. Call continues firmest for the heavy drafters which go at \$260@300 while fair draft horses have made \$200@225. Chunks weighing 1,250 to 1,400 lbs. sold at \$150@200 and general purpose horses weighing 1,050 to 1,300 lbs. brought \$165@200. Choice heavy feeders went at \$210@260 and medium weight feeders made \$140@200, with 1,100 to 1,450-lb. farm workers at \$100@200.

LIVE STOCK NOTES.

John Clay, Chicago commission merchant, who keeps close tab on western range conditions, and has just returned from a survey of the range country, says he has never seen more luxuriant growth of feed or better conditions for making beef. While the 1912 range beef supply will be short in numerical sense, cattle will come to market in generally good killer condition, and much superior to that of last year. The northwestern hay crop, Mr. Clay says, is the largest in history, a condition calculated to expand hay-feeding operations and keep thin cattle away from eastern markets. Sections that have never given winter feeding any attention heretofore are now considering it. Mr. Clay found a conspicuous shortage of good young cattle available for distillery and other feeding purposes everywhere in the northwest.

"Montana has a generous crop of aged wethers and they are for the most part fat," said G. B. Traub, a big sheepman of that state, who recently marketed a shipment of ovine stock at Chicago. "However, market conditions recently have not been such as to cause flockmasters to send in rush orders for cars. There is a general impression among sheepmen in Montana that sheep will be worth more money later this season. They are selling 50c higher now than a few weeks ago, and if they do not advance more it will not be because further advances are not warranted by the high level of cattle and hogs. The Montana lamb crop last spring was a short one and the lamb delegation to come this fall from that state will be smaller than of late years because of the shortage of supply, since winter feed will be abundant and there is also an excellent home demand for lambs, as well as young ewes from Canadian buyers. A great many stock ewes and some lambs have been shipped from Montana into Canada and Wyoming this fall."

Hog cholera is hitting sections of Illinois, Iowa, and Missouri to an extent which gives the trade cause for no little alarm. Many sick pigs are coming into the markets, particularly at Chicago and East St. Louis. It is a usual thing at this time of year for hog cholera reports to come with more or less regularity but not in recent years has the direct evidence of sickness, (generous shipping of pigs), been as noted as now. Feeding of new corn has developed a colicky condition among many pigs which owners have evidently thought was due to the cholera and this accounts for a part of the big shipping of pigs, although it is not the only reason by any means.

Hog prices have recently gone to new high levels and the trade is destined to go still higher, according to market experts. It is a logical trend of affairs at this time since shortage is looming up and the big marketings of pigs only serve as a drain upon future supply of matured stock. Hogs have been worth the money to packers for a long time past, and they are finding a good demand for fresh meats, lard, and the salted pork parts. An \$8@9.25 market for hogs recently is expected to give way to a \$9@10 trading basis before many months have passed, and the big corn crop this season should prove a great stimulus to increased pork production.

THIS IS THE LAST EDITION.

In the first edition the Detroit Live stock markets are reports of last week; all other markets are right up to date. Thursday's Detroit Live Stock markets are given in the last edition. The first edition is mailed Thursday, the last edition Friday morning. The first edition is mailed to those who care more to get the paper early than they do for Thursday's Detroit Live Stock market report. You may have any edition desired. Subscribers may change from one edition to another by dropping us a card to that effect.

DETROIT LIVE STOCK MARKETS.

Thursday's Market.
September 19, 1912.

Cattle.

Receipts, 2,254. Market 10@15c lower than on Wednesday; canners very dull; general market about same as last week. We quote: Extra dry-fed steers, \$8@9; steers and heifers, 1,000 to 1,200, \$6@7.50; do. 800 to 1,000, \$5@6; grass steers and heifers that are fat, 800 to 1,000, \$4.25@5.50; do. 500 to 700, \$4.25@4.75; choice fat cows, \$5.25@6.50; good fat cows, \$4.50@5; common cows, \$3.25@3.95; canners, \$2@3; choice heavy bulls, \$4.75@5.25; fair to good bolognas, bulls, \$4@4.50; stock bulls, \$3.25@3.75; choice feeding steers, 800 to 1,000, \$5.25@5.75; fair do., 800 to 1,000, \$4.50@5; choice stockers 500 to 700, \$4.50@5.10; fair stockers, 500 to 700, \$3.75@4.25; stock heifers, \$3.50@4; milkers, large, young, medium age, \$4@6.50; common milkers, \$2.50@3.50.

Haley & M. sold Rattkowsky 4 cows av 812 at \$4.15; to Hammond, S. & Co. 3 bulls av 1,000 at \$4.35, 2 steers av 835 at \$6, 7 cows av 930 at \$4.40; to Newton B. Co. 2 butchers av 685 at \$4.10, 2 do av 850 at \$4.25; to Morgan 2 stockers av 690 at \$5; to Thompson Bros. 6 butchers av 663 at \$4.30; to Hills 7 stockers av 633 at \$4.75, 8 do av 630 at \$5, 5 do av 588 at \$4.50, 10 do av 640 at \$5, 4 do av 467 at \$4.50; to Breitenbeck 1 cow weighing 880 at \$3.50, 5 do av 944 at \$4.40; to Hirschman 4 butchers av 700 at \$5; to Hammond, S. & Co. 1 bull weighing 1,000 at \$4.35; to Kamman B. Co. 18 butchers av 580 at \$4, 13 do av 673 at \$4.75; to Bresnahan 16 do av 524 at \$4, 5 cows av 830 at \$3.30, 7 do av 821 at \$3.25, 8 do av 781 at \$3.25, 3 do av 953 at \$3.40; to LaBoe 6 heifers av 630 at \$5; to Hills 15 stockers av 644 at \$5; to Goose 12 butchers av 500 at \$4.10; to Rattkowsky 5 cows av 910 at \$4.50; to Hammond, S. & Co. 2 do av 945 at \$3.60; to Lachalt 12 butchers av 750 at \$4.90; to Sullivan P. Co. 1 bull weighing 1,070 at \$5, 6 butchers av 648 at \$2.90; to Mich. B. Co. 5 bulls av 820 at \$4.10; to Regan 6 heifers av 526 at \$4.35; to Sullivan P. Co. 9 cows av 950 at \$4.10; to Kamman 16 steers av 740 at \$5.25.

Roe Com. Co. sold Bray 5 cows av 502 at \$3.50, 1 do weighing 700 at \$3, 5 do av 888 at \$3.50, 1 do weighing 820 at \$3, 13 do av 829 at \$3.50; to Sullivan P. Co. 11 do av 1,000 at \$4.25, 15 stockers av 548 at \$4.25, 2 do av 885 at \$3; to Morgan 1 feeder weighing 930 at \$5; to Mich. B. Co. 5 steers av 1,170 at \$6.75; to Kamman B. Co. 7 do av 745 at \$5.50, 5 cows av 932 at \$5; to Parker, W. & Co. 2 bulls av 1,065 at \$4.50, 4 do av 945 at \$4.50, 4 cows av 835 at \$4.25, 1 do weighing 1,280 at \$4.50, 26 steers av 820 at \$6.25; to Kamman B. Co. 5 do av 744 at \$5.50; to Bray 3 cows av 923 at \$3.75, 1 do weighing 1,000 at \$3, 3 do av 873 at \$3.25; to Thompson Bros. 3 steers av 683 at \$5.25, 4 butchers av 470 at \$4.25; to Parker, W. & Co. 2 bulls av 830 at \$4.50, 10 butchers av 915 at \$4.25; to Morgan 5 stockers av 490 at \$4.50, 11 do av 523 at \$4.90, 17 do av 440 at \$4.25; to Rattkowsky 2 cows av 800 at \$4.15; to Havlin 1 do weighing 1,050 at \$4.75, 1 heifer weighing 680 at \$5.25; to Fisher 1 cow weighing 1,160 at \$5.25, 2 heifers av 710 at \$5, 2 cows av 705 at \$3; to Prucka 5 stockers av 530 at \$4, 1 heifer weighing 730 at \$4.50; to Rattkowsky 2 cows av 950 at \$5.25, 8 butchers av 436 at \$4.

Bishop, B. & H. sold Breitenbeck 24 butchers av 800 at \$4.85; to Bresnahan 7 cows av 750 at \$3.25, 6 bulls av 629 at \$3.75, 8 stockers av 552 at \$4.25, 2 do av 590 at \$3.75; to Parker, W. & Co. 4 butchers av 712 at \$4, 1 bull weighing 900 at \$4.50, 7 butchers av 744 at \$4.25, 5 steers av 836 at \$5.75; to Hill 8 stockers av 430 at \$3.90, 7 do av 600 at \$4.75, 7 do av 640 at \$4.75; to Fry 12 butchers av 677 at \$5; to Mason Bros. 4 stockers av 680 at \$4.85; to Kuchta 16 steers av 1,004 at \$7; to Rattkowsky 4 do av 990 at \$5, 2 heifers av 750 at \$4; to Bray 5 canners av 866 at \$3.25; to Sullivan P. Co. 11 butchers av 720 at \$4.60, 1 bull weighing 1,180 at \$5.50; to Hammond, S. & Co. 11 butchers av 884 at \$4.15, 2 cows av 945 at \$3.25, 27 butchers av 852 at \$4.85, 6 do av 991 at \$4.35; to Hill 3 stockers av 600 at \$5; to Applebaum 2 cows av 875 at \$4.10; to Fisher 9 stockers av 622 at \$5.10, 2 do av 505 at \$4.50; to Newton B. Co. 11 butchers av 1,015 at \$4.75, 5 do av 506 at \$3.75, 2 cows av 910 at \$3.50; to Thompson Bros. 9 butchers av 730 at \$4.85; to Sullivan P. Co. 3 bulls av 533 at \$3.75, 1 do weighing 1,300 at \$5, 11 butchers av 720 at \$4.80; to Heinrich 32 do av 580 at \$5, 14 steers av 732 at \$5.90.

