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As the activities of the farm focus about the harvest, all eyes are turned toward the farmer. Crop reports are a barometer for the world's greatest commercial enterprises. Large crops make good times, empty granaries and storehouses are a signal for hard times and business depression. The farmer's smile of prosperity quickens the pulse of commerce and radiates hope to all other industries; the products of his fields are the basis of the world's wealth.

The fortunate possessors of luxuriant fields of small grain will feel a satisfaction when these crops are secure from the weather. A few days' delay may result in damage from shattering and over-ripe grain and destruction from storms. An anxious time is this harvest; it is a time when one must weigh the risk of a few days against the risk of months and secure his crops as quickly as he can. Abundant preparations should be made to push the work along as rapidly as possible.

First thought should be directed to the question of the proper time of cutting. Wheat may be cut when the straw begins to yellow and the kernels are in the dough stage. They should be firm enough not to be easily crushed. Barley may be allowed to become nearly ripe before cutting. Oats may be cut when in the soft dough stage, and when about one-half of the leaves show green. The safer plan is to begin cutting so that the crop may be harvested with as little waste as possible from shattering. The field, as a whole, may show a slight greenish tinge. Oats cut at this time cure and ripen to the best advantage. Perhaps one side of the field may be a day or two ahead of the rest. A start as soon as a few acres are ready means a gain of valuable time in harvesting a large acreage. The same thing applies to other small grains. But it is safe to cut wheat with more sap in the straw than can be allowed in oats without danger of the grain being damaged in the mow or stack.

Getting the binder in shape to begin the season's cutting should receive more attention than it usually gets on the average farm. It is the most complicated and delicately adjusted machine used on the farm. The man who neglects to provide shelter for his binder will be compelled to pay heavy bills for repairs before he finishes cutting his grain. No matter how a binder has been sheltered it needs a good overhauling and cleaning before going to the field. Every part needs adjusting, every loose bar should be tightened and anything sprung out of line should be straightened. A few hours spent in overhauling and cleaning a binder reduces breakage and delays to a minimum. Any part that shows severe wear or imperfectly does its work should be replaced before related parts are affected. It is poor policy to run any machine until it breaks.

When being used in the field the binder should be kept well oiled. The life of a machine depends much upon the oiling. Oil frequently and plentifully, but always bear in mind that the oil which

IN THE HARVEST FIELDS.

runs out of the boxings does no good. It is better to stop the machine every 30 or 40 minutes than to allow some of the boxings to run dry. Every bearing that is allowed to run dry occasionally soon gets loose and runs dry quicker. This increases the draft and the liability of breakage. Straw and dirt should be promptly removed from parts with whose functions such accumulations may interfere. It does not pay to take chances with binders. Many drivers seeing weed patches and wet spots in the field whip up the horses in an attempt to cut through instead of taking time to drive around. Sections are frequently broken and pitman rods smashed by such careless driving. Binders were not made to stand driving over stumps, stones and steep washes or to cut willow sprouts and huge weeds. Any man with common sense can determine in a few seconds whether or not his machine will cut through such places. By careful driving, frequent oiling and not monkeying with the various parts of the machine unless one knows just what needs adjusting there is little danger of serious breakage in operating a grain binder.

One of the prime factors in operating a binder successfully is that of having

team for leaders, one of which may be ridden by a boy. It pays to avoid overloading horses during the extremely hot weather in the harvest field. Where six horses are available two three-horse teams can be worked alternately to advantage.

Careless shocking is many times responsible for damaged grain. Good shockers are scarce in these days. Old-time careful shockers set the bundles down firmly in the stubble, set the heads together tightly and broke the caps so that they would turn an immense amount of water and withstand strong winds. A poorly constructed shock is easily blown over and permits the rain to give the bundles a thorough soaking. If the bundles are green or the butts full of grass and weeds, long, narrow shocks are to be preferred. A 10 or 12 bundle shock is better than a larger one. If plenty of air space is allowed at the bases of the shock and the heads are close together, the grain can cure rapidly and at the same time be protected. Careless laborers should be closely watched and given instructions regarding the proper methods of shocking to avoid loss from this cause.

Whether to thresh from the shock or

that has been cut a trifle green should be left in the field a few days, else it may heat in the mow or stack. In case a heavy rain comes before hauling it to the mow or stack it will be well to open the shocks and scatter the bundles from the shock, taking pains to loosen up the butts of the bundles so that the air and sun may dry them, before hauling from the field.

Stacking, too, seems to be almost a lost art. Every farmer should know how to build a good stack. A few simple rules about starting, laying out the bulge, keeping the middle well filled, drawing in and putting on the cap govern the work. Round stacks generally give good satisfaction because they are easier to construct. Stacks should not be too large, as pitching to the center becomes difficult and the stack must be made high. The high stack makes pitching difficult and has a tendency to cause the builder to draw in too fast. Pitching the grain all on one side of a large stack causes it to settle unevenly.

The one great secret of building a good stack is to keep the middle full and compact. A stack is sure to settle, and it is very important that the middle settle the least. Provide a foundation of poles or rails. Start the same as an ordinary shock with the outside bundles practically flat. Keep the middle full and compact. Put the bundles in place with a fork. Make the bulge about four feet above the ground. The bulge makes it easy to slant bundles down and provides a droop when the stack settles. Make a good top. Place bundles carefully. Some use swamp grass to top off the stack. Wires and weights will help prevent the top from blowing off. Rake down the sides so that the butts will slant downward.

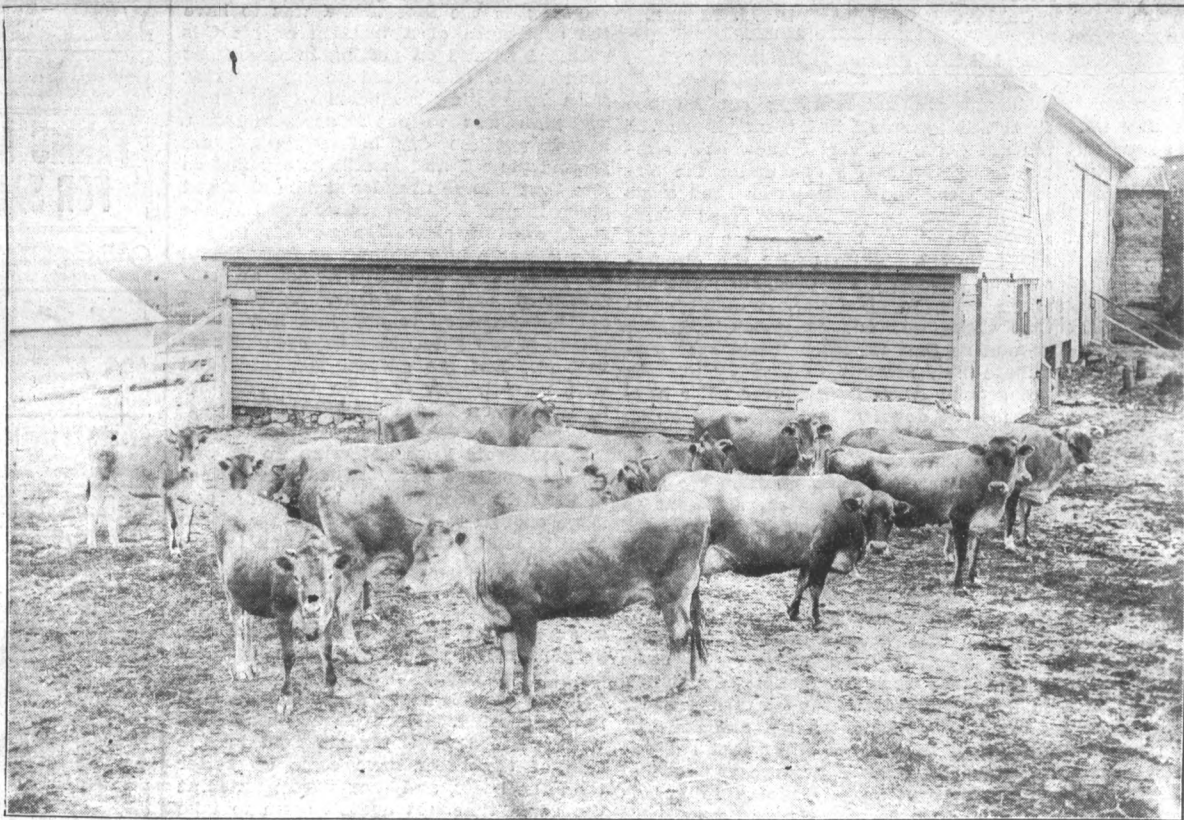
Harvest time is the fulfillment of the year's promises. It is a happy as well as a busy time on the farm. To sit enthroned upon the seat of a modern self-binder, pull the reins over three standard drafters and trip the bundle carrier while cutting 12 or 15 acres of heavy grain a day affords a more joyous thrill than to sit upon the throne of a king. Our bounteous fields have laughed with another harvest to stand between us and starvation until harvest time shall come again. Away with our fancied independence. Back again to the old time simple independence—back to nature. We pray in the line of the harvest covenant when we say, "Give us this day our daily bread."

New York.

W. MILTON KELLY.

SEED SELECTION AT HARVEST TIME.

We all know that the American farmer is a wonderfully easy mark, especially in farm seeds. We know that of the staple crops such as wheat, oats, barley, beans, etc., the average farmer is everlastingly changing seed, trying new varieties, and growing one variety only a few years. The wheats we grew 15 years ago are no longer extensively grown today, having been supplanted by other and later varie-



Jerseys Being Tested for the Register of Merit Class by Samuel Odell, of Oceana County. (See Page 25).

sufficient horsepower. Business farming requires that such important work as harvesting small grain should be done at the right time. That time is brief. In the light of these facts there should be large horses that are capable of handling the machine without wiggling and tugging in the collar every time there is a slight increase in the draft of the binder. A shortage of horsepower during the harvest is a serious handicap and should be avoided. The driver who is compelled to spend his time whipping up three or four horses cannot properly look after his machine and attain a high degree of excellence in his work. Three large drafters are needed on a six-foot binder in heavy grain. If the ground is rough or soft it would pay to put on an extra

from the stack is a debatable question. If one can secure a machine and plenty of help at just the right time, and if he has plenty of floor space to properly spread the grain to prevent it from being damaged by heating, he is justified in threshing his grain from the shock. On the other hand, if he has a large barn it is perhaps better to allow the grain to go through the sweating process and do the threshing after the rush of other farm work is over. Threshing from the mow or shock usually gives a better quality of grain. If grain is allowed to stand in the shock after it is properly cured many of the kernels are likely to be bleached or discolored. If the wet weather is of long duration the grain may start to sprout or mold. Grain

ties, although the new varieties are no better yielding or milling wheats than were the varieties of 15 years ago. The varieties grown 30 years ago, were practically all replaced by the varieties of 15 years ago and yet those wheats we grew 30 years ago were as good or better yielders as were those of 15 years ago or even of the present time. The same has been true of the oat, as we well know when we stop and think about it, and so on through the whole list of grains, with the exception of corn, including also such crops as potatoes, etc.

Why have these varieties been changed so often, especially when we have not been getting any better yields or quality by so doing? Farmers who have grown the same variety of corn for 10, 20, 30 or more years on the same farm continuously with increasing yields and higher standards of excellence each year do not seem to stop to reason by analogy the same system of seed selection in other grains as that pursued in selecting corn, would eliminate this fancied need of continually changing seed for these other grains and would in that way prevent the deterioration and "running out" of them. The fact is, the farmer with his fanning mill selecting the largest, heaviest grains for seed without any regard as to what kind of a head or pod or plant they grew in or on has been uniformly and gloriously successful in degenerating and actually destroying practically every promising variety of grain he has been able to get his hands on and manipulate for a few years. If it was not so much easier to save seed corn in the right and natural way, we would be doing the same thing in corn that we have with the other grains. If we were after the largest grain for seed we would have shelled our corn without any grading of the ears before so doing and then selected the largest finest grains, the most of which would have grown on the nubbins or more undesirable ears. Therefore, when we select only the best kernels of grain, we can only expect just such results as the farmer has been getting all the way along through the past.