Spicer & R. sold Bray 3 canners av 753 at \$3, 1 cow weighing 790 at \$3.50, 2 cows av 790 at \$3.40, 2 do av 855 at \$3.50; to Gerisch 1 do weighing 1,400 at \$6.75; to Morgan 11 stockers av 441 at \$4.50, 3 do av 450 at \$4.25, 2 do av 525 at \$5; to Gerisch 14 steers av 1,060 at \$7.50; to Parker, W. & Co. 5 do av 944 at \$6; to Sullivan P. Co. 3 bulls av 1,320 at \$5, 3 do av 610 at \$4; to Bray 3 cows av 880 at \$3.25.

Campbell & W. sold Hill 8 feeders av 801 at \$5.30.

Same sold Bray 2 cows av 950 at \$4, 3 do av 760 at \$3.50.

Coon sold same 1 heifer weighing 880 at \$6.50, 5 cows av 828 at \$3.25.

Campbell & W. sold Bresnahan 11 butchers av 670 at \$4.60.

Veal Calves.

Receipts, 471. Market steady with last week; quality very common. Best, \$10 @11; others, \$4@9.

Roe Com. Co. sold Hammond, S. & Co. 1 weighing 230 at \$6, 1 weighing 210 at

\$10, 4 av 200 at \$11, 3 av 120 at \$8; to Goose 6 av 200 at \$4.75, 7 av 155 at \$4.75, 4 av 180 at \$4.75; to Hammond, S. & Co. 1 weighing 110 at \$8, 5 av 140 at \$10.50; to Thompson Bros. 2 av 175 at \$10.50, 2 av 175 at \$10.50; to Burnstine 2 av 150 at \$7, 3 av 150 at \$10.50.

Spicer & R. sold Schufel 2 av 205 at \$5.50; to Burnstine 1 weighing 120 at \$9, 1 weighing 130 at \$10; to Applebaum 2 av 130 at \$8.50; to Parker, W. & Co. 3 av 150 at \$10, 1 weighing 250 at \$5; to Thompson Bros. 2 av 100 at \$8, 6 av 140 at \$10.50, 1 weighing 160 at \$11; to McGuire 5 av 150 at \$10.

Bishop, B. & H. sold Parker, W. & Co. 7 av 125 at \$10, 3 av 130 at \$10, 1 weighing 250 at \$7, 1 weighing 120 at \$9.50; to Goose 1 weighing 140 at \$11, 10 av 227 at \$4.75, 15 av 225 at \$5, 11 av 230 at \$4.50, 7 av 240 at \$4.50, 1 weighing 140 at \$10.50, 2 av 200 at \$8, 1 weighing 130 at \$11; to Hammond, S. & Co. 5 av 145 at \$10.50, 3 av 350 at \$5.50; to McGuire 3 av 170 at \$11; to Parker, W. & Co. 4 av 155 at \$10.50, 2 av 180 at \$10, 3 av 210 at \$7, 4 av 170 at \$10.50; to Newton B. Co. 6 av 145 at \$10.50, 6 av 165 at \$10.50; to McGuire 3 av 250 at \$6, 6 av 155 at \$10.

Haley & M. sold Newton B. Co. 2 av 105 at \$7, 10 av 135 at \$10; to Burnstine 1 weighing 220 at \$7, 6 av 153 at \$10; to Shaparo 8 av 210 at \$5; to Sullivan P. Co. 12 av 225 at \$4.50, 6 av 180 at \$4.50; to Burnstine 11 av 140 at \$10; to Newton B. Co. 1 weighing 150 at \$10, 2 av 130 at \$5, 2 av 205 at \$7.25.

Sheep and Lambs.

Receipts, 5,004. Market steady at Wednesday, and prices 15@25c higher than last week's close. Best lambs, \$6.75@7; fair to good lambs, \$6.25@6.50; light to common lambs, \$5@5.50; wethers, \$4.25@4.50; fair to good sheep, \$3@3.75; culls and common, \$2@2.50.

Bishop, B. & H. sold Sullivan P. Co. 3 sheep av 80 at \$2, 10 lambs av 48 at \$4.50, 5 yearlings av 70 at \$4, 18 lambs av 70 at \$6.50; to Newton B. Co. 38 do av 79 at \$6.85; to Thompson Bros. 31 do av 65 at \$6.25; to Parker, W. & Co. 18 do av 55 at \$5.50, 59 do av 70 at \$6.75; to Hammond, S. & Co. 18 sheep av 150 at \$3.50, 9 do av 100 at \$2.50, 35 do av 115 at \$3.50, 128 lambs av 85 at \$6.90, 20 lambs av 60 at \$5.50, 23 sheep av 95 at \$3, 39 do av 125 at \$2.25, 13 do av 110 at \$3, 12 yearlings av 100 at \$4, 12 do av 80 at \$4; to Brown 70 sheep av 100 at \$3, 15 do av 80 at \$3, 63 lambs av 55 at \$5.75; to Sullivan P. Co. 80 lambs av 80 at \$7, 81 do av 75 at \$6.65; to Parker, W. & Co. 39 do av 60 at \$6, 50 do av 52 at \$5; to Nagle P. Co. 138 do av 80 at \$6.90, 46 do av 70 at \$6.75, 44 do av 73 at \$6.85; to Newton B. Co. 35 yearlings av 75 at \$5, 31 lambs av 65 at \$6.50; to Fitzpatrick Bros. 35 do av 70 at \$6.75; to Young 35 do av 95 at \$5; to Fitzpatrick Bros. 11 do av 85 at \$5, 23 do av 105 at \$3.50, 31 do av 115 at \$3.65.

Spicer & R. sold Mich. B. Co. 25 lambs av 53 at \$5.10, 16 sheep av 110 at \$3.35, 22 do av 105 at \$3.25, 42 lambs av 75 at \$6.40, 46 do av 75 at \$6.40; to Sullivan P. Co. 6 do av 75 at \$6.50, 46 do av 75 at \$6.50, 11 sheep av 100 at \$2.75; to Hayes 19 do av 80 at \$2.50.

Sharp sold Mich. B. Co. 68 lambs av 63 at \$6.40, 48 sheep av 120 at \$3.35.

Roe Com. Co. sold Hammond, S. & Co. 40 lambs av 70 at \$6.50, 8 do av 55 at \$5.50.

Kendall sold Mich. B. Co. 14 sheep av 120 at \$3.25, 67 lambs av 75 at \$7.

McLachlin sold Newton B. Co. 18 lambs av 55 at \$6, 14 sheep av 95 at \$3.50.

Haley & M. sold Mich. B. Co. 65 sheep av 120 at \$3.50; to Newton B. Co. 73 lambs av 73 at \$6.50, 144 do av 70 at \$6.50, 15 do av 80 at \$6.50, 124 do av 73 at \$6.60, 31 do av 80 at \$6.60, 60 do av 70 at \$6.25; to Mich. B. Co. 55 sheep av 115 at \$3.50, 21 do av 95 at \$3.25; to Hayes 23 lambs av 55 at \$4.50, 26 do av 50 at \$5.50.

Taggart sold Hammond, S. & Co. 47 lambs av 70 at \$6.50, 13 yearlings av 100 at \$4.

Hogs.

Receipts, 3,326. Market looks 10c higher than on Wednesday, or 25c lower than last week; none sold up to noon.

Range of prices: Light to good butchers, \$8.25@8.65; pigs, \$7@7.85; light yorkers, \$8@8.65; heavy, \$8@8.65; stags one-third off.

Bishop, B. & H. sold Parker, W. & Co. 520 av 200 at \$8.60, 1,010 av 155 at \$8.55, 1,060 av 160 at \$8.50, 500 av 140 at \$8.40, 150 av 130 at \$8.25.

Roe Com. Co. sold Sullivan P. Co. 250 av 200 at \$8.60, 240 av 190 at \$8.55, 150 av 180 at \$8.50.

Spicer & R. sold Hammond, S. & Co. 61 av 180 at \$8.50, 12 av 200 at \$8.60, 109 av 140 at \$8.40.

Haley & M. sold same 125 av 200 at \$8.60, 140 av 190 at \$8.50, 160 av 140 at \$8.40.

Friday's Market.

September 13, 1912.

Cattle.