While we will grant all that is claimed for the benefit in cleaning and grading seed, because we are satisfied that the larger plumper grains will produce a more thrifty growth and consequently a larger yield, than will the smaller or inferior seed, simply because of the greater food supply in the grain to give the plant a good start after germination, yet we are also fully convinced that this very system defeats the very end we think we are trying to reach, that of increasing the yield of our variety and fixing that tendency to increase of yield so that it becomes a fixed habit, and thus permanently improving the variety. We know we would do that in corn if we followed it any length of time, and why is it not true in the case of other grains.

Permit me to give a short history of operations along this line conducted by myself and reported to your journal last year. Several years ago we began selecting seed oats by the head. The first year we spent about five hours time in the field and selected the largest heads to be found in the field. That was the year the thrips were so bad nearly all over the state, and the largest heads we could find carried not over 70 or 80 grains to the head. This peck of seed so gathered was sown in a plot by itself the following year, and again we spent another five hours selecting the largest heads. That year the heads ran around 150 grains to the head and were quite uniformly large. This second peck of seed was sown again by itself with a still greater increase of the number of grains in the head, and instead of saving only a peck of seed that year we selected enough to make a bushel, spending about 15 hours in so doing. The following season we sowed the bushel of seed on an acre of land and harvested a trifle over a hundred bushels of grain, after selecting enough by hand for another bushel of seed. That season many of the heads bore from 200 to 250 grains each, an increase of more than 100 per cent in the yield per head brought about by selection for a period of only three generations.

Now let us figure a little. By re-reading the paragraph above we will see that a matter of about 25 hours was consumed in this special work of selecting seed by the head during these three years. The increase in the yield of that last bushel of seed of considerably over 100 per cent was solely due to this 25 hours' extra labor. Say nothing about the value of that 100 bushels for seed purposes to sell to other farmers or to use myself, that increase of over 50 bushels was mighty good

pay for that extra 25 hours' work. So much for the fellow who wants to see immediate results for the labor expended in such extra stunts. But let us look at the larger and more important results. By this system we have largely increased the producing capacity of our variety of oats and after five years of such practice have increased the yield of our general crop something better than 25 bushels per acre. We no more think of starting cutting our oats without first going into the plot sown with the hand-gathered seed and making a selection of seed by the head for next year's sowing, than we would think of not cutting them at all. I now have a variety of oats that never yielded so well as they do now and I see no reason why I should have any reason to change my variety of oats for the next 20 years than I had for changing seed corn for the last 20 years, which I have not done. There is no possible doubt but that this system, followed up carefully each year on every farm in all grains grown on the farm, would practically double the production in these grains without making any change in tillage, soil fertility or any other condition for better or for worse.

This is why we are so afraid of the farmer and his fanning mill. When grading seed according to the universally accepted custom, we almost inevitably tend to destroy the producing capacity of the variety. It is only reasonable to expect to find many of the larger and plumper grains of wheat or oats or what not in the smaller head just as we find our larger grains of corn on the smaller or more undesirable ears. It is not reasonable to expect that the grains of an oat head bearing 250 grains to be as large as those in a head bearing only 30 or 40, when other conditions for growth and development are equal.

While cleaning and grading the seed may be the best thing for us to do for this year's crop, yet we should emphasize with all our might the fact that such procedures do not in any way insure a fixed tendency for increase of yield in any given variety, but rather seems to hasten the coming of the time when the variety so handled becomes so degenerate as to be no longer profitable to grow. This has been the universal history of the past in grain growing, and such facts should be noted with all possible emphasis.

Oakland Co. E. M. MOORE.

LILLIE FARMSTEAD NOTES.

Things are not working out on the farm this year as I had them planned. I am not doing the best I know how, simply doing the best I can under the circumstances. The prospects on hoed crops are not very good, yet the crops themselves are doing better than one would think they could do under the circumstances. When I got ready to plant ensilage corn, for instance, it didn't seem that there was enough moisture in the ground so that the corn would ever germinate but, strange to say, by packing the ground down firmly, even after having plowed down a heavy crop of grass, we had formed the capillary connection between the sub-soil and the furrow slice and moisture has come up from the sub-soil by capillary attraction, sufficient to bring up a large per cent of the corn. I never would have believed this fact had I not noted it this year. I thought my only salvation was that we would have a good soaking rain after the ground was plowed. The ground was dry, understand, when it was plowed. In some places there wasn't a particle of moisture in it, and added to that we turned under grass that would cut a ton and one-half per acre. In spite of all of that sub-soil moisture has caused a large per cent of the corn, especially in places to germinate, and it is growing. There hasn't been a particle of rain since the ground was plowed, and yet we are able to cultivate the corn. Some places it hasn't come up. These are small clay places, the rows are straight, and the man is enabled to straddle the row by looking ahead where there was moisture enough so that the corn could germinate. It is certainly a valuable lesson in this question of sub-soil moisture, and it convinces me the very first season that on late plowed ground you cannot pack it too firmly. This ground was packed by running over it with a heavy disk and a ten-ton traction engine. Some people said that it would pack the ground so that no crops would grow, but I think it has been the salvation of the ensilage corn this year. Had the weather been wet, excessive rains instead of a drought, the case might have been different. I

cannot speak intelligently upon this point at the present time, but I am convinced that the thorough packing of the ground is what brought up the corn that had germinated.

A 20-acre field planted earlier for husking we began plowing on Decoration Day, and plowed the 20 acres in two days. Then we disked it and planted along the 10th and 12th of June. In the meantime there came a fairly good rain but the under side of clay lumps were dry even after that rain and we haven't had a particle of rain since. I never expected that half of that corn would come up but I am happy to say that I had my "crying spell" a little bit too soon, and with the exception of a few clay spots there is a fairly good stand of corn. Where there was any chance at all for the corn to germinate it is too thick. Every kernel seemed to grow and there is too much in the hill. This, I understand from what I read, is not a common occurrence this year owing to poor seed corn, but I am happy to say that my seed corn that I saved myself and fire-dried was prime, every kernel seemed to grow. Notwithstanding the fact that we are so late with our crops and such a backward season, yet we have our field potatoes planted a little earlier this year than we had before in several years. The finish of the crop came earlier because we were able to do the work more rapidly, and had we had a proper distribution of moisture I think I would have been fairly well satisfied with the outlook. These potatoes were planted in dry ground and I don't know how they will come out. I didn't expect much of a stand but if it works with the potatoes as it did with the ensilage corn I may have a fair stand yet. We planted potatoes this year with a potato planter.

Two men and a team with this potato planter can put in more potatoes in a day and put them in better on well prepared ground than six or eight men. I am positive that it didn't cost me one-quarter as much this year to put in the late potatoes as it did last, and I believe that any man who raises even three or four acres of potatoes, it would pay him to have a potato planter. It saves a lot of hard work, and it does its work nicely. It not only plants and drops and covers the potatoes at the same time but it will distribute the fertilizer at the same time and work it well into the soil.

Owing to the fact that I was to have the assistance of a traction engine this spring I figured on putting in more crops than usual, and added to my working farm by renting 100 acres of land, and my plan was to put 30 acres in beans, but it got too dry before we got the ground plowed and is still so dry and so late that I have abandoned this idea and given it up. I would rather not risk the seed, and my intention now is to put this 30 acres into wheat this fall. It will be something on the sort of an old-fashioned summer fallow. Although I am not prepared to say just how much tillage it will get during haying and harvesting. But the ground is plowed and well plowed, too, and we can certainly fit it later on in the season.

Sugar Beets.

Sugar beets have not come up as well as the ensilage corn. There are places in the field large enough to cultivate and large enough to thin and on other places they haven't come up at all, and it is a question whether they ever will. If we could get a rain before the middle of July I still think probably I would have a stand that might pay expenses, and perhaps more. We are cultivating them, as best we can. On a large part of the field we have to go by guess but the land needs stirring. Bush lima beans that were planted in the same field by the side of the beets have come up better than the beets, and they were planted at the same time. It doesn't seem to take as much moisture to bring up lima beans as it does sugar beets. These beans are coming up so that now there is a fair stand where at first it looked as if they would be too thin to be profitable. This is a new crop raised for the canning factory. What it will amount to is more than I can say, because I have had no experience.

COLON C. LILLIE.

MOWING DISCOURAGES THISTLES.

My experience with this Canada thistle problem is, if they are cut only when in full bloom, which is generally about the first of July, hardly any will come up, but if they should, cut again the first few days of August. I have practically cleared my farm that way, which a few years ago was over-run with them.

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J. G. WRIGHT.

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LIVE STOCK

THE HOG AND HIS PEDIGREE.

The man who thinks pedigree is of little value will never get anywhere in animal breeding, yet the sight of a pedigree is of little value to a buyer of breeding animals unless he knows something of the individuals found among the ancestry named. There is no use in examining pedigrees unless the names found in them suggest something intelligible to the reader. The beginner can soon learn the names of some of the most famous animals of the breed and look for them in the pedigrees of the animals he purchases. But there is much to be known about pedigrees in addition to the knowledge that they contain the names of great animals. Even good breeders of live stock have their own notions and hobbies as to the value of good names in given places in a pedigree.

One mistake into which young breeders are prone to fall is thinking that a great sire or a great dam necessarily means being a great individual. The son of a famous sire may be a very mediocre animal; and this is particularly true of hogs. Every experienced hog breeder knows the extreme variations which occur between pigs of the same litter, to say nothing of the difference between pigs from different litters by the same sire. A good boar used on a large herd during six years of activity may produce a thousand sons. Is it within reason to expect that all or anywhere nearly all of these sons will be good individuals, and also good breeders?

Of far greater value than an ancestor of outstanding merit close up in pedigree is high average of excellence and uniformity in all ancestors for two or three generations back. In picking a boar "out of sight and unseen," I would far rather buy an individual whose sire and dam and grandsires and granddams had all taken first and second premiums at the fairs, than buy a son of the boar taking grand championship at the same fairs, if the other ancestors close up in the pedigree were comparatively unknown. A high average of excellence in all ancestors compared with phenomenal merit in one, involves a difference similar to that between investment and speculation. With a pedigree of the former character one is reasonably certain of offspring measuring up to the normally high level of their ancestry, while with the latter kind one may get offspring equal to the one great ancestor or to the comparatively unknown dam, or to the mediocre ancestors of either the sire or dam. If one desires to gamble there is no better nor more certain way of doing it than by buying a pig because it has one good parent.

It is well known in the human family that children frequently resemble their uncles and aunts more than their father and mother. And the same phenomena extend through animal life. One of the most impressive features of heredity is the fact that inheritance is a handing down of racial or family characters rather than the bestowing of an individuality which is a composite of father and mother. Scientific men use a term called "the pull of the race" to describe the known fact that there is a tendency for the offspring of animals above the average of the race to return to that average. In other words, an exceptional animal is a variation and in begetting offspring the variation is not perpetuated, but rather the offspring tend to be like the normal type.

It is true that the exceptional animal may beget some offspring even more exceptional than himself, but these will be few in number, while the bulk of his progeny will be less meritorious than he himself. And it is especially true that the selection and breeding of these exceptional animals is what keeps up the vanguard of advance in animal breeding, but it is only the man with many females in his herd and a long purse to carry him through who can afford to breed an exceptional animal for the sake of the few progeny he will beget that prove to be better than himself. The only safe method for the large majority of breeders to pursue is to secure a sire all of whose near ancestors are of uniformly high excellence and are better than the females in his own herd. He can thus raise the average of his herd with reasonable rapidity and have a uniform lot of animals from each crop.