Receipts this week, 1,950; last week, 2,143. Market steady at Thursday's prices. We quote: Extra dry-fed steers \$8@9; steers and heifers, 1,000 to 1,200, \$6.75@7.50; do. 800 to 1,000, \$5@6; grass steers and heifers that are fat, 800 to 1,000, \$4.25@5.50; do. 500 to 700, \$4.25@4.75; choice fat cows, \$5.25@5.75; good do., \$4.50@5; common cows, \$3.50@4; canners \$2@3.25; choice heavy bulls, \$4.75@5.50; fair to good bologna bulls, \$4.25@4.50; stock bulls, \$3.25@3.75; choice feeding steers, 800 to 1,000, \$5.25@5.75; fair feeding steers, 800 to 1,000, \$4.50@5; choice stockers, 500 to 700, \$4.50@5.25; fair do., 500 to 700, \$3.75@4.25; stock heifers, \$3.50@4; milkers, large, young, medium age, \$4@6; common milkers, \$2.50@3.50.

Sheep and Lambs.

Receipts this week, 7,102; last week, 6,259. Good steady; common 25c lower. Best lambs, \$7@7.25; fair to good lambs, \$6@6.25; light to common lambs, \$4@4.75; fair to good sheep, \$3@3.25; culls and common, \$2@2.25.

Hogs.

Receipts this week, 3,902; last week, 4,298. Market steady at Thursday's prices. Range of prices: Light to good butchers, \$8.75@8.90; pigs, \$7@8.25; light, \$8.50@8.85; heavy, \$8.50@8.80; stags one-third off.

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 some one else. When reply by mail is requested, it becomes private practice, and a fee of \$1.00 must accompany the letter.

Chronic Cracked Heels—Stocking.—I have a seven-year-old mare that is perhaps pregnant; her hind leg has had on it a few cracks which pretty much extend across whole hind part of leg. The leg is also stocked considerable but she is not lame. I showed her to our local Vet., he gave me medicine that we have used both externally and internally without seemingly doing her much good. She seems to play, eat and drink as well as she ever did. I have been feeding her oats and bran mash three times a day. I have also given her three tablespoonfuls of epsom salts and some sulphur with each meal. She runs on pasture daytime and is stable nights. A. R. A., Kings Mills, Mich.—Apply equal parts tincture benzoin and glycerine to sores twice a day. Also give her a tablespoonful of Donovan's solution at a dose three times a day for 30 days. If her kidneys do not act well, give her a tablespoonful of powdered nitrate potash once or twice a day.

Chronic Cough.—Have an eight-year-old gelding in good condition that has been troubled with a cough all summer and seems to be gradually growing worse. He is fed good oats and hay daytime and runs on grass nights. Can you prescribe something that will stop this cough? E. S., Mt. Pleasant, Mich.—Give your horse a dessertspoonful of fluid extract opium and 1 oz. ground licorice at a dose in feed two or three times a day. You will find it no easy task to correct a chronic cough.

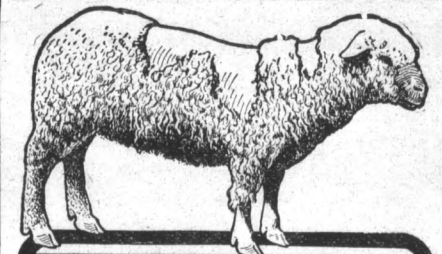
Loss of Appetite—Indigestion.—Have been a reader of the Michigan Farmer for some time and have derived some benefit from the veterinary columns. I have a mare 12 years old that does not thrive, she suffers from loss of appetite and is in a run-down condition. She is lifeless and I would like to know what to give her. C. W. J., Lakeview, Mich.—Her teeth may need floating; also give her 1 dr. ground nux vomica, ½ oz. of ground gentian, ½ oz. powdered cinchona and a dessertspoonful of salt at a dose in feed three times a day. Her grain ration should perhaps be increased.

Barren Cows.—I have three heifers that have been coming in heat regularly since April, but none of them have yet gotten with calf. I would like to know if there is anything that I can do that will insure their chance of becoming pregnant. I forgot to say that I also have two cows that fail to breed. I have had my cows served by four different bulls. F. McL., Ortonville, Mich.—When your cows come in heat inject them with a soda solution made by dissolving 2 ozs. bicarbonate soda in 3 pts. of water. Do not breed the cow for three or four hours after she has been treated. An occasional treatment before heat period will have a good effect.

Sore on Coronet.—I have been a reader of the Michigan Farmer for nearly a year and have been quite interested in the veterinary columns. One of my cows has a sore foot, just noticed it a few days ago, and am not able to state how long it has been in this condition. The leg is considerable swollen, and she shows some lameness and it must annoy her for she licks it a great deal. The sore is covered with small pustules and must itch for she is inclined to lick it. I. B., Stearns, Mich.—Apply one part iodoform and ten parts boracic acid to sore twice a day, covering it lightly with oakum and a cloth. If the wound appears to be malignant apply one part carbolic acid and five parts water carefully with the point of a feather twice a day.

Castrating Ruptured Pigs.—How shall I proceed to castrate young pigs when a rupture appears in one side of scrotum? I have several such cases in one litter. W. F. F., Otter Lake, Mich.—If the hernia is inguinal protruding into scrotal sack with testicle, then operate by the covered operation, which means to cut through the skin and expose testicle, applying either a clamp or ligature to slough off testicle and covering tunic, thereby preventing protrusion of bowel. However, it is not necessary to use clamp, if you use stitches or ligature. Kindly understand cleanliness and septic measures should be used in order to insure a recovery in all cases. If you have never done surgical work of this kind, I am inclined to believe you should secure

the services of a competent veterinarian to demonstrate how the operation should be performed. To castrate a ruptured hog in the ordinary way, is apt to prove fatal. In ventral hernia, open sack, bring edges of muscles together with heavy catgut, stitching wound and leaving the catgut in, but remove silk stitches from skin.



Kreso Dip No. 1

CURES SCAB

A DIP THAT DOES THE WORK WITHOUT INJURY

TO THE ANIMAL OR FLEECE
NO BURNING OF THE FIBRES;
NO STAINING; NO POISONING;
NO SICKENING.

WHY USE DIPS THAT HAVE THESE DESTRUCTIVE AND DANGEROUS QUALITIES? WHY EXPERIMENT WITH UNKNOWN PREPARATIONS?

KRESO DIP No. 1

STANDARDIZED

INEXPENSIVE, EASY TO USE

PERMITTED BY THE U.S. DEPARTMENT OF AGRICULTURE FOR THE OFFICIAL DIPPING OF SHEEP FOR SCAB

FOR SALE BY ALL DRUGGISTS
WE HAVE BOOKLETS GIVING FULL DIRECTIONS FOR USE ALSO MANY VALUABLE HINTS ON HANDLING SHEEP. WRITE FOR FREE COPIES.

PARKE, DAVIS & Co.
DEPARTMENT OF ANIMAL INDUSTRY
DETROIT, MICH.



Pratts Animal Regulator
has for forty years been the standard live-stock conditioner. 25c, 50c, \$1, \$3.50

Pratts Colic Cure
(Veterinary)
Sure cure for colic and indigestion, \$1
"Your money back if it fails"
Sold by dealers everywhere, or
PRATT FOOD CO.
Philadelphia
Chicago

DYNAMITE
Will accomplish more work in removing stumps, rocks, etc., also planting trees, digging ditches, etc., than twenty men. It's effective, safe and easily used; guaranteed Standard Brand; shipped direct from Mill in this state; lowest prices. No salesmen. Established over 30 years. Write for full particulars.
BRUNS POWDER CO.
TERRE HAUTE, INDIANA.

We Want HAY & STRAW
We get the top price on consignments, make liberal advancements and prompt remittances.
Daniel McCaffrey's Sons Co.
PITTSBURG, PA
Reference, Washington Trust Company, or any bank in city

HAY
If you have car lots for sale it will pay you to write The E. L. RICHMOND COMPANY, Detroit, Michigan.

BIGELOW'S HOLSTEIN FARM

BREEDSVILLE, MICHIGAN.

Have for sale a five months old bull, ¾ white. His dam has an official record of 25.50 lbs. butter and is a granddaughter of Hengerveld DeKol. His sire's dam has an official record of 26.73 lbs. butter, and is a grandson of De Kol Burke. First check for \$125 takes this fine youngster.

Another—same sire from a 22.83 lb. dam, 6 months old—\$90.

Another—same sire from a 20.27 lb. dam, 9 months old—\$85.

Another—same sire from a 20.41 lb. dam, 7 months old—\$80.

And two 4 and 5 months old by same sire \$35 and \$45, out of good milking dams.

MARKETS

DETROIT WHOLESALE MARKETS.

September 18, 1912.

Grains and Seeds.

Wheat.—The wheat market is slightly stronger than a week ago. Most of the bearish news is from this side which consists of large crops being gathered in the different wheat sections and the delivery of large quantities of wheat at western grain centers. The bullish news is made up of the strong demand for flour, causing millers to seek cash grain, and the urgent request coming from abroad due to a shortage on the European markets. South America is shipping in little wheat and most of the European countries report a smaller crop than has usually been produced. Altogether, conditions have caused cash wheat to advance while futures remain about the same as a week ago. The visible supply increased nearly 4,000,000 bushels. One year ago the price for No. 2 red wheat on the local market was 90c per bu. Prices for the past week are as follows:

	No. 2	No. 1	Red.	White.	Dec.	July.
Thursday	1.06½	1.05½	1.09½	1.13		
Friday	1.07½	1.06½	1.10½	1.13½		
Saturday	1.07½	1.06½	1.10½	1.14		
Monday	1.07½	1.06½	1.09½	1.13½		
Tuesday	1.07	1.06	1.09½	1.13½		

Corn.—The improved outlook in this crop has lent the trade a bearish tone. Recent weather conditions have encouraged the crop and increased the probability of a larger portion of it maturing. As a result prices have declined about six cents during the week. Early this week indications of frost offered a little strength, but as little or no damage resulted from this source, prices dropping 3c on Monday and 2c on Tuesday. A year ago the price for No. 3 corn was 68½c per bu. Quotations are as follows:

	No. 3	No. 3
	Corn.	Yellow.
Thursday	81	83½
Friday	80	82
Saturday	80	82
Monday	77	79
Tuesday	75	77

Oats.—Oat offerings continue liberal, thus giving an easier tone to the trade. Prices show a half cent decline from last week. A large crop of oats in Europe is curtailing the trade from that quarter. One year ago the local price for standard oats was 45½c per bu., or 10c above present quotations. The visible supply shows an increase of over 1,000,000 bu. Following are the quotations for the week:

	Standard.	Oat.
Thursday	35½	35
Friday	35½	35
Saturday	35½	35
Monday	35½	35
Tuesday	35½	35

Beans.—But little activity is apparent in this trade. Cash beans were marked down 20c last Saturday. Although much damage has been done this crop by excessive rains this season the past several days has improved the outlook. Following are the nominal quotations for the week:

	Cash	Oat.
Thursday	2.70	2.30
Friday	2.70	2.30
Saturday	2.50	2.30
Monday	2.50	2.30
Tuesday	2.50	2.30

Clover Seed.—The tone of this trade has improved. The few days of hot, clear weather favored filling, but the rains since have made the outlook appear more discouraging than it has been thus far this season. As a result prices have advanced from the low level reached last week. Alsike shares in the higher values. Quotations are as follows:

	Oat.	Alsike.
Thursday	10.75	11.75
Friday	10.75	11.75
Saturday	10.75	11.75
Monday	11.00	11.75
Tuesday	11.00	11.75

Rye.—An improved demand for this grain advanced prices last week 2c. No. 2 rye now being quoted at 73c per bu.

Timothy Seed.—The gradual decline in quotations for timothy seed has finally been checked and the price remains the same as one week ago, it being \$2.10 per bu. for prime spot.

Flour, Feed, Potatoes, Etc.

Flour.—Market is active with prices unchanged.

Straight	\$5.20
Patent Michigan	5.80
Clear	4.50
Rye	5.00

Feed.—All classes of feed continue steady with last week. Carlot prices on track are: Bran, \$28 per ton; coarse middlings, \$28; fine middlings, \$31; cracked corn and coarse corn meal, \$34; corn and oat chop, \$31 per ton.

Hay and Straw.—Hay is weaker and rye straw higher. Quotations are: No. 1 timothy, \$16.50@17; No. 2 timothy, \$15@16; clover, mixed, \$13@16; rye straw, \$10@10.50; wheat and oat straw, \$8@9 per ton.

Potatoes.—There is promise of a good crop of potatoes in most sections of the country and prices are depressed in most of the large markets. Detroit's decline amounting to 15c. They are going slowly at 35@40c per bu. The ruling price for southern offerings is \$2 per sack.

Provisions.—Family pork, \$22@23; mess pork, \$26; clear, backs, \$21@24; hams, 15½@16½c; briskets, 12½c; shoulders, 13c; picnic hams, 12½c; bacon, 16½@18c; pure lard in tiers, 12½c; kettle rendered lard, 13½c per lb.

Dairy and Poultry Products.

Butter.—The advanced price in creamery butter noted last week has been maintained, with first creamery a half cent higher. The condition of the trade appears to be on a firm basis of supply and demand. Dairy stock remains steady. Quotations are: Fancy creamery, 29c; first creamery, 27½c; dairy, 21c; packing stock, 19c per lb.

Eggs.—This product continues firm. There is little change in the output and the demand is given strength by the increase in meat prices. Current receipts candled, cases included, are quoted at 24c per dozen, the price given a week ago.

Poultry.—The tone of this trade is easy. There is very little activity due to the supply being sufficient to care for an inactive demand. Broilers are down a little as is also true of ducks. Quotations are as follows: Broilers, 16c per lb.; hens, 13@13½c; No. 2 hens, 9@70c; old roosters, 9@10c; turkeys, 15@16c; geese, 8@9c; ducks, 12@13c; young ducks 14@15c per lb.

Veal.—All grades steady. Fancy, 13½@14c per lb; choice, 9@10c.

Cheese.—Market steady. In wholesale lots, Michigan flats, 14½@15c; York state flats, 16½@16½c; limburger, 14@15c; domestic Swiss, 17½@18½c; brick cream, 14½@14½c.

Fruits and Vegetables.

Peaches.—Offerings restricted and prices advanced under a good demand. Fancy Elbertas, \$2.50; AA, \$2.25; A, \$2; B, \$1.50 per bushel.

Pears.—Bartletts are quoted at \$1.50@1.75 per bu.

Plums.—Steady. Per bu., \$1.25@1.60.

Apples.—New apples are quoted at \$1.75@2.25 for fancy, and \$1@1.50 for common; poor, 75c@1 per bbl. Good apples by the bushel are selling at 40@60c.

Grapes.—More's Early, per 8-lb. basket, 15c; Champion, 14c; Worden, 16c.

Honey.—Choice to fancy comb, 15@16c per lb; amber, 12@13c.

Tomatoes.—Per bushel, 40@50c.

Onions.—Per bushel, 75c.

OTHER MARKETS.

Grand Rapids.

Four hundred loads of fruit and farm produce were offered on the city market Tuesday morning. Tomatoes were in good supply but sold readily at 60c. Fifty loads of potatoes went at 40@50c. Other produce sold as follows: Cucumbers, 40@50c; corn, 10c; cabbage, 25@35c; cauliflower, 1¢ per doz; celery, 15c; watermelon, 40c; muskmelon, 50c@1. Fruit brought the following prices: Peaches, \$2.25@2.50; pears, \$1.50; plums, \$1@1.75; apples, 50@65c; grapes, \$1.25 per bushel. Hay is worth \$12@15; dressed hogs, 10½@11c. Live fowls are quoted at 10c.

Chicago.

Wheat.—No. 2 red, \$1.05@1.07; Dec., 90½c; May, 95½c.

Corn.—No. 3, 68½@69½c; Dec., 52½c; May, 52c.

Oats.—No. 2 white, 35@35½c; Dec., 32½c; May, 34½c.

Butter.—Receipts are somewhat lighter than usual at this season, holding the market very firm at last week's advance. Quotations: Creameries, 24@28c; dairies, 22½@24½c.

Eggs.—The better grades of eggs have made a further gain of ½c during the past week. Market firm. Quotations: Firsts, 21½c; ordinary firsts, 19½c; at mark, cases included, 17½@18½c per doz.

Potatoes.—Gradually increasing receipts is lowering values, the loss for the week running from 2c to 5c. Michigan stock quoted at 45@48c; Minnesota, 40@45c; Wisconsin, 40@48c.

Beans.—There is an undertone of strength in this market and last week's outside quotations are being firmly maintained. Pea beans, choice, hand-picked, \$3 per bu; prime, \$2.90; red kidneys, \$2.50@2.75.

Hay and Straw.—All grades of hay except clover are lower. Oat straw higher; other kinds lower. New timothy hay selling about 2¢ per ton lower than old. Quotations: Timothy, choice, \$19@20; No. 1, \$17@18; No. 2 and No. 1 mixed, \$14@16; clover, \$7@12; No. 2 and no grade, \$5@7; alfalfa, choice, \$16@17; No. 1 \$14@15; No. 2, \$10@13. Straw—Rye, \$7@8; wheat, \$6.50@7; oat, \$7.50@8.50.

New York.

Butter.—Market firm under another advance of 1c on the better grades of creamery. Quotations: Creamery, special extras, 29¾@30c; do., firsts, 27½@29c; seconds, 25½@27c; factory do., June make, firsts, 23@23½c.

Eggs.—All offerings meeting a good demand at prices ranging from 1 to 3c above last week's figures. Fresh gathered extras, 29@31c; extra firsts, 26@28c; firsts, 24@25c per dozen.

Poultry.—Dressed—Firm, with prices practically unchanged. Fresh killed western chickens, 18@24c; fowls, 15@17½c; turkeys, 16@17c per lb.

Boston.

Wool.—There continues to be an active market for wool. The volume of trading past week was less than for the former week, but still of sufficient size to indicate a strong interest in the trade. There continues to be an insistent demand for fleeced wools, there being indications that the supply will be short of the wants of manufacturers. A considerable quantity of Michigan ½-blood was sold at 28½c. Michigan mediums are quoted at 30c and fine unwashed at 21½@23c. There is a moderate demand for all kinds of territory wools. Pulled wools are quiet.

Elgin.

Butter.—Market is firm at 28c per lb., which is an advance of ½c over last week's quotation.

THE LIVE STOCK MARKETS.

Buffalo.

September 16, 1912.

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

Receipts of stock here today as follows: Cattle, 225 cars; hogs, 102 double decks; sheep and lambs 110 double decks; calves, 1,500 head.

With 225 cars of cattle on our market here today, and with the weather very rainy and warm, and without a load of strictly good cattle in the whole day's receipts, we quote the market 10@15c per cwt. lower than last week.