Illinois.

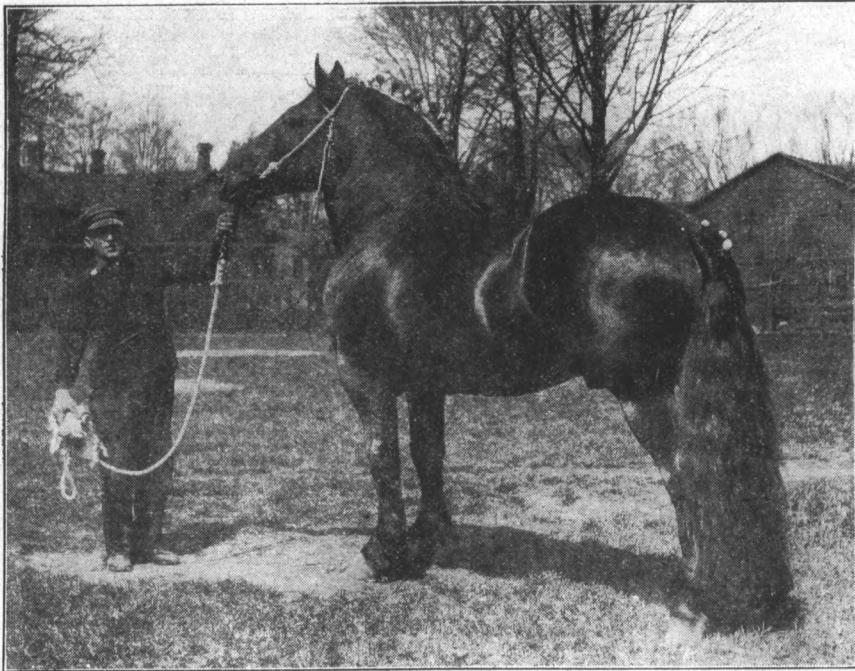
W. H. UNDERWOOD.

THE FUTURE OF OUR BEEF PRODUCTION.

It is a well known fact that supply and demand is what stimulates our markets and causes the fluctuation of prices. But not until recently did I know why our "butcher wagon" did not make its regular trips through this locality as it has been accustomed to do in years past. I was somewhat surprised, on making an inquiry at one of our trading points as to why this condition prevailed, by being told that the price of meat had reached such an extreme limit that it did not pay the markets to run their wagons at present as the farmers could not "afford

money away from home—but like the cattle business, if we can't find the goods at home which we want, at a moderate price, we are compelled to go outside.

Of course, our views differ greatly when it comes to managing our farms and we generally qualify for our own special interests, yet I believe there is a chance for any of us to make mistakes. But from what experience I have had and have noted from the most successful farms from a financial standpoint, I believe that those who encourage and follow along the lines of well-bred live stock and make it a point to feed out most of their products will have less hard work to do and retain the soil fertility at a



Percheron Stallion of Useful Type, Bred by B. F. Anderson, Lenawee County.

to eat beef" and the prices ranged from 10 to 20 cents per pound.

I have been wondering just what the crisis will come to in a few years if we do not produce better beef and more of it. I was in Chicago on the 13th of May and bought 37 head of stockers averaging 690 lbs., which cost, delivered, over \$1,500. They had the gall to ask me \$6.25 for these cattle, which were far from being the best beef type; but I managed to get them down to \$5.75, which was a dollar more than they should have cost. The best kinds were going that day at around seven cents, which was much more than I cared to pay. Of course, all the buyers were putting up a vigorous kick about such high prices but the dealers said that this class of cattle were no higher than they ever were in proportion to finished stuff, which was selling at that time for \$9.30 and at present for \$9.60. Of course, this is true in a measure but at that time, several years ago, you could buy all the corn you cared for at 20 to 30 cents per bushel, while now it is twice to three times as high. For this reason it makes a fellow wonder just where he is going to land in paying such high prices for cattle and feeding a small fortune to them in grain and hay. Taking these facts in consideration what are we going to do?

Michigan has the name of producing the largest quantity of beans of any state in the union. In my opinion it ought to have the credit of producing at least and most inferior class of beef type cattle. I have often wondered why the dairymen do not keep a class of cows that would produce beef as well as milk. I know of farmers in Illinois who have such herds and seem to realize as much profit from their milk as those who cater to the Jerseys or Holsteins, which we all know are no earthly good for beef production. Of course, many years ago when cattle were plentiful and low in price it made no material difference what a calf looked like, just so you had a fresh cow. But the time has come when it does make a great difference, and a good, well-bred calf is nearly as valuable as a nugget of gold and should be cared for by every farmer to sustain the great decrease in our beef supply, which we must keep up.

If Michigan would produce more well-bred stock and less beans some of us fellows who appreciate feeding would not have to pay our cash to the western farmers but could drive through our rural districts and find what we ought to at home, and incidentally leave the cash here. Our local merchants always put in a desperate kick about our ordering goods from Chicago and sending our

high standard, which spells success in farming.

Washtenaw Co. B. F. WASHBURN.

LIVE STOCK NOTES.

"Marketing of the Tennessee and Kentucky lamb crop will extend through a longer period this year than last," said Clark Estes, who returned to Chicago the other day from a visit to his old home in Louisville. "While the run from the two states will be fully 25 per cent short, of last year, and the Tennessee crop is probably 40 per cent short, the supply will be a right generous one at that, as last year's supply in those states was the largest on record. Quality has begun to show improvement, but it has been comparatively poor thus far this season. Not as much contracting for future delivery is heard of as usual, as breeders, pleased with current prices, are holding their offerings at pretty stiff rates. I know of some Tennessee lambs contracted for August 1 delivery, however, at \$7.25 per 100 lbs. Kentucky and Tennessee breeders are picking up a number of native ewes on the Louisville market to send back to the country as breeders, something they have not done to any appreciable extent heretofore in that market, and a load or two is leaving Louisville daily. A raft of ewes that lost their lambs are being sent to that market now, mostly, I think, by breeders who have become discouraged because of the troubles they have experienced with scabies and government attempts at regulation of the disease during the past year. The high lamb market is acting as an offset, in a measure, to this liquidating of breeding stock, and if lambs continue to sell high, it is more than likely that many who are now selling out will get back in the game later on in which event Chicago should have a pretty good demand after harvest time in that country for breeding ewes, but the probable breadth of this demand is at this time uncertain."

H. J. McMahon, of Phillips, South Dakota, who marketed in Chicago recently three decks of 96-lb. two-year-old wethers at \$5.15, remarked that he had been in that country for the past 28 years and never knew before live stock to be in such limited supply. The drought last summer was the worst he ever knew, and with the gradual encroachment on former ranch lands of the dry farmer, the high price of hay and other feed during the past winter, the throwing open of reservations to settlers and the difficulty ranchmen encounter in leasing lands for any great length of time, has all but wiped out the ranching proposition in the Dakotas. Grass is as good as it has been in a long time at this season of the year, but, unfortunately, few grazing lands are half stocked. Cattle and sheep are doing well, and there is a fair supply of horses, which are in excellent flesh condition. A few of the larger cattle outfits on the Cheyenne river have shipped in some stock cattle the past spring from the southwest, the "Diamond A" people having received 4,000 head of Mexicans and a few other smaller numbers. There are no big flocks of sheep left in the South Dakota range country.



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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.

Sore Throat—Weak Heart.—I have a horse that must have some throat trouble for it bothers him to swallow water; besides he breathes hard. This horse is 18 years old and appears to be much worse one day than another. G. G., Newport, Mich.—Apply iodine ointment to throat every day or two. Give him 1 dr. ground nux vomica and 2 drs. muric acid ammonia at a dose in feed two or three times a day.

Indigestion—Lump Jaw.—I have a mare five years old that I bought about two years ago and she has never been in very good condition since I have owned her. She is inclined to gnaw wood and I had her teeth floated, but it made no difference. I am told that some horses do not thrive on account of their lower grinders being narrower than upper. She is troubled with wind galls on both hind legs, but not lame. I have a two-year-old heifer that has lump jaw. Can anything be done for it? J. K., Carsonville, Mich.—Your mare may have liver trouble affecting her digestion. Give 1 oz. phosphate of soda at a dose twice a day; also give a tablespoonful of fluid extract of genetian and a tablespoonful of fluid extract cinchona at a dose three times a day. Apply one part red iodine mercury and four parts lard on jaw once every ten days.

Septic Arthritis.—I have a six weeks old colt that was real healthy and lively when it came and remained so until it was four weeks old. It then showed lameness in right hip, then lameness moved to right shoulder, when it laid down, it was unable to get up. I gave it an enema of soap and water and salt baths, following this with liniment. I called in our local Vet. and he pronounced the case hopeless; the colt died a day or two later. N. R., Groose Ile, Mich.—Had you treated navel of colt right away after birth, he would not have died. The navel cord of every colt should be tied with a silk cord one inch from body; also apply a good healing remedy twice a day.

Scirrhus Cord—Fibrous Tumor.—Have a yearling colt that was castrated some time ago; one of the wounds healed, the other remaining raw for a time and a bunch forming in scrotum. I also have another colt with a bunch on shoulder near where trace runs, which is about the size of a hen egg, very hard and moveable. H. H., Bradley, Mich.—A tumor has grown on end of cord on account of cord uniting with skin of scrotum. When the colt was castrated cord was left too long. The bunch should be cut and cord shortened. Also cut bunch out of shoulder and apply one part iodoform and ten parts boracic acid to the wound twice a day.

Horse Rolls in Stable—Worms.—I have a six-year-old horse that I bought four months ago which has a nasty habit of rolling in stable. Have attempted to correct this habit but failed. This same horse must have some worms, for he occasionally passes them. He also seems stupid and lazy, urinates too often and is inclined to have colic. He seems to be well, but has a ravenous appetite. J. J. O., Grand Rapids, Mich.—Give him 7 drs. aloes, 30 grains calomel, 1 dr. san-tonine and 2 drs. ginger at a dose and one dose only. Also give him 1 dr. of ground nux vomica, 2 drs. powdered sulphate iron, 1 oz. ground gentian at a dose in feed two or three times a day. Worms may cause his rolling in stable.

Bleeding Wart on Hind Leg.—My four-year-old mare has a soft bleeding wart, situated a little below hock on right hind leg, and she also has swollen bag. A. M., Elk Rapids, Mich.—Cut off wart and apply one part iodoform and ten parts boracic acid to wound once a day. Apply hot raw linseed oil to bag once a day. Give a teaspoonful of powdered nitrate potash at a dose in feed night and morning for three days.

Raising Orphan Colts.—I would like a little information regarding the care and management of a colt one day old, which we shall have to raise on cows' milk. A. F. B., New Buffalo, Mich.—Select a healthy cow that recently freshened and add a little sugar, also one-quarter water to her milk before feeding it to colt. Young colts should be fed every two or three hours up to bed time, then feed the first thing in the morning.

Colt Got Hooked.—We have a four-year-old colt that got hooked by a cow, making wound back of shoulder blade. The flesh on shoulder is badly swollen and feels much like a sponge. W. L., Pinconning, Mich.—Apply equal parts of oxide of zinc and boracic acid to wound twice a day. Air has gotten in between skin and muscles and it will gradually leak out. Hand rubbing is perhaps the best remedy you could apply.