We quote: Best 1,350 to 1,500-lb. steers \$9@9.50; good prime 1,200 to 1,300-lb. do., \$8.50@8.75; do. 1,100 to 1,200-lb. do., \$8.25@8.65; medium butcher steers, 1,000 to 1,100, \$7@7.50; butcher steers, 950 to 1,000, \$6.50@7; light butcher steers, \$6@6.25; best fat cows, \$5.50@6; butcher cows, \$4.50@5; light butcher cows, \$3.50@4; trimmers, \$3@3.25; best fat heifers, \$7@7.50; medium butcher heifers, \$6@6.50; light butcher heifers, \$4.50@5; stock heifers, \$4@4.25; best feeding steers, dehorned, \$6@6.50; common feeding steers, \$4.75@5; light stockers, \$4.50@5; prime export bulls, \$5.75@6; best butcher bulls, \$5.25@5.50; bologna bulls, \$4@4.50; stock bulls, \$4@4.50; best milkers and springers \$6@70; common kind do., \$35@40.

Receipts of hogs here today were very liberal, something over 100 double decks, and the general run of the hogs poor in quality, lacking much in weight, and a scarcity of choice 200-lb. hogs was noted here today. Supplies at western markets were not excessive, but with so many of one kind here, market suffered a severe setback, general sales being 25@35c below Saturday's best time. Best hogs selling at 9c generally, with a few decks of selected yorkers a little more, with a good many of the ordinary hogs from \$8.75@8.90. Pigs, as to quality, sold from \$8.25@8.50; roughs generally, \$7.50; stags \$6.50@7. The closing market was extremely dull on anything but the best. Good many pigs and full eight or ten double decks of yorkers going over unsold. The prospects not very favorable on the ordinary grades of hogs.

The sheep and lamb market was fairly active today, with prices about a quarter lower than the close of last week; most of the choice lambs selling from \$7.50@7.60. Yearlings, \$5@5.75. Look for about steady prices the balance of the week.

We quote: Choice lambs, \$7.50@7.60; cull to fair do., \$5.50@7; yearlings, \$5@5.75; bucks, \$2.50@3; wethers, \$4.75@5; handy ewes, \$4@4.25; heavy ewes, \$3.75@3.85; cull sheep, \$2@3; veals, choice to extra, \$10.75@11; fair to good, \$7.50@10.50; heavy calves, \$4.50@6.

Chicago.

September 16, 1912.

Cattle. Hogs. Sheep.
Receipts for week...50,777 101,250 130,725
For previous week...45,098 98,679 134,629
Same week last year...57,488 91,766 165,856
Shipments for week...16,935 27,212 28,878
For previous week...17,643 28,605 27,894
Same week last year...22,260 11,817 77,543

The cattle run today embraced about 8,000 head from the western ranges, and a new high record was made for the best range steers by the sale of a consignment at \$9.65. The top for natives was \$10.85, choice beeves remaining firm, with no large supply. Otherwise the steer market was slow, weak and partly a dime lower, although early sales of fat cows and heifers looked a little higher in several instances. Hogs broke 5@10c with fair animation, sales ranging at \$7.90@8.90. The average weight of the receipts for two weeks in succession has been 235 lbs., which compares with 225 lbs. a year ago and 259 lbs. two years ago. Sheep and lambs were in active general demand at former prices.

New record for prime heavy beeves, \$10.90, and \$10.35 for yearlings, also a new price, were stellar features of last week's market. All below prime grade beeves, however, sold lower, Jewish holidays, which shut off the Kosher demand for big steers and generous runs of immature cattle in the west being bearish factors. Market for the common to choice steers closed 15@25c lower in most instances and bulk showed a 25c decline while some light steers went at 30@40c decline. Range cattle run of 11,000 on the other hand, had strong demand and sold 10@15c higher. Prime range beeves equalled previous record price of \$9.50 and bulk of 1,100 to 1,250-lb. westerns went at \$7.25@8.10. These were kinds which came in direct competition with the medium to good handy weight native steers, later of value at \$8.10@9.25. Bulk of the good 1,300-lb. steers sold at \$9.50@10, while for native grassers it was a \$6.50@7.85 deal, but kinds below \$7 had a small claim to killing quality. Feeder cattle market was weak on a big supply and influenced by heavy runs of feeders at western points. Thin steers of class below choice declined 15@25c from the week before, selling at \$5@6.50 while the choice 800 to 1,040-lb. feeders held at stationary rates, these making \$6.75@7.45. Stockers went at \$4.75@5.35 for poor to fair and selected stock steers landed up to \$6.60. Fat cows sold at \$5.50@9, latter being a record, and most heifers made \$5.75@7.50. Canner cows brought \$2.50@3.25 and cutters \$3.50@4.20. Bulls declined 25@35c, selling at \$3.75@6.60. Calves were also off \$1 at the close, choice making \$11 against a top of \$12 recently. Milk and springers were \$3@5 lower than the week before and \$10 off from top point this season, selling at \$35@85, a bulk of good cows at \$55@70.

Hogs declined last week, the light and butcher weights going down mostly 25c from top levels recently, but there was packer partiality for heavy and mixed packing classes and these were maintained on a price basis little different from levels shown at the start of the month. More generous receipts have been had since the market turned higher a short time back, but now that packers have punished prices a shut off in the runs

is expected. The good call for packing hogs is significant of free action in lard trade and there is no complaint of dull consumer call for loins and hams. The hog meats are moving freely into consumer channels by reason of the public having cut down on beef consumption since price of the latter commodity has gone to new record high level. Matured hogs are scarcer than usual at this time of year and the trade is looking for small supplies in the next two months, which strengthens belief in the final materialization of much higher prices. The government report on stock hogs for Sept. 1 stated that there are 9.2 per cent fewer of them now than a year ago and hog condition as to health is 92, against 95.7 a year ago and 95.2 for the past ten-year average. Light hogs sold at a premium over other grades, topping at \$9 and common lights going down to \$8.40. Mixed packing made \$8.10 and \$8.50, medium and butchers at \$8.55@8.95 and the heavy packing kinds went at \$7.90@8.35 with pigs at \$6.10@7.75 and light-lights up to \$8.25@8.50.

Lambs had decidedly the best demand in ovine trade, advancing 25@40c in last week while yearlings went 25c higher and the ewes and wethers declined 10@15c from the previous week's basis. Range stock continued to predominate in the supply and quality was good. Only a small run of feeder stuff has been at market thus far in the month and for the year to date there is said to be a shortage of 180,000 feeder sheep and lambs received at the five principal western markets. Prime range lambs sold at \$7.50@7.75 with a fair to good kind at \$7.15@7.40 while feeders paid \$6@6.70 for a small crop of thin western lambs. Native lambs sold at \$5@7.60 and native and range yearlings at \$5.50@5.75. Plain to fair wethers brought \$4.25@4.65 and culls sold down to \$3.25@3.75. Native and range ewes of fair to good grade sold at \$3.50@4.35 and culls at \$2.50@3. Feeding yearlings made \$4.75@5.50 and feeding wethers \$3.90@4.50.

In horse trade some improved general demand was shown for all above common work and animals and strong prices were paid last week, although the trade did not quote sales materially higher. Call continues firmest for the heavy drafters which go at \$260@300 while fair draft horses have made \$200@225. Chunks weighing 1,250 to 1,400 lbs. sold at \$150@200 and general purpose horses weighing 1,050 to 1,300 lbs. brought \$165@200. Choice heavy feeders went at \$210@260 and medium weight feeders made \$140@200, with 1,100 to 1,450-lb. farm workers at \$100@200.

LIVE STOCK NOTES.

John Clay, Chicago commission merchant, who keeps close tab on western range conditions, and has just returned from a survey of the range country, says he has never seen more luxuriant growth of feed or better conditions for making beef. While the 1912 range beef supply will be short in numerical sense, cattle will come to market in generally good killer condition, and much superior to that of last year. The northwestern hay crop, Mr. Clay says, is the largest in history, a condition calculated to expand hay-feeding operations and keep thin cattle away from eastern markets. Sections that have never given winter feeding any attention heretofore are now considering it. Mr. Clay found a conspicuous shortage of good young cattle available for disillery and other feeding purposes everywhere in the northwest.

"Montana has a generous crop of aged wethers and they are for the most part fat," said G. B. Traub, a big sheepman of that state, who recently marketed a shipment of ovine stock at Chicago. "However, market conditions recently have not been such as to cause flockmasters to send in rush orders for cars. There is a general impression among sheepmen in Montana that sheep will be worth more money later this season. They are selling 50c higher now than a few weeks ago, and if they do not advance more it will not be because further advances are not warranted by the high level of cattle and hogs. The Montana lamb crop last spring was a short one and the lamb delegation to come this fall from that state will be smaller than of late years because of the shortness of supply, since winter feed will be abundant and there is also an excellent home demand for lambs, as well as young ewes from Canadian buyers. A great many stock ewes and some lambs have been shipped from Montana into Canada and Wyoming this fall."

Hog cholera is hitting sections of Illinois, Iowa, and Missouri to an extent which gives the trade cause for no little alarm. Many sick pigs are coming into the markets, particularly at Chicago and East St. Louis. It is a usual thing at this time of year for hog cholera reports to come with more or less regularity but not in recent years has the direct evidence of sickness, (generous shipping of pigs), been as noted as now. Feeding of new corn has developed a colicky condition among many pigs which owners have evidently thought was due to the cholera and this accounts for a part of the big shipping of pigs, although it is not the only reason by any means.