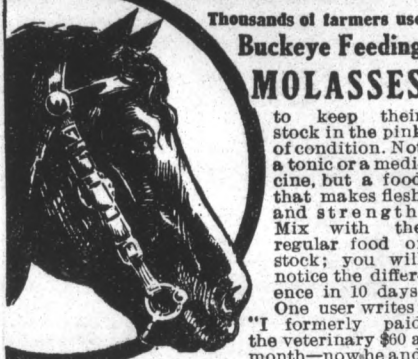
Diarrhoea—Indigestion.—We have a three-year-old heifer that came fresh last October which suddenly dropped on milk flow and has purged badly ever since. A. D. D., Prescott, Mich.—Give her 1/2 oz. fluid extract opium and 1 dr. of salol at a dose three times a day. It is possible that she should have one dose

of linseed oil and if her bowels are not too loose, better give her a pint or two. **Rheumatism.**—I have two three-year-old cows that have been sore and lame in shoulder for sometime. Have applied blisters, but they fail to help. Exercise seems to lessen lameness. F. S. B., Algonac, Mich.—Give your cows 1/2 oz. powdered nitrate of potash at a dose in feed or water three times a day, and apply equal parts turpentine, aqua ammonia and olive oil to shoulder joints three times a week.

Umbilical Hernia.—I would like to know what can be done for shoats weighing 100 lbs. which have rupture in navel. What is the cause of this trouble? So far as I know they were sound a short time ago. G. R., Adrian, Mich.—Hernia is usually the result of strain or it may occur when animal coughs, or over exertion is a common cause. If the rupture is small it will not be necessary to operate, for it will perhaps never do the hogs any harm. It is possible that your hogs had a small rupture at birth and it has recently enlarged.

Leucorrhoea—Debility.—My cow came fresh two months ago, giving birth to twin calves, began to run down in flesh and is now very thin. She has a white colored vaginal discharge, but her appetite is good. W. C., South Rockwood, Mich.—Give her 2 drs. powdered sulphate iron, 1 oz. ground gentian and 1 oz. bicarbonate soda at a dose in feed two or three times a day. Dissolve 1 dr. permanganate potash in six quarts of tepid water and wash her out through a small rubber tube with funnel, once a day.

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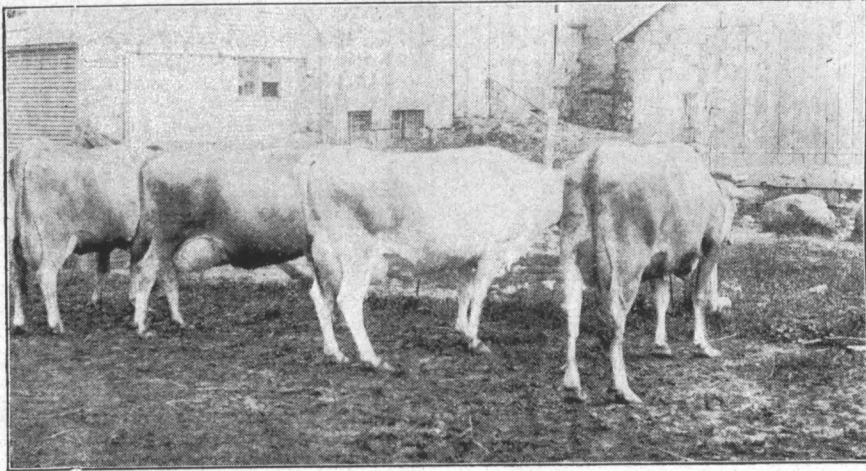
In a recent number of this paper, it was my privilege to tell of the organization of a Co-operative Breeders' Association, and to say in that connection, that already three of our number were testing cows for "The Register of Merit Class."

Hon. Samuel Odell, our representative in the legislature, and secretary of the association, is one of those referred to in the article mentioned above, and I wish in this letter to speak of his herd. He is testing ten Jerseys for "The Regis-

previous to her first freshening. She possesses a wonderful constitution. She has never lost a single feed since the test began, and seems to enjoy it all as well as do her master and his many friends.

And now, having given Suzie such a long introduction, let me speak of some of the others in the herd. Julia's Girl has been in the test for five months, and in that time has produced 4,997 pounds of milk, equal to 270 pounds of fat, or an average of 54 pounds per month. Atlanta's Jeannie, four months in test, has produced 3,275 pounds of milk testing 173 pounds fat. Ina Rostelle is the smallest producer in the bunch of ten. She freshened at 23 months, and has been in test only one month. During that time she has given 674 pounds of milk, containing thirty and six-tenths pounds of fat.

Without doubt this heifer will improve as the period of lactation advances, but



Four Choice Matrons in the Herd of Samuel Odell, of Oceana County.

ter of Merit Class," and they will all go in without a doubt.

A few days ago, the writer went to Mr. Odell's home in company with a photographer, and secured some pictures of these cows which it is a pleasure for him to submit to the readers of the Michigan Farmer. First, we drove the ten into a corner of the barnyard, and took a shot at the bunch. Next, we chose four from the herd, and got a picture of them, and then we led out Suzanne, "the pride of the herd," and the man with the camera did his best. And well he might, for here is one of the world's great cows.

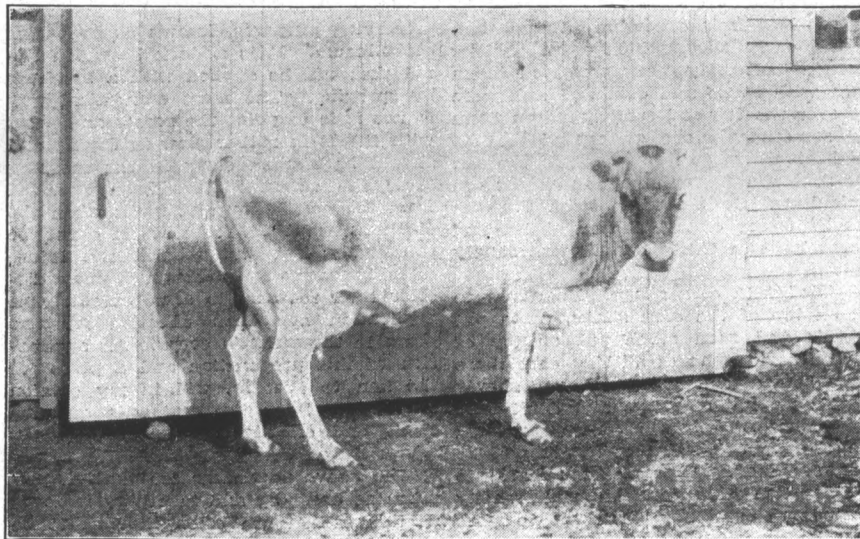
I told The Farmer readers something of the kind of cattle that one might have found here 10 or 15 years ago, in a former letter to this paper. What would our people have said then, if someone had

she is doing well now. The two-year-old heifer that will produce a pound of fat per day, and keep it up, is entitled to a good deal of respect.

These Tests Stimulate Dairying.

Later on I shall give the further results of this test, and also the findings in the two other tests spoken of in this letter. These tests are doing more than we can tell to increase the interest in dairying in this section. There will be more cows tested next year, and while we do not expect to find the equal of Suzie in many cases, we shall discover our good cows, and each discovery of this kind will encourage us to greater efforts in this good work.

I am not reporting these facts to parade our county, as a great dairy section, for it is only recently that much



Suzanne, the Pick of the Herd, Produced 414 lbs. of Butter-fat in Six Months.

predicted that in the year 1912, right here in Oceana county, we should have a cow that would produce 414 pounds of butter-fat in six months. Reader, this is what Suzie has done, and that beyond any question. Moreover, she has about completed her seventh month, in which she will produce between 68 and 70 pounds of fat, and she still keeps on without any sign of falling off in her flow of milk. It is practically certain that she will make from 650 to 675 pounds of fat during the year. Six hundred and seventy-five pounds of fat equal 843 pounds of 80 per cent butter, or nearly 800 pounds of 85 per cent butter.

This wonderful cow is but six years old and so has time to do still better work in the years that are to come. She is an economical producer, and will return her owner more money above the cost of the feed she consumes this year, than she could have been sold for at any time

interest has been taken in live stock husbandry of any kind in this county. Heretofore, we have been concerned mainly in growing peaches and potatoes, and like many another northern county, we have seen the vegetable matter growing scarcer in our soil, and the fruit and potatoes getting smaller and smaller in consequence. We have led the "old cow" into the ring to bring up the soil, and are beginning to see results in this regard.

I have not written this letter to advertise our stock, for we have no stock to sell, but I have told this story to encourage every man everywhere, who is trying to improve his herd, and in the hope that some reader of this paper who as yet has lacked the courage to begin to breed better stock, might see the advantage in so doing, and thus receive a share of the reward that is for everyone who "looks forward and not back."

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Then there is the great saving of time and labor, which counts for more in summer than at any other season and often alone saves the cost of the separator, aside from all its other advantages.

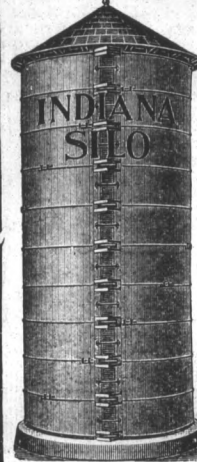
This is likewise the season when DE LAVAL superiority counts for most over other separators,—in closer skimming, larger capacity, easier running, easier handling, easier cleaning and absolute sanitarianess.

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THE DE LAVAL SEPARATOR CO.
NEW YORK CHICAGO SAN FRANCISCO SEATTLE

150 INDIANA SILOS PER DAY



That's our capacity since our new factory started, and we have the material to keep going till the last hill of corn is cut. Don't you think your order would be safe with us? Delivery is going to be a mighty big factor this fall, and

An Indiana Silo

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IT'S A SURE THING

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Easy running. Easily cleaned. Different from this picture, which illustrates our large capacity machines. Whether dairy is large or small, obtain our handsome free catalog. Address
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Keeps flies and other insect pests off of animals—in barn or pasture—longer than any imitation. Used and endorsed since 1885 by leading dairymen and farmers.

\$1 worth saves \$20.00 in milk and flesh on each cow in a single season. Heals sores, stops itching and prevents infection. Nothing better for galls. Kills lice and mites in poultry houses.

SEND \$1, if your dealer can't supply you, for 200 cows, and our 3-tube gravity sprayer without extra charge. Money back if not satisfactory. Write for booklet, FREE. Special terms to agents. Shoo-Fly Mfg. Co., Dept. H, 1310 N. 10th St., Phila.

Editor knows from experience that Shoo-Fly is O.K.

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If you now have a cream separator that is not giving satisfaction—old or new—hard-running, hard-cleaning, a poor skimmer—broken down or worn out—get rid of it right away. You don't need to put up with it a day longer. Stop the waste of cream, the waste of time, the needless drudgery. Trade in your old machine toward the

Easy-Cleaning SHARPLES Tubular Separator

Just drop us a postal or letter and tell us what make of machine you have, how long it has been used and how many cows you keep. We will immediately make you a proposition, either direct or through our agent near you, to take it off your hands.

Before asking you to accept our offer, we will deliver a Tubular to your place, set it up and let you give it a thorough trial. Then you can see for yourself why Tubulars have double skimming force—get cream no other separator can get—why they are easier to clean, turn easier, wear longer and cost less for repairs. Write today for our exchange proposition and Catalog 501.

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Even without the Beatrice Centrifugal Disc Washing Device and the 1-piece Steel Pail, both of which we give free with each machine, the BEATRICE CREAM SEPARATOR is the greatest money-saving and service-giving skimmer you can buy. Get our money-saving prices. Free booklets worth reading, if you ask.

Beatrice Creamery Co.
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BEATRICE Cream Separator

Mr. Odell came back to a farm that had been rented for many years. He was scarce more than a boy, and when he took charge of the farm, he found the fields full of quack grass, and the soil badly run. But he had an ideal, and he had what is better if possible, the courage to press forward to its realization. He built a cement silo, bought a few good grade cows, and a very few pure-bred cows from a responsible breeder in our own state. He has kept his ideal in sight all the time, and now is beginning to receive his reward. Others in this vicinity are going in the same way, and it will be my pleasure to tell of some of them later.

Just one thought more and I am through, for my story is already too long. Progress of any sort, which culminates in results as gratifying as this splendid dairy demonstration, is always interesting, and we turn from the fact itself to examine into some of the causes of this kind of development. The farmer's institute has done its work and some good has come from that source.

Here, as elsewhere, the Grange has proven the farmer's opportunity, and twice each month this "school out of school" has been in session, but every week the farm paper has made its visit to the home of the farmer, and its message has been "Seed sown upon good ground." Not another in all the long list of farm papers has such a good dairy department as the Michigan Farmer. No man in the country so far as our knowledge goes, has given more practical help to the man, young or old, who was interested in the dairy, than the dairy editor of this paper, and I have taken a great deal of pleasure in sending in this report, and in acknowledging our obligation to this paper for a large part of the progress made here in dairying in the past few years.

Oceana Co. W. F. TAYLOR.

A BARN CELLAR FOR SILO.

I have a barn cellar 18x42x7 ft. deep that does not freeze. Would it be possible for me to use it as a silo if I put a cement floor in?

READER.

All I can say to this proposition is, don't; and still you can make ensilage in a barn cellar. That was the original kind of silo, but we have got something a good deal better now. Your loss would be exceedingly heavy. With a pit 18 feet wide and 42 feet long and only seven feet deep I would figure that you would lose probably one-third of your silage, perhaps not quite so much, but I think you would. In the first place, it is not deep enough so that there is weight sufficient from the silage itself to pack down properly and consequently there will be a great loss from excessive fermentation. In the early silos, which were shallow pits, in this way they weighted them down with stone and earth. Plank were put over the top and earth piled on them and sometimes stone on top of that to weight it down so as to exclude the air. The first silo I ever saw was out at the Agricultural College when Prof. Johnson was Professor of Agriculture there, and it was built in this way. It was simply a pit in the ground walled up with stone and filled with corn silage. Boards were put on top of the corn silage, earth put on this and then stone put on top of that. But in spite of all this care there was a heavy loss of silage. If you simply fill this pit full of silage and don't take any pains to weight it down you will lose the larger portion of it. It will be unfit for food. Where one takes into consideration this loss he will readily conclude to build a modern silo to store the corn crop in.

DAIRY ITEMS.

The feed situation leads to a belief that cheaper butter will be available, hence the speculators are in waiting, but should their prediction fail to materialize the scramble for stock should work quotations higher instead of downward.

Water should be supplied in the pasture these hot days. It is too much to ask the cows to stand it from morning to evening without quenching their thirst. Better results will follow where pure water is liberally supplied at all hours of the day.

Sellers of milkers and springers in the Chicago stock yards report that a new demand has been developing of late, the irrigation districts of the northwest having invaded the Wisconsin dairy districts, looking for choice cows. There is seldom or never a surplus of prime milk cows in the markets of the country, but buyers are more discriminative than ever before, and owing to the growing scarcity of beef cattle, most of the backward springers are bought by killers.

POULTRY AND BEES

CONTROLLING LICE AND MITES IN HOT WEATHER.

There is probably nothing that discomforts the fowl, discredits the keeper, and discounts the returns from poultry on the farm as those two little insignificant pests, the poultry louse and the mite. In many cases, where the hen has at last an opportunity to balance her own diet in the spring and summer, she is prevented from shelling out eggs by these bothersome things.

The common lice are probably not as bothersome to the hen as the mites are. When allowed to run at will the hen finds means for dusting herself, which she will always do if given half a chance. The lice are upon her body day and night, feeding on the feathers and loose pieces of skin. They breathe through holes in the sides of their bodies and the thorough dusting process that the hen goes through causes these holes to become clogged and the lice die of suffocation. Dusting powders, and appliances advertised and recommended for using them, are more or less expensive, and the procedure generally is not only a laborious one but one that scares the wits out of the hen. Give biddy enough dry earth or dust of any kind and she will do the rest and enjoy doing it.

The mite is not so easily controlled by the hen. She has no means of her own to get rid of it, and therefore man should help her. The mite is a small red insect which spends the day in the cracks and crevices of the roosts and nests that the hen frequents, and at night gets upon her body and secures its meal of blood. Our feathered friend sits and takes it because she is so attached to her home, no matter how humble it may be. The mite breathes through nostrils and, even though it is upon the hen when she dusts, it would not be affected by the dust. Spraying the coop with lime, lime and sulphur or other materials, or fumigating it with sulphur, and frequently soaking the roosts and nests with kerosene, hot water or carbolic acid and cresol preparations are recommended. All of these involve considerable time and bother, and are often not used on that account. For the hen's sake we should seek and encourage the use of simple but effective remedies, as such will naturally be used by a larger number of poultry keepers than would be the case with remedies which are hard to prepare and inconvenient to apply.

For several years the writer has used a preparation originally made for wood preserving purposes, known as *avenarius carbolineum*. It is a dark brownish liquid that can be applied with a brush or by spraying. The most economical way to use it is to paint the roosts and nests with it. It is rather slow in drying and should be applied early in the morning after the chickens have been excluded from the coop. Even at night when the chickens want to roost it may not be thoroughly dry, but it will not injure them in any way although it may discolor their feathers to some extent. One application has been effective for two years in the writer's coops. An application of this preparation and a place for the hen to dust in, will in my opinion take care of the lice and mite question easily and effectively.

Van Buren Co. F. A. WILKEN.

(The above reminders are timely inasmuch as drooping and inactivity in fowls at this season are often thought to be natural effects of the heat. Attention to these pests, however, has frequently brought increased egg production and general improvement in the flock.—Eds.)

FOSTER MOTHERS FOR CHICKS.

No less an authority than Prof. Lippincott, of the Kansas Agricultural College, vouches for the ability with which the capon takes care of little chicks. "Substituting capons for hens is very successful," he says. "The capons will take care of chicks and they are being used more for that kind of work. One Kansas poultryman hatched 635 chicks this spring and gave them to capons, and 600 of them were brought through safely. Better results than this could not be expected from a hen or a brooder."

A prominent southern member of congress has a large dairy farm and in conjunction with this has quite a number of chickens. He states that quite frequently capons mother the young chicks on his place and do it just as well as the

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Write today for our free illustrated book. It explains how you can put money in your pocket by equipping your barns with Harris Patented Steel Stalls and Stanchions and labor-saving Litter and Feed Carriers. They make your cows more profitable.

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The Empire Feed has always been noted for accurate sowing. Peas, Beans, Beets, Corn, Oats, Wheat, Grass Seed, Flax, Alfalfa—no matter what kind of seed you want to sow—the Empire correctly sows it. While the cut below illustrates an 8x8 Empire Hoe Drill, you can get any size with Single Disks, Double Disks, Hoes or Shoes in grain or fertilizer styles. There is an Empire Drill for every need—guaranteed to do all we claim. Send for the Empire Catalogue and insist on seeing the Empire.

Plain or Fertilizer

THE AMERICAN SEEDING MACHINE CO. (INCORPORATED)
RICHMOND, INDIANA, U.S.A.

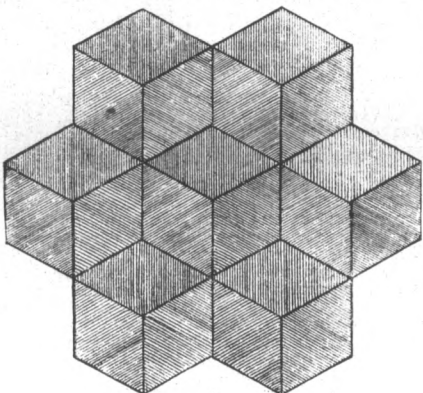
hen. In the suburbs of Washington an amateur poultryman had a couple of capons and they were outcasts of poultry society—neither hens nor roosters associating. In their lonesomeness for friends the capons turned to the little chicks, which became very grateful for the friendship of their feathered allies which not only protected them but also hunted and scratched food for them.

In the capon, poultrymen have discovered the first male animal that will take good care of the young. In some cases they are even better than hens for this purpose. Capons are larger, have more loose feathers, and can care for more chicks than can hens. They will fight off crows, hawks, and other marauders that prey on little chickens. In cold weather 20 chicks are as many as can be protected by a capon, but in warm weather one can care for 30.

The capon should be put in a coop with a covered run before giving him any chicks, says Prof. Lippincott. There he should be left for three or four days to get acquainted with his quarters. There should not be any roost in the coop; the capon must remain on the floor. After he gets acquainted with his surroundings, put the little chicks under him at night and he will usually take care of them after that, but if he does not, the chicks should be taken away and the capon confined in the coop for a few days longer, keeping him in the dark as much as possible. It very seldom happens that a capon will refuse the chickens on the second night.

HOW HONEY COMB IS BUILT.

Probably many have noticed the little six-sided cells of the honey comb, but not many know the intricate problem the little creatures solved when they figured out just how to make the bottom so that it will fit into the bottoms of the cells on the other side, be of just the right degree of pointedness, and at the same time have all the walls of that delicate thinness characteristic of the honey comb. You must remember that bees, in a state of nature, have as their prime object in comb building the preparation of a comfortable place to rear their brood. As it takes eight to ten pounds of honey to make one pound of wax, the latter article is very precious in their sight, so they must be saving of it. That they have accomplished this to a wonderful degree anybody will admit who has ever noticed the delicate texture of the honey comb. The bottom of each cell is formed of three lozenge-shaped pieces, each of which forms one side of the bottom of a cell on the other side of the comb. The completed article

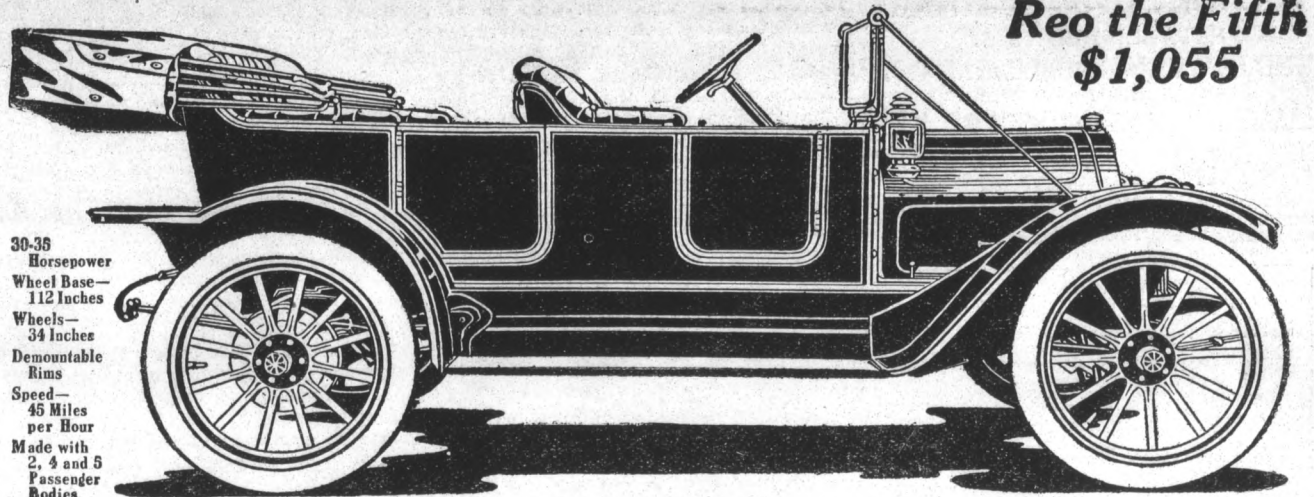


Showing Formation of the Bottom of Cells in Honey Comb.

makes available every atom of space, and yet every cell wall is built of that same wafer-like thickness. Best of all, the bees have made a very comfortable resting place for their young bees to hatch out in.