Hog prices have recently gone to new high levels and the trade is destined to go still higher, according to market experts. It is a logical trend of affairs at this time since shortage is looming up and the big marketings of pigs only serve as a drain upon future supply of matured stock. Hogs have been worth the money to packers for a long time past, and they are finding a good demand for fresh meats, lard, and the salted pork parts. An \$8@9.25 market for hogs recently is expected to give way to a \$9@10 trading basis before many months have passed, and the big corn crop this season should prove a great stimulus to increased pork production.

THIS IS THE LAST EDITION.

In the first edition the Detroit Live stock markets are reports of last week; all other markets are right up to date. Thursday's Detroit Live Stock markets are given in the last edition. The first edition is mailed Thursday, the last edition Friday morning. The first edition is mailed to those who care more to get the paper early than they do for Thursday's Detroit Live Stock market report. You may have any edition desired. Subscribers may change from one edition to another by dropping us a card to that effect.

DETROIT LIVE STOCK MARKETS.

Thursday's Market.
September 19, 1912.

Cattle.

Receipts, 2,254. Market 10@15c lower than on Wednesday; canners very dull; general market about same as last week.

We quote: Extra dry-fed steers, \$8@9; steers and heifers, 1,000 to 1,200, \$6@7.50; do. 800 to 1,000, \$5@6; grass steers and heifers that are fat, 800 to 1,000, \$4.25@5.50; do. 500 to 700, \$4.25@4.75; choice fat cows, \$5.25@6.50; good fat cows, \$4.50@5; common cows, \$3.25@3.95; canners, \$2@3; choice heavy bulls, \$4.75@5.25; fair to good bolognas, bulls, \$4@4.50; stock bulls, \$3.25@3.75; choice feeding steers, 800 to 1,000, \$5.25@5.75; fair do., 800 to 1,000, \$4.50@5; choice stockers 500 to 700, \$4.50@5.10; fair stockers, 500 to 700, \$3.75@4.25; stock heifers, \$3.50@4; milkers, large, young, medium age, \$4@6.50; common milkers, \$2.50@3.50.

Haley & M. sold Rattowsky 4 cows av \$12 at \$4.15; to Hammond, S. & Co. 3 bulls av 1,000 at \$4.35, 2 steers av \$35 at \$6, 7 cows av \$30 at \$4.40; to Newton B. Co. 2 butchers av \$85 at \$4.10, 2 do av \$50 at \$4.25; to Morgan 2 stockers av \$90 at \$5; to Thompson Bros. 6 butchers av \$63 at \$4.30; to Hills 7 stockers av \$33 at \$4.75, 8 do av \$30 at \$5, 5 do av \$58 at \$4.55, 10 do av \$40 at \$5, 4 do av \$47 at \$4.50; to Breitenbeck 1 cow weighing 880 at \$3.50, 5 do av \$44 at \$4.40; to Hirschman 4 butchers av 700 at \$5; to Hammond, S. & Co. 1 bull weighing 1,000 at \$4.35; to Kamman B. Co. 18 butchers av \$80 at \$4, 13 do av \$73 at \$4.75; to Bresnahan 16 do av \$24 at \$4, 5 cows av \$30 at \$3.30, 7 do av \$21 at \$3.25, 8 do av \$71 at \$3.25, 3 do av \$53 at \$3.40; to LaBoe 6 heifers av \$30 at \$5; to Hills 15 stockers av \$44 at \$5; to Goose 12 butchers av \$50 at \$4.10; to Rattowsky 5 cows av \$10 at \$4.50; to Hammond, S. & Co. 2 do av \$45 at \$3.60; to Lachalt 12 butchers av \$70 at \$4.90; to Sullivan P. Co. 1 bull weighing 1,070 at \$5, 6 butchers av \$48 at \$2.90; to Mich. B. Co. 5 bulls av \$20 at \$4.10; to Regan 6 heifers av \$26 at \$4.35; to Sullivan P. Co. 9 cows av \$50 at \$4.10; to Kamman 16 steers av \$40 at \$5.25.

Roe Com. Co. sold Bray 5 cows av \$32 at \$3.50, 1 do weighing 700 at \$3, 5 do av \$88 at \$3.50, 1 do weighing 820 at \$3, 13 do av \$29 at \$3.50; to Sullivan P. Co. 11 do av 1,000 at \$4.25, 15 stockers av \$48 at \$4.25, 2 do av \$35 at \$5; to Morgan 1 feeder weighing 930 at \$5; to Mich. B. Co. 5 steers av 1,170 at \$6.75; to Kamman B. Co. 7 do av \$45 at \$5.50, 5 cows av \$32 at \$5; to Parker, W. & Co. 2 bulls av 1,065 at \$4.50, 4 do av \$45 at \$4.50, 4 cows av \$35 at \$4.25, 1 do weighing 1,280 at \$4.50, 26 steers av \$20 at \$6.25; to Kamman B. Co. 5 do av \$44 at \$5.50; to Bray 3 cows av \$23 at \$3.75, 1 do weighing 1,000 at \$3, 3 do av \$73 at \$3.25; to Thompson Bros. 3 steers av \$83 at \$5.25, 4 butchers av \$70 at \$4.25; to Parker, W. & Co. 2 bulls av \$30 at \$4.50, 10 butchers av \$15 at \$4.25; to Morgan 5 stockers av \$49 at \$4.50, 11 do av \$23 at \$4.90, 17 do av \$40 at \$4.25; to Rattowsky 2 cows av \$80 at \$4.15; to Havlin 1 do weighing 1,050 at \$4.75, 1 heifer weighing 680 at \$5.25; to Fisher 1 cow weighing 1,160 at \$5.25, 2 heifers av \$10 at \$5, 2 cows av \$70 at \$3; to Prucka 5 stockers av \$30 at \$4, 1 heifer weighing 730 at \$4.50; to Rattowsky 2 cows av \$50 at \$5.25, 8 butchers av \$46 at \$4.

Bishop, B. & H. sold Breitenbeck 24 butchers av \$80 at \$4.85; to Bresnahan 7 cows av \$70 at \$3.25, 6 bulls av \$29 at \$3.75, 8 stockers av \$52 at \$4.25, 2 do av \$50 at \$3.75; to Parker, W. & Co. 4 butchers av \$72 at \$4, 1 bull weighing 900 at \$4.50, 7 butchers av \$74 at \$4.25, 5 steers av \$36 at \$5.75; to Hill 8 stockers, av \$30 at \$3.90, 7 do av \$60 at \$4.75, 7 do av \$40 at \$4.75; to Fry 12 butchers av \$77 at \$5; to Mason Bros. 4 stockers av \$60 at \$4.85; to Kuchta 16 steers av 1,004 at \$7; to Rattowsky 4 do av \$90 at \$5, 2 heifers av \$70 at \$4; to Bray 5 canners av \$66 at \$3.25; to Sullivan P. Co. 11 butchers av \$72 at \$4.60, 1 bull weighing 1,180 at \$5.50; to Hammond, S. & Co. 11 butchers av \$84 at \$4.15, 2 cows av \$45 at \$3.25, 27 butchers av \$52 at \$4.35, 6 do av \$91 at \$4.35; to Hill 3 stockers av \$60 at \$5; to Applebaum 2 cows av \$75 at \$4.10; to Fisher 9 stockers av \$22 at \$5.10, 2 do av \$55 at \$4.50; to Newton B. Co. 11 butchers av 1,015 at \$4.75, 5 do av \$56 at \$3.75, 2 cows av \$10 at \$3.50; to Thompson Bros. 9 butchers av \$70 at \$4.85; to Sullivan P. Co. 3 bulls av \$33 at \$3.75, 1 do weighing 1,300 at \$5, 11 butchers av \$70 at \$4.80; to Heinrich 32 do av \$80 at \$5, 14 steers av \$72 at \$5.90.

Spicer & R. sold Bray 3 canners av \$73 at \$3, 1 cow weighing 790 at \$3.50, 2 cows av \$70 at \$3.40, 2 do av \$55 at \$3.50; to Gerisch 1 do weighing 1,400 at \$6.75; to Morgan 11 stockers av \$41 at \$4.50, 3 do av \$45 at \$4.25, 2 do av \$25 at \$5; to Gerisch 14 steers av 1,060 at \$7.50; to Parker, W. & Co. 5 do av \$44 at \$6; to Sullivan P. Co. 3 bulls av 1,320 at \$5, 3 do av \$10 at \$4; to Bray 3 cows av \$80 at \$3.25.

Campbell & W. sold Hill 8 feeders av \$81 at \$5.30.

Same sold Bray 2 cows av \$50 at \$4, 3 do av \$70 at \$3.50.

Coon sold same 1 heifer weighing 880 at \$6.50, 5 cows av \$28 at \$3.25.

Campbell & W. sold Bresnahan 11 butchers av \$70 at \$4.60.

Veal Calves.

Receipts, 471. Market steady with last week; quality very common. Best, \$10 @11; others, \$4@9.