The most wonderful part of it all is that this comb is built by thousands of the little insects, each one working independent of the others, and none for a boss. The idea that the queen controls the bees in such things is as erroneous as many other ideas people have about bees. They seem to be happiest when the greatest rush is on and then comb building goes on apace. All are in a quiver of excitement, and one will come dancing up to a cell and beat and pat and pull it with his mandibles and race away to some other part of the hive, to be followed up perhaps by another who will give it a little pull this way or that, and so on, skipping about the hive, pulling a little here, patting a little there, with no apparent aim in view and yet how the work all fits in together to make that wonderful creation, the honey comb!

Mecosta Co. L. C. WHEELER.



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Horsepower
Wheel Base—
112 Inches
Wheels—
34 Inches
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Top and windshield not included in price. We equip this car with mohair top, side curtains and slip cover, windshield, gas tank and speedometer—all for \$100 extra. Self-starter, if wanted, \$20 extra.

The 1912 Sensation

By R. E. Olds, Designer

Five Times Oversold in May

I have built automobiles for 25 years. Reo the Fifth is my 24th model.

I have watched all the ups and downs of Motordom—all the comings and goings, the successes and failures.

But I never saw a demand like that which developed for Reo the Fifth this year. In April and May we could easily have sold five times our factory output.

My Final Car

Month after month I have told you the story, so you know why this call has come.

I built this car as my final creation, as the cap-sheaf of my career.

In this car I embodied the best I had learned from 25 years of car building.

This car marked my limit. Every detail showed the best I knew.

I analyzed all steel that went into it. I tested the gears in a crushing machine with 50 tons' capacity.

I used Nickel Steel axles—Vanadium Steel connections. I equipped the car with 13 Timken bearings.

To every part I gave big margins of safety. The carburetor I doubly heated for low-grade gasoline.

I Watched It

Then I took personal charge of the building, for I pledged my good faith on this car.

I saw that the parts were ground over and over, until we got utter exactness. I saw that each car got a thousand inspections.

The engines were tested for 48 hours. Each finished car was tested over and over, until it proved utterly perfect.

We did all this with every car, in the midst of the April rush. We do it today, and shall always do it so long as I build this car.

The Center Control

Then we equipped this car with my new center control. All the gear shifting is done by a small, round lever between the two front seats. It is done by moving this lever only three inches in each of four directions.

I got rid of all side levers, so the front doors were clear. Both brakes are operated by foot pedals.

In these ways I made possible the left-side drive.

Now nearly all makers announce for next season the center control and the left-side drive. But none can use my center control. They still use the old time levers.

The Amazing Price

Then we offered this car—the best I can build—for \$1,055. And nothing on the market could begin to compete with it.

The car is long, roomy and powerful. The wheels are big. The body is finished in 17 coats. The upholstery is the height of luxury.

The demand for this car will grow and grow as the facts become better known. I believe that each car will sell twenty.

But the price of \$1,055 can't last long. The price is too low for profit, and materials are advancing. Before very long advancing costs will compel us to ask something more for this car.

1,000 Dealers

Reo the Fifth is shown by dealers in a thousand towns. If you will write for our catalog, showing the various styles of body, we will tell you where to see the car. Address

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For hard-milking cows or leaky teats. Prevents leakage where teat opening is relaxed and cures hard milking where due to an obstruction in the canal. Our price 35c each, or \$1.00 for a set of four.

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Blue Bell Barred Rock yearling hens and cocks \$1 to \$2.50. Eggs, 75c a set. ing, two for \$1.25. Lake Ridge Farm, Levering, Mich.

Eggs for Hatching from Standard Silver, Golden and W. Wyandottes, 15, \$2.30, \$3. Browning's Wyandotte Farm, R. 30, Portland, Mich.

INDIAN RUNNER DUCKS FOR SALE. Great laying strain. Prices reasonable. Also eggs. W. M. P. BOOTH, R. 3, Orland, Indiana.

MOTTLED ANCONAS, Beautiful, nonsetting, persistent layers of large eggs. \$1.00 for 15 eggs. WILL W. FISHER, Watervliet, 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.

R. C. B. LEGHORN EGGS 15 for \$1; 30 for \$1.50. O. M. YORK, Millington, Mich.

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ESTABLISHED 1843.

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DETROIT, JULY 13, 1912.

CURRENT COMMENT.

The national convention of the democratic party completed its work at Baltimore last week in apparent harmony, notwithstanding the fact that its sessions were strenuous and prolonged and the deadlock which preceded the nomination of the ticket broke all previous records. Here, as at the Chicago convention, the lines were rather sharply drawn between the progressive and conservative wings of the party and, as at Chicago, the conservative element won out in the preliminary contest which started with the election of a temporary chairman and the organization of the convention. Judge Alton B. Parker, of New York, one time candidate of the democratic party for the presidency, was elected chairman with votes to spare and at the outset it appeared that with the machinery of the convention in their hands the conservative or reactionary element of the party would control the situation. But the fact that the strength of the two elements in the convention was pretty evenly divided became apparent when the so-called progressives, under the leadership of Col. Bryan, forced through a proposition to depart from the established precedent and defer the adoption of a platform until the nominations were made, which action in all probability had an indirect bearing on the final result of the convention, if, indeed, it did not forestall an irreparable breach in the party.

As noted in the last issue, Speaker Champ Clark, of Missouri, led in the number of votes during the first week of the convention, receiving a majority of the votes of all the delegates at times, but falling short of enough to nominate under the rule which prevails in democratic conventions requiring a two-thirds vote of the delegates to nominate a candidate. Gov. Woodrow Wilson, of New Jersey, the candidate favored by the so-called progressive element of the convention, held little more than the balance of power, or one-third of the delegates at the start, including the votes cast for him and those which it was figured would ultimately come to him, but gained steadily up to the close of the week, when the contest reached its most strenuous stage and ugly words were used by the orators who took the floor in behalf of the contending candidates or in personal attacks upon the leaders of the contending factions of the party. But during the week-end adjournment of the convention, while no agreement was reached and while neither of the leading candidates gained the necessary number of votes to nominate, the other candidates in the field lost ground, until the final break came on Tuesday, the delegates favorable to the candidacy of Congressman Underwood, of Alabama, were released, and Gov. Wilson was nominated on the forty-sixth ballot. Thus the progressive element of the party won out by a narrow margin in the end and dictated the nature of the platform, winning a record victory in that it was the first democratic convention in which a candidate controlling a majority of the delegates did not ultimately receive the nomination, notwithstanding the two-thirds rule. After the nomination of Gov. Marshall, of Indiana, as the running mate of Gov. Wilson and the adoption of a platform, the convention adjourned in apparent harmony, with the "conservative" delegates running for cover, thus avoiding an open break such as occurred at the Chicago convention.

Thus the two-thirds rule, which was really effective for the first time at this convention and which the conservative element of the convention talked of abandoning during the early days of its deliberations, served the rank and file of the democratic party a good turn in this case in that it probably made the action of the convention conform to the will of the majority in the party when it would not have done so under a majority rule. Yet the margin of safety was small in this direction; much smaller than would be the case under an effective legal primary in the several states for the election of delegates to national conventions and the expression of the popular preference for party nominees for the presidency.

The Rural School Problem.

Reports were submitted to the National Educational Association, which opened its fiftieth annual convention in Chicago this week, indicating that of the 20,000,000 public school children in the United States, 12,000,000 were being educated in the rural schools and that only one-third of the country boys and girls were making a good showing. A more or less direct result of the subject matter of these reports was the open advocacy of national supervision of country schools, in which Thomas H. Harris, State Superintendent of Schools for Louisiana, took the lead. In addressing the convention Mr. Harris declared that the condition of the rural schools was becoming so deplorable that it was time for the federal government to provide both money and methods to remedy this situation. On this point he is reported to have said, "Federal interference in the state control of schools should be set aside in the interest of the rising generation. National supervision of country schools is an absolute necessity. Our country needs a better educated rural citizenship."

It will, of course, remain for the convention to decide whether it favors this policy and what steps, if any, shall be taken to induce the federal government to lend aid in the solution of the rural school problem. It is likely, however, that the rural school problem will be made one of the most important subjects in the deliberations of the convention. It is stated upon good authority that a special committee appointed to investigate this subject will urge the appointment of field workers to travel over the country in the interest of better country schools in a report to be submitted later.

It is, of course, a far cry from the action of an association of this kind to a realization of the sentiment expressed in favor of the farther removal of the control of the public schools from the people who are their patrons and supporters. Yet the fact that such sentiment exists should not be overlooked, as it is further evidence of the fact that the rural school problem, so-called, is a condition and not a theory. And it is a condition which must be met with an adequate remedy if sentiment of this kind is to be prevented from developing in other quarters as well as among professional educators. It will be generally conceded that our rural schools are not as efficient as they should be, largely because many of them are too small to make efficiency possible, especially under the administration of the poorly trained teachers which are the only available material for our smaller and weaker schools. Another cause of inefficiency is the fact that the courses of study are not designed to interest the pupils and equip them for life's active duties as thoroughly as they ought, but rather as preparatory to advanced courses which the great majority of pupils never take. In the first instance, the school patrons and taxpayers are at fault, while for the second cause the educators must shoulder the blame.

But what of the remedy? Like charity, it "should begin at home." There should be a broadening of the views held by the average school patron and taxpayer, coupled with an intelligent and painstaking study of the question in all its phases, rather than from the viewpoint of cost alone. Likewise there should be a modification of the one-sided views of our educators who have sought to make our common schools preparatory schools for institutions of higher learning, rather than for the strenuous duties of active life. There is evidence of such getting together on common ground in the introduction of agricultural courses into the high schools of our own state, and in the advance which has occurred in vocational schools and part vocational training in the common schools of some sections in recent years. There is fur-

ther encouraging evidence in the increased interest which is noted in this problem on the part of the average school patron. There is every reason to hope and believe that this important problem will be rightly solved by the people themselves, rather than for them by any outside interference or direction. But to this end it is important that conditions should not be mistaken for theories and that as patriotic citizens we discard our prejudices and study this important problem from the standpoint of the greatest good to the greatest number, rather than from a narrow personal or selfish viewpoint.

Passing of Vehicles on Highways.

In the last issue a comment was published under this head in which an erroneous quotation of the present Michigan law on this subject was included. The section quoted was Section 17 of Act No. 304, Public Acts of 1907, which section however was superseded by Sub. 5 of Section 6 of Act No. 318, Public Acts of 1909, which is identical with the section quoted last week, except that the words "or to the left" are omitted. The error in the quotation was due to the difference in the index reference to the two acts, which was discovered after last week's issue had gone to press, in looking up other provisions of the motor vehicle law, although we are indebted to several readers for their kindness in later calling our attention to same. The section of the law last mentioned, and which is now in force, reads as follows:

Sub. 5. If a vehicle drawn by a horse or horses or other draft animals, or a motor vehicle, be overtaken by any motor vehicle, and the person in charge of such motor vehicle expresses a desire to pass, it shall be the duty of the driver of any such vehicle or motor vehicle so overtaken as aforesaid, to turn to the right of the center of the highway, and give the person so making the request an opportunity to pass, but in passing, the person in charge of such motor vehicle and the other male occupants thereof over the age of fifteen years shall give such assistance as they are able to the occupant or occupants of the vehicle they are passing, if assistance is asked, and in thus passing the chauffeur shall use all due care to avoid accident.

It will thus be seen that the state law as well as the custom of the road, as was indicated in the comment of last week, requires the driver of any vehicle overtaken by any motor vehicle, the driver of which signifies a desire to pass, to turn out to the right side of the center of the road to give said vehicle an opportunity to pass on the left.

HAPPENINGS OF THE WEEK.

National.

A call to the people of the United States who are in sympathy with the "national progressive movement" to send delegates to a national convention to open in Chicago on August 5, was given out late last week by United States Senator Dixon, Col. Roosevelt's campaign manager. The call was signed by members of the committee chosen at the meeting held in Chicago just after the adjournment of the republican national convention for the purpose of taking steps to organize a new party, and also includes the signatures of Roosevelt supporters in 40 states. In commenting upon the action Senator Dixon said: "The call lays down no rules as to the methods of choosing delegates, since each state will be expected to select its delegates by its own paraphernalia. The representation will be cut down to just one-half that of the previous conventions. This was considered advisable since this convention is to be notably a deliberative body and will certainly be composed of a class of men altogether different from those who usually attend conventions. In all probability the convention will adopt the name 'National Progressive' for the new party, but I cannot say definitely what will be done. Thus far no issues have been authoritatively stated and, of course, the platform itself will have to be decided upon by the delegates."

J. L. Hudson, the noted Detroit merchant, died in a suburb of London, Eng., on Friday, July 7. Mr. Hudson had been in ill health for some time and had been in Europe under the personal care of his physician for several weeks. In addition to being one of Detroit's leading business men, Mr. Hudson was a generous philanthropist who will be sorely missed by the city and its people, as well as in the business circles in which he moved. His remains are expected to reach Detroit on July 17.

The total volume of American money at the beginning of the fiscal year on July 1, was \$3,640,407,621, of which \$363,621,008 is held in the treasury vaults and the balance is in active circulation. This is said to be a new high mark for the volume of currency, beating a year ago by \$84,500,000. The treasury officials estimate that the population at the opening of the new fiscal year had grown to 95,656,000, and that the total of the country's currency is equal to \$34.26 per cap-

ita, or six cents more than a year ago. An electric storm which occurred in Chicago on the afternoon of July 7 is estimated to have caused \$150,000 in property loss. Five inches of water fell during the afternoon flooding many basements and damaging their contents. Twelve houses were struck by lightning and 42 alarms were received by the fire department, but no lives were lost.

The city of Chicago is about to establish a farm for the employment of city men who have been rendered unfit for city work by their own vices or misfortunes.

American representatives at the great athletic meet at Stockholm, Sweden, are giving a good account of themselves. Although the contests are not completed the points already won place the defenders of the stars and stripes out of danger from the contestants of other countries. America had a total of 25 points on Monday evening, Finland was second with six points, Sweden and Greece each had three, Germany and Norway each two and Hungary one point.

Delegates of a school fraternity in session at Flint, voted to bring test cases before the courts to determine the constitutionality of the Michigan and Indiana laws which prohibit the existence of fraternities in high schools.

Foreign.

The trial of the Camorristi at Viterbo, Italy, was completed Monday when the jury returned a verdict of guilty against nine of the defendants. The band was charged with the murder of Gennaro Cuccolo and his wife, but the trial brought out many other crimes committed by the men, showing them to be dangerous persons to the public peace and welfare. The guilty parties were sentenced to long terms in prison. The trial has been in session for over a year.

A decisive French victory resulted from an engagement between the victors and Moroccans at Maunay Bouchta, Morocco, Monday. Sixty of the natives and three of the French soldiers were killed.

CROP AND MARKET NOTES.

Lapeer Co., July 6.—The heaviest rain fall today known for years. Many potato, corn and bean fields all or partly under big ponds of water, thus breaking the long drought and, as it happened, finding a large amount of hay out in cock and windrow. About five inches of water said to have fallen. Ground had been so dry crops that had been planted a long time had not come up very well and were uneven. June clover is being delayed in cutting and by the time that hay weather is here again will be pretty ripe. The long period of dry weather shortened the hay crop some. Corn small for this date of the season. We think that oats will be a pretty good crop only an occasional field of good wheat in this country. An unusual acreage of potatoes planted. New clover seedling is quite good. Lots of June grass this season in the old meadows. Pastures are good. Feed still holds at high prices and farmers selling their sheep, calves and young cattle. Old potatoes still hold good at fair prices. Eggs, 17c; butter, 23c; berries, cherries and plums short crop.

Eaton Co., July 1.—First half of June cold and wet, with hard hail storm the 15th, stones half-inch in diameter. The last week of the month was the first corn weather so far. Much corn not planted till after June 1, so it is small, but growing fast now. Haying is in progress. Hay will be a light crop. Beans planted late and quite a lot failed to germinate, hence will make a short crop. Strawberries good, other fruit will be scarce. Beans, \$2.50; wheat, \$1.04@1.06; rye, 74c; corn, 80c; oats, 50c; wool, 20@23c; eggs, 16@19c; butter, 19@20c; potatoes, \$1@1.25; hogs, \$6.50@7; calves, \$5@7; lambs, 5@6c; hay, \$12@15.

Ohio.

Carroll Co., July 1.—We have had a few nice showers lately and it has been great weather for making corn grow. The hay crop won't amount to much this year, on account of the dry weather we had this spring. Farmers beginning to make hay. The boys are kept busy working corn. Corn, \$1; oats, 60c; potatoes, \$1.20; cherries about all gone and not a very good crop this year.

Wayne Co., July 8.—Weather very nice and warm with plenty of rain. Corn, where the grub worms are not working, is doing nicely, but they are taking nearly all of some pieces, some corn being just replanted after the flood for fodder. Potatoes are looking fine. Wheat harvest here, some wheat ready to cut. Quite a bit of clover hay being made turning off a pretty fair crop. Very poor hay weather, there being not enough sunshine for curing. Oats looking good; prospects for a fair crop. Butter, 20c; eggs, 17c.

A CORRECTION.

Will you kindly permit me to correct the eleventh paragraph of my township school article in your issue of June 22. It should read:

"His (the Grange delegate's) report, with other matter, was sent to the sub-Granges, also inserted in the 1901 official report of the State Superintendent of Public Instruction of Michigan as though it were '1901 history' when their trip was not made until April, 1902. Read their combined reports between pages 12 and 20 of book named to verify this statement."

The "other matter" was the report of Michigan State Superintendent of 1902 who accompanied the Grange delegate to Ohio.

In another place I wrote of "inaccurate statistics" influencing the National Grange of 1902, but a printer's error changes the words to "accurate statistics."

Lapeer Co. Mrs. R. M. BROWNELL.

PRACTICAL SCIENCE.

THE BALANCED RATION (Continued).

BY FLOYD W. ROBISON.

The Determination of the Ration.

In chapter VIII of Henry's Feeds and Feeding, a somewhat extended treatment of feeding standards and the method of calculating balanced rations is discussed. For the sake of clearness we shall discuss here the identical rations given under this heading in Henry's Feeds and Feeding and the reader is expected to refer to the above text for further amplification.

The Wolff standard provides that an ox at rest should have 18 lbs. of digestible dry matter containing .7 lbs. of digestible crude protein, 8 lbs. of digestible carbohydrates and .1 lb. digestible fat, this ration constituting therefore a nutritive ratio of 1:11.8. A cow yielding 22 lbs. of milk daily is allowed a ration of 29 lbs. of dry matter with 2.5 lbs. of digestible protein, 13 lbs. of digestible carbohydrates and .5 lb. digestible fat, the nutritive ratio being 1:5.7.

The Maintenance Ration.

The ox at rest furnished a nutritive ratio of 1:11.8 is thus given a mere maintenance ration, that is, and animal is given enough feed to provide for the mere maintenance of the animal without either a gain or loss in weight. A maintenance ration such as mentioned above could be obtained by the use of 10 lbs. of corn stover, 10 lbs. of oat straw for the roughage, together with 1 lb. of oil meal and 1 lb. of ground oats. The roughage ration alone, that is, 10 lbs. of corn stover and 10 lbs. oat straw, would have a nutritive ratio of 1:27 which would evidently require the consumption of a great deal more than the standard amount of roughage to furnish a sufficient amount of nutritive matter to satisfy the maintenance requirements of the ox at rest. By the addition to this roughage ration of 1 lb. of oil meal and 1 lb. of ground oats the nutritive ratio is changed to 1:12.8 which very closely approximates the Wolff standard of 1:11.8. In fact, this ratio is sufficiently close for all practical purposes provided the animal has a sufficient amount of protein and a sufficient amount of digestible carbohydrates as well. In this instance the animal would be given 16.8 lbs. of dry matter whereas the Wolff standard calls for 18 lbs. of dry matter, but dry matter is indicative merely of the bulk of the ration and falling below or exceeding the standard by one or two pounds is a matter of little consequence.

The Work or Dairy Ration.

In formulating a ration for the dairy cow yielding 22 lbs. of milk daily, according to Henry, he uses as a basis of this ration, that is the roughage, red clover hay, corn stover and oat straw. It is evident at the beginning that a cow at heavy work, that is, producing a good flow of milk, must have in her feed a considerable increase in the protein content. Consequently in order to provide proper bulk in the ration it is quite desirable to introduce among the roughages a feed high in protein. Consequently red clover hay is selected in this instance and with perfect propriety other legumes could be substituted, such as alfalfa for example. Allowing 8 lbs. of clover hay, 10 lbs. corn stover and 3 lbs. of oat straw would furnish about 15.2 lbs. of dry matter which is only about one-half the total amount of dry matter prescribed by the Wolff standard. Henry adds 5 lbs. of corn meal and 5 lbs. of bran to this roughage ration, all of which together contributes 24.3 lbs. of dry matter, 1.7 lbs. of digestible protein, 12.7 lbs. of carbohydrates and .5 lbs. digestible fat. This ration would fall considerably short of the standard in protein and have a nutritive ratio of about 1:8. The Wolff standard provides a nutritive ratio of 1:5.7 and it is clear that to bring up the percentage of protein in this ration and likewise narrow the nutritive ratio it is necessary to add a concentrate containing a high percentage of protein. Oil meal is consequently selected as before and 3 lbs. added, which gives a total of 27 lbs. of dry matter, 2.6 lbs. of protein, 13.7 lbs. of carbohydrates and .8 lbs., practically, of fat, with a nutritive ratio of 1:5.9. The standard provides a ratio of 1:5.7 and it is conceded that this final ration of 8 lbs. of clover hay, 10 lbs. of corn stover, 3 lbs. of oat straw, 5 lbs. of corn meal, 5 lbs. of bran and 3 lbs. of oil meal meets the conditions sufficiently close for all practical purposes.

Roughage Should Constitute Half.

In formulating a balanced ration the first thing to be considered, of course, is the roughage to be used and when an animal at heavy work, such as the dairy cow on a full flow of milk, is concerned, the roughage should provide for about one-half of the total dry matter needed in the ration, and for about one-fourth if possible, of the total digestible crude protein needed. Under these conditions it becomes possible without the use of too large a quantity of highly concentrated feeds to properly balance the ration, giving at the same time a fair and practical quantity of dry matter.

To attempt to simulate conditions in the standard ration exactly is a waste of time for rarely, except by accident, will it be possible to arrange a ration with the many factors congenial which it is necessary to take into consideration in prescribing a ration. For instance, the bulkiness, the palatability, and the many other factors that we have discussed heretofore in these articles must be considered at first hand in preparing a ration and if the standard be then approximated with these other conditions fulfilled there will be no need to figure closer on the ration.

Real Skill Consists in Balancing the Ration Economically.

The real skill in preparing a ration, therefore, resolves itself into the question of selecting those roughages, and concentrates as well, which furnish the nutrients desired with the least expenditure of money. To this end it frequently becomes desirable to sell many of the products grown on the farm and purchase on the market feeds which are less expensive and more adaptable for the purposes in hand. It is this idea which has caused such an influx of commercial feeding stuffs into the state and has caused the enactment of the feeding stuff inspection law which was passed in Michigan by the legislature of 1905.