Roe Com. Co. sold Hammond, S. & Co. 1 weighing 230 at \$6, 1 weighing 210 at

\$10, 4 av 200 at \$11, 3 av 120 at \$8; to Goose 6 av 200 at \$4.75, 7 av 155 at \$4.75, 4 av 180 at \$4.75; to Hammond, S. & Co. 1 weighing 110 at \$8, 5 av 140 at \$10.50; to Thompson Bros. 2 av 175 at \$10.50, 2 av 175 at \$10.50; to Burnstone 2 av 150 at \$7, 3 av 150 at \$10.50.

Spicer & R. sold Schufel 2 av 205 at \$5.50; to Burnstone 1 weighing 120 at \$9, 1 weighing 130 at \$10; to Applebaum 2 av 130 at \$8.50; to Parker, W. & Co. 3 av 150 at \$10, 1 weighing 250 at \$5; to Thompson Bros. 2 av 100 at \$8, 6 av 140 at \$10.50, 1 weighing 160 at \$11; to McGuire 5 av 150 at \$10.

Bishop, B. & H. sold Parker, W. & Co. 7 av 125 at \$10, 3 av 130 at \$10, 1 weighing 250 at \$7, 1 weighing 120 at \$9.50; to Goose 1 weighing 140 at \$11, 10 av 227 at \$4.75, 15 av 225 at \$5, 11 av 230 at \$4.50, 7 av 240 at \$4.50, 1 weighing 140 at \$10.50, 2 av 200 at \$8, 1 weighing 130 at \$11; to Hammond, S. & Co. 5 av 145 at \$10.50, 3 av 350 at \$5.50; to McGuire 3 av 170 at \$11; to Parker, W. & Co. 4 av 155 at \$10.50, 2 av 180 at \$10, 3 av 210 at \$7, 4 av 170 at \$10.50; to Newton B. Co. 6 av 145 at \$10.50, 6 av 165 at \$10.50; to McGuire 3 av 250 at \$6, 6 av 155 at \$10.

Haley & M. sold Newton B. Co. 2 av 105 at \$7, 10 av 135 at \$10; to Burnstone 1 weighing 220 at \$7, 6 av 153 at \$10; to Shaparo 3 av 210 at \$5; to Sullivan P. Co. 12 av 225 at \$4.50, 6 av 180 at \$4.50; to Burnstone 11 av 140 at \$10; to Newton B. Co. 1 weighing 150 at \$10, 2 av 130 at \$5, 2 av 205 at \$7.25.

Sheep and Lambs.

Receipts, 5,004. Market steady at Wednesday, and prices 15@25c higher than last week's close. Best lambs, \$6.75@7; fair to good lambs, \$6.25@6.50; light to common lambs, \$5@5.50; wethers, \$4.25@4.50; fair to good sheep, \$3@3.75; culls and common, \$2@2.50.

Bishop, B. & H. sold Sullivan P. Co. 3 sheep av \$0 at \$2, 10 lambs av 48 at \$4.50, 5 yearlings av 70 at \$4, 18 lambs av 70 at \$6.50; to Newton B. Co. 38 do av 79 at \$6.85; to Thompson Bros. 31 do av 65 at \$6.25; to Parker, W. & Co. 18 do av 55 at \$5.50, 59 do av 70 at \$6.75; to Hammond, S. & Co. 18 sheep av 150 at \$3.50, 9 do av 100 at \$2.50, 35 do av 115 at \$3.50, 128 lambs av \$5 at \$6.90, 20 lambs av 60 at \$5.50, 23 sheep av 95 at \$3, 39 do av 125 at \$2.25, 13 do av 110 at \$3, 12 yearlings av 100 at \$4, 12 do av 80 at \$4; to Brown 70 sheep av 100 at \$3, 15 do av 80 at \$3, 63 lambs av 55 at \$5.75; to Sullivan P. Co. 80 lambs av 80 at \$7, 81 do av 75 at \$6.65; to Parker, W. & Co. 39 do av 60 at \$6, 50 do av 52 at \$5; to Nagle P. Co. 138 do av 80 at \$6.90, 46 do av 70 at \$6.75, 44 do av 73 at \$6.85; to Newton B. Co. 35 yearlings av 75 at \$5, 31 lambs av 65 at \$6.50; to Fitzpatrick Bros. 35 do av 70 at \$6.75; to Young 35 do av 95 at \$5; to Fitzpatrick Bros. 11 do av 85 at \$5, 28 do av 105 at \$3.50, 31 do av 115 at \$3.65.

Spicer & R. sold Mich. B. Co. 25 lambs av 53 at \$5.10, 16 sheep av 110 at \$3.35, 22 do av 105 at \$3.25, 42 lambs av 75 at \$6.40, 46 do av 75 at \$6.40; to Sullivan P. Co. 6 do av 75 at \$6.50, 46 do av 75 at \$6.50, 11 sheep av 100 at \$2.75; to Hayes 19 do av 80 at \$2.50.

Sharp sold Mich. B. Co. 68 lambs av 63 at \$6.40, 48 sheep av 120 at \$3.35.

Roe Com. Co. sold Hammond, S. & Co. 40 lambs av 70 at \$6.50, 8 do av 55 at \$5.50.

Kendall sold Mich. B. Co. 14 sheep av 120 at \$3.25, 67 lambs av 75 at \$7.

McLachlin sold Newton B. Co. 18 lambs av 55 at \$6, 14 sheep av 95 at \$3.50.

Haley & M. sold Mich. B. Co. 65 sheep av 120 at \$3.50; to Newton B. Co. 73 lambs av 73 at \$6.50, 144 do av 70 at \$6.50, 15 do av 80 at \$6.50, 124 do av 73 at \$6.60, 31 do av 80 at \$6.60, 60 do av 70 at \$6.25; to Mich. B. Co. 55 sheep av 115 at \$3.50, 21 do av 95 at \$3.25; to Hayes 29 lambs av 55 at \$4.50, 26 do av 50 at \$5.50.

Taggart sold Hammond, S. & Co. 47 lambs av 70 at \$6.50, 13 yearlings av 100 at \$4.

Hogs.

Receipts, 3,326. Market looks 10c higher than on Wednesday, or 25c lower than last week; none sold up to noon.

Range of prices: Light to good butchers, \$8.25@8.65; pigs, \$7@7.85; light yorkers, \$8@8.65; heavy, \$8@8.65; stags one-third off.

Bishop, B. & H. sold Parker, W. & Co. 520 av 200 at \$8.60, 1,010 av 155 at \$8.55, 1,060 av 160 at \$8.50, 500 av 140 at \$8.40, 150 av 130 at \$8.25.

Roe Com. Co. sold Sullivan P. Co. 250 av 200 at \$8.60, 240 av 190 at \$8.55, 150 av 180 at \$8.50.

Spicer & R. sold Hammond, S. & Co. 61 av 180 at \$8.50, 12 av 200 at \$8.60, 109 av 140 at \$8.40.

Haley & M. sold same 125 av 200 at \$8.60, 140 av 190 at \$8.50, 160 av 140 at \$8.40.

Friday's Market.

September 13, 1912.

Cattle.

Receipts this week, 1,950; last week, 2,143. Market steady at Thursday's prices. We quote: Extra dry-fed steers \$8@9; steers and heifers, 1,000 to 1,200, \$6.75@7.50; do. 800 to 1,000, \$5@6; grass steers and heifers that are fat, 800 to 1,000, \$4.25@5.50; do. 500 to 700, \$4.25@4.75; choice fat cows, \$5.25@5.75; good do., \$4.50@5; common cows, \$3.50@4; canners \$2@3.25; choice heavy bulls, \$4.75@5.50; fair to good bologna bulls, \$4.25@4.50; stock bulls, \$3.25@3.75; choice feeding steers, 800 to 1,000, \$5.25@5.75; fair feeding steers, 800 to 1,000, \$4.50@5; choice stockers, 500 to 700, \$4.50@5.25; fair do., 500 to 700, \$3.75@4.25; stock heifers, \$3.50@4; milkers, large, young, medium age, \$4@6; common milkers, \$2.50@3.50.

Sheep and Lambs.

Receipts this week, 7,102; last week, 6,259. Good steady; common 25c lower. Best lambs, \$7@7.25; fair to good lambs, \$6@6.25; light to common lambs, \$4@4.75; fair to good sheep, \$3@3.25; culls and common, \$2@2.25.

Hogs.

Receipts this week, 3,902; last week, 4,298. Market steady at Thursday's prices. Range of prices: Light to good butchers, \$8.75@8.90; pigs, \$7@8.25; light, \$8.50@8.85; heavy, \$8.50@8.80; stags one-third off.

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 some one else. When reply by mail is requested, it becomes private practice, and a fee of \$1.00 must accompany the letter.

Chronic Cracked Heels—Stocking.—I have a seven-year-old mare that is perhaps pregnant; her hind leg has had on it a few cracks which pretty much extend across whole hind part of leg. The leg is also stocked considerable but she is not lame. I showed her to our local Vet., he gave me medicine that we have used both externally and internally without seemingly doing her much good. She seems to play, eat and drink as well as she ever did. I have been feeding her oats and bran mash three times a day. I have also given her three tablespoonfuls of epsom salts and some sulphur with each meal. She runs on pasture daytime and is stable nights. A. R. A. Kings Mills, Mich.—Apply equal parts tincture benzoin and glycerine to sores twice a day. Also give her a tablespoonful of Donovan's solution at a dose three times a day for 30 days. If her kidneys do not act well, give her a tablespoonful of powdered nitrate potash once or twice a day.

Chronic Cough.—Have an eight-year-old gelding in good condition that has been troubled with a cough all summer and seems to be gradually growing worse. He is fed good oats and hay daytime and runs on grass nights. Can you prescribe something that will stop this cough? E. S. Mt. Pleasant, Mich.—Give your horse a dessertspoonful of fluid extract opium and 1 oz. ground licorice at a dose in feed two or three times a day. You will find it no easy task to correct a chronic cough.

Loss of Appetite—Indigestion.—Have been a reader of the Michigan Farmer for some time and have derived some benefit from the veterinary columns. I have a mare 12 years old that does not thrive, she suffers from loss of appetite and is in a run-down condition. She is lifeless and I would like to know what to give her. C. W. J. Lakeview, Mich.—Her teeth may need floating; also give her 1 dr. ground nux vomica, ½ oz. of ground gentian, ½ oz. powdered cinchona and a dessertspoonful of salt at a dose in feed three times a day. Her grain ration should perhaps be increased.

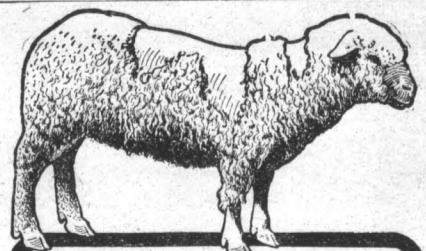
Barren Cows.—I have three heifers that have been coming in heat regularly since April, but none of them have yet gotten with calf. I would like to know if there is anything that I can do that will insure their chance of becoming pregnant. I forgot to say that I also have two cows that fail to breed. I have had my cows served by four different bulls. F. McL., Ortonville, Mich.—When your cows come in heat inject them with a soda solution made by dissolving 2 ozs. bicarbonate soda in 3 pts. of water. Do not breed the cow for three or four hours after she has been treated. An occasional treatment before heat period will have a good effect.

Sore on Coronet.—I have been a reader of the Michigan Farmer for nearly a year and have been quite interested in the veterinary columns. One of my cows has a sore foot, just noticed it a few days ago, and am not able to state how long it has been in this condition. The leg is considerable swollen, and she shows some lameness and it must annoy her for she licks it a great deal. The sore is covered with small pustules and must itch for she is inclined to lick it. I. B. Stearns, Mich.—Apply one part iodoform and ten parts boracic acid to sore twice a day, covering it lightly with oakum and a cloth. If the wound appears to be malignant apply one part carbolic acid and five parts water carefully with the point of a feather twice a day.

Castrating Ruptured Pigs.—How shall I proceed to castrate young pigs when a rupture appears in one side of scrotum? I have several such cases in one litter. W. F. F. Otter Lake, Mich.—If the hernia is inguinal protruding into scrotal sack with testicle, then operate by the covered operation, which means to cut through the skin and expose testicle, applying either a clamp or ligature to slough off testicle and covering tunic, thereby preventing protrusion of bowel.

However, it is not necessary to use clamp, if you use stitches or ligature. Kindly understand cleanliness and septic measures should be used in order to insure a recovery in all cases. If you have never done surgical work of this kind, I am inclined to believe you should secure

the services of a competent veterinarian to demonstrate how the operation should be performed. To castrate a ruptured hog in the ordinary way, is apt to prove fatal. In ventral hernia, open sack, bring edges of muscles together with heavy catgut, stitching wound and leaving the catgut in, but remove silk stitches from skin.



Kreso Dip No. 1
CURES SCAB

A DIP THAT DOES THE WORK
WITHOUT INJURY

TO THE ANIMAL OR FLEECE
NO BURNING OF THE FIBRES;
NO STAINING; NO POISONING;
NO SICKENING.

WHY USE DIPS THAT HAVE THESE DESTRUCTIVE
AND DANGEROUS QUALITIES? WHY EXPERIMENT
WITH UNKNOWN PREPARATIONS?

KRESO DIP No. 1
STANDARDIZED

INEXPENSIVE, EASY TO USE

PERMITTED BY THE U. S. DEPARTMENT OF
AGRICULTURE FOR THE OFFICIAL DIPPING
OF SHEEP FOR SCAB

FOR SALE BY ALL DRUGGISTS

WE HAVE BOOKLETS GIVING FULL DIRECTIONS
FOR USE ALSO MANY VALUABLE HINTS ON
HANDLING SHEEP. WRITE FOR FREE COPIES.

PARKE, DAVIS & Co.
DEPARTMENT OF ANIMAL INDUSTRY
DETROIT, MICH.



Pratts Animal Regulator

has for forty years been the standard live-stock
conditioner. 25c, 50c, \$1, \$3.50

Pratts Colic Cure
(Veterinary)

Sure cure for colic and indigestion, \$1
"Your money back if it fails"

Sold by dealers everywhere, or

PRATT FOOD CO.
Philadelphia
Chicago

DYNAMITE

Will accomplish more work in removing stumps, rocks, etc., also planting trees, digging ditches, etc. than twenty men. It's effective, safe and easily used; guaranteed Standard Brand; shipped direct from Mill in this state; lowest prices. No salesmen. Established over 30 years. Write for full particulars.
BRUNS POWDER CO.
TERRE HAUTE, INDIANA.

We Want HAY & STRAW

We get the top price on consignments, make liberal advancements and prompt remittances.

Daniel McCaffrey's Sons Co.
PITTSBURG, PA

Reference, Washington Trust Company, or any bank in city

HAY If you have ear lots for sale it will pay you to write The E. L. RICHMOND COMPANY, Detroit, Michigan.

BIGELOW'S HOLSTEIN FARM

BREEDSVILLE, MICHIGAN.

Have for sale a five months old bull, ¾ white. His dam has an official record of 25.50 lbs. butter and is a granddaughter of Hengerveld DeKol. His sire's dam has an official record of 26.73 lbs. butter, and is a grandson of De Kol Burke. First check for \$125 takes this fine youngster.

Another—same sire from a 22.83 lb. dam, 6 months old—\$90.

Another—same sire from a 20.27 lb. dam, 9 months old—\$85.

Another—same sire from a 20.41 lb. dam, 7 months old—\$80.

And two 4 and 5 months old by same sire \$35 and \$45, out of good milking dams.

Overland
1913

\$985

Model "69T"

Completely Equipped

Self Starter

30 Horsepower

5-Passenger Touring Car

110-inch Wheel Base

Timken Bearings

Center Control

Warner Speedometer

Remy Magneto

Prestolite Tank

Mohair Top and Boot

Clear Vision Wind

Shield

In 24 Hours the Demand for this Car Was Greater Than Our Annual Supply

AND yet we are shipping better than 150 cars a day. Think of it! Nearly 1000 cars a week, and still the public refused to be satisfied. We could ship 500 cars a day and at that we could not wipe out our immediate orders. But 150 a day is the very best we can do just now. That is our present production limit. Later on when our new factories are swung into working operation we can improve this condition; for this season we will make 40,000 Overlands, which nearly doubles our production of the season that just closed.

We announced this car to the general public the latter part of last month. The instantaneous effect took our breath away. Inside of twenty-four hours we heard from practically every corner of the globe. It seemed to jar the entire automobile universe. Cables from abroad were almost as thick as American telegrams. Distributors, dealers and the appreciative motor buying public alike, telephoned, wired, wrote and traveled from every direction. Our headquarters in Toledo were swamped with requests, demands and threats. Everybody wanted a model 69 at the same time. Nothing could curb the demand. We simply had to close our doors and ears to the riot and allot the cars as best we could.

This car took the country by storm. The very fact that a car of this size and power, a car of this magnificence, strength and comfort, a car so fully equipped with the very best of everything, could be had for \$985 was beyond all belief.

Everyone said "Why that car is identical with lots of \$1,200 and \$1,500 cars I have seen." And so it is.

The self starter, big wheel base, powerful motor, rugged rear system, the unusually large brakes, the beautiful finish, rich upholstery, and the complete equipment, which includes practically everything made for an automobile, are specifications that square up with cars that cost twenty and thirty per cent more money. These specifications are all \$1200 specifications.

Then there is the cold rolled pressed steel frame, the selective transmission—three speeds forward and reverse, fitted with annular bearings; the well known Remy magneto; the I section drop forged front axle which is forged in one heat and is fitted with the famous Timken bearings; the three quarter floating rear axle fitted with Hyatt bearings. This car is finished in that superb Overland blue with gray wheels, trimmed in black and nickel plate, making a most striking and stylish car of rich design. You cannot duplicate this car from any other maker for less than \$1200 and some want \$1500.

We have but one suggestion to make. Get your "69" order in early. Don't delay, put off or stall. Just get busy. If you want to enjoy your automobile this fall you will have to step pretty lively. "First come first served," is an old expression but it fits. The demand right now is treble the supply. We never in the wide world will be able to catch up with the orders, so if you want one of these world's record cars, act quick.

Get in touch with our dealer in your locality. If you cannot find him, wire us. There are over 2,000 of them delivering these cars right and left just as fast as we can ship them. Don't you get left.

Write us for a catalogue describing this model—the car that broke all preceding automobile values. Please ask for Book AG 39.

The Willys-Overland Company, Toledo, Ohio