As we stated in our previous discussion, later experimentation has shown that while it is not advisable to reduce the percentage of protein below a certain minimum, at the same time it frequently becomes advantageous for the feeder to go considerably beyond the maximum amount of protein prescribed by the standard and the full scope of our definition of the balanced ration permits of this elasticity. We frequently have a year when the commercial rating of clover, alfalfa, and other legumes would permit of their being given, almost to the exclusion of other roughages, and the mere fact that they contain a high percentage of protein would to our mind in no wise mitigate against their use. On the other hand, when the conditions may be reversed so that clover, alfalfa and the other leguminous constituents of a ration are exceedingly expensive, it does not become possible to substitute for them some of the non-nitrogenous roughages.

LABORATORY REPORT.

That Cider Vinegar.

The following letter is submitted for edification of Reader who made the inquiry regarding cider vinegar in a recent copy of the Michigan Farmer. We think comment on this is entirely unnecessary.

In last week's Michigan Farmer, Reader asks why his cider did not make vinegar. I think he is from the city or is in school years, but then, it is not so strange that he should ask the question as is the editor's answer to it. If that lad, or anyone else, expects to make good cider vinegar of apple cider in less time than two years, he must use some other means than to let it stand on a barn floor over winter. If the cider was not injured by freezing it is all right now to go on with its work of fermentation, that dead taste shows it to be in the second stage of fermentation and will go through one, perhaps two more before it is good vinegar, if left to work of itself in a summer temperature it will take two or three years to become good vinegar. Of course, fermentation can be hurried along by putting in yeast or mother. The bung should be left out of the barrel and a loose woven cloth tacked over the hole to keep out dust. I think not one-tenth of the vinegar (so-called) is given time to become vinegar. I think the best way is to give it air and a warm place, and time, it won't spoil with age unless it be too weak, that is, too little sugar in it.

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RUMELY PRODUCTS CO., Inc.
62722 Main Street, La Porte, Indiana.



MARKETS

DETROIT WHOLESALE MARKETS.

July 10, 1912.

Grains and Seeds.

Wheat.—There has been a steady but decided decline in wheat values all the past week. Cash wheat has suffered most at the hands of the bears but futures show a loss of two cents in four days' trading. The approach of the threshing season and the improvement in crop conditions are largely responsible for the poorer prices. In the southwestern states where harvesting and threshing is on reports are to the effect that yields are much higher than early estimates. Farther to the north seasonable rains have supplied the plans with needed moisture, but in some parts, especially Michigan and the other northern states east of the Mississippi, rust is showing up strong and it is generally predicted that where that is the case the recent gain made in the crop will be lost. In the spring wheat section these rains have done the grain much good and the crop on both sides of the line is in excellent condition. Cash wheat is weaker than futures, due to the light demand from millers who are having a difficult time disposing of flour. The local price for No. 2 red wheat a year ago was 87½¢ per bu. Quotations are:

	No. 2	No. 1	Red.	White.	Sept.	Dec.
Thursday	1.09½	1.08½	1.10½	1.12½		
Friday	1.08	1.07	1.09½	1.11½		
Saturday	1.07½	1.06½	1.08½	1.10½		
Monday	1.07	1.06	1.08	1.10		
Tuesday	1.06½	1.05½	1.07½	1.09½		
Wednesday	1.07	1.06	1.08	1.10		

Corn.—Corn values are ruling lower than seven days ago. The estimated total production for the country by the government experts is 2,811,000,000 bu., as compared with a yield of 2,531,488,000 bu. in 1911. This large estimate was a little unexpected because of the backward condition of the crop, but the past week has done much to bring the crop up to standard which, with the additional acreage planted this season largely accounts for the estimate. In the central states corn made splendid improvement since warm weather appeared. One year ago the price for No. 3 corn was 66¢ per bu. Quotations for the week are:

	No. 3	No. 2	Yellow.
Thursday	75	77	77
Friday	75	77	77
Saturday	74	76½	76½
Monday	72	74½	74½
Tuesday	72½	75	75
Wednesday	73½	75½	75½

Oats.—The oat trade followed the trend of the wheat market until Tuesday when there was a reaction and cash oats advanced a cent, which left prices two and one-half cents below the quotations for last Friday. The government figures put the estimate for the coming crop at 1,139,000,000 bu., as compared with a yield of 922,298,000 bu. in 1911 and 1,186,341,000 bu. in 1910. The trade was firm Tuesday after the advance. The present shortage and the promise of only an average crop will probably hold prices fairly high for the season. One year ago the price for standard oats was 48¢ per bu. Quotations for the past week are:

	Standard.	No. 3	White.
Thursday	55½	55	55
Friday	55½	55	55
Saturday	54	53½	53½
Monday	52	51½	51½
Tuesday	53	52½	52½
Wednesday	53	52½	52½

Beans.—In this part of the market prices were marked down 5¢. There is no business and the figures are only nominal. The new crop is promising over a greater part of Michigan, and the acreage is large. Nominal quotations are:

	Cash	Oct.
Thursday	2.70	2.25
Friday	2.65	2.20
Saturday	2.65	2.20
Monday	2.65	2.20
Tuesday	2.65	2.20
Wednesday	2.65	2.25

Clover Seed.—There is a possibility that a fair crop of seed will be gathered in this state this fall, but many things can reduce the chances. The removal of hay is being delayed by local showers and this will discourage the second crop of clover which is used for seed. Where hay has been taken off the aftermath is growing fast. Alsike clover is heading up excellently and in many sections the heads appear to be well filled. Nominal quotations are:

	Prime	Oct.
Thursday	9.90	9.75
Friday	9.90	9.75
Saturday	9.90	9.75
Monday	9.90	9.75
Tuesday	9.90	9.75
Wednesday	9.90	9.75

Flour, Feed, Potatoes, Etc.

Flour.—Prices are steady with the trade slow.

Straight	5.60
Patent Michigan	5.80
Clear	5.00
Rye	5.40

Feed.—Market continues steady at last week's range of values. Carlot prices on track are: Bran, \$25 per ton; coarse middlings, \$27; fine middlings, \$30; cracked corn and coarse corn meal, \$34; corn and oat chop, \$32 per ton.

Hay and Straw.—All grades steady. Quotations: No. 1 timothy, \$21.50@22; No. 2 timothy, \$19@20; clover, mixed, \$18@20.50; rye straw, \$11@11.50; wheat and oat straw, \$10@10.50 per ton.

Potatoes.—The increased offerings have pulled prices for new potatoes down to

\$3 per bbl. The fields of late potatoes in Michigan are quite promising in many sections, the stand being almost perfect. Old potatoes are gone so far as the market is concerned.

Provisions.—Family pork, \$19.50@21.50; mess pork, \$20.50; clear, backs, \$19.50@21.50; hams, 14½@15¢; briskets, 11½@12¢; shoulders, 12¢; picnic hams, 10½@11¢; bacon, 14@16¢; pure lard in tierces, 13¢; kettle rendered lard, 13¢ per lb.

Dairy and Poultry Products.

Butter.—There was no change in the price of creamery and dairy butter the past week. In the cattle markets it is noted that dairymen are disposing of a large number of cows, and the quality of these offerings leads to the general belief that they are the poorer animals of herds. While this will bring to the dairymen increased profits it is cutting down the supply of milk and butter and keeping the price up. Storage men are not taking hold of the market vigorously because of the high prices ruling. Quotations are: Extra creamery, 26½¢; firsts, do., 25½¢; dairy, 21¢; packing stock, 19¢ per lb.

Eggs.—Market is steady with the volume of business large. Current receipts case count, cases included, are quoted at 20¢ per dozen.

Poultry.—So little is being done in this deal that it is difficult to place quotations. Those reported are as follows: Live—Broilers, 25@28¢; chickens, 12@12½¢; turkeys, 16@18¢; geese, 11@12¢; ducks, 14¢; young ducks, 15@16¢ per lb.

Veal.—Steady; fancy, 10@11¢ per lb; choice, 8@9¢ per lb.

Cheese.—All grades are steady at last week's values. Michigan flats, 16@17¢; York state, flats, 17@18¢; limburger, 17@18¢; domestic Swiss, 24@25¢; brick cream 17@18¢.

Fruits and Vegetables.

Cherries.—Sour are quoted at \$1.50@1.75 per 16-qt. case.

Raspberries.—Prices falling from last week's high figures as the supply increases. Reds now selling at \$2@2.25 per 24-pt. case.

Blackberries.—Offerings increased and quotations down to \$1.25 per 16-qt. case.

Huckleberries.—More plentiful and lower, now selling at \$3.25@3.50 per 24-qt. case.

Gooseberries.—Firm at \$2@2.50 per bu. Honey.—Choice to fancy comb, 15@16¢ per lb; amber, 12@13¢.

Apples.—Scarce and firm. Willow Twig, \$7@7.50 per bbl; Steele Red, \$5.50@6.

OTHER MARKETS.

Grand Rapids.

Recent rains have prolonged the strawberry crop and this fruit sold on the city market Tuesday morning at \$1@1.50 per crate. Gooseberries brought \$1.25; red raspberries, \$2; black raspberries, \$1.75; red currants, \$1.25; sweet and sour cherries, \$2 per crate. New home-grown potatoes are still scarce. Peas are worth \$1; onions, 10¢; spinach, 25¢; carrots, 10¢; radishes, 6¢; beets, 15¢; butterbeans, \$1; lettuce, 30¢. Hay is lower, the new crop selling at \$12@14; old at \$14@16.

Chicago.

Butter.—Last week's prices rule despite a fractional decline at Elgin. Trade quiet. Quotations: Creameries, 23@25¢; dairies, 21@24¢ per lb.

Eggs.—All grades ½¢ lower; volume of business moderate. Quotations: Firsts, 17½¢; ordinary firsts, 16¢ per doz; at mark, cases included, 15@16¢.

Potatoes.—Prices continue to decline as receipts increase. A drop of 20¢ in the past week has restored potatoes to the bill of fare of most consumers and consequent increase in demand promises to steady the market. Triumphs, 70¢; 75¢ per bu; Kansas Early Ohio, 70¢@80¢; Virginia, \$2.60@2.75 per bbl.

Beans.—Prices remain at last week's figures with business fairly good. Quotations: Pea beans, choice hand-picked, \$2.92@2.95 per bu; prime, \$2.82½@2.85; red kidney, \$3.25.

Hay and Straw.—The outlook for the new crop of timothy did not warrant the sharp reductions of the past few weeks and the reaction has sent prices up \$2 @3 during past week. Clover, alfalfa and straw unchanged. Quotations are: Timothy, choice, \$22@23; No. 1, \$20@21; No. 2 and No. 1 mixed, \$17@18.50; clover, \$9@12; No. 2 and no grade, \$5@9; alfalfa, choice, \$13.50@14; No. 1, \$11@13; No. 2, \$9@11. Straw—Rye, \$10@11; wheat, \$7.50@8.50; oat, \$7.50@8.50.

Elgin.

Butter.—Market is firm at 25¢ per lb., which is ½¢ below the quotation of one week ago.

Boston.

Wool.—There is a tone of satisfaction hovering over the wool market. Early in the season trading was practically brought to a standstill by the demands from growers for prices above what the dealers thought they could well afford to pay. The growers were persistent, however, and now they are getting their price. This came about by manufacturers receiving new and duplicate orders for long lines of goods and to meet these orders they had to have wool, and to get the wool they had to give the price that will cover the dealer who is now assured and is ready in most states to pay the farmer what he asks. All kinds of wools are firmer and most are quoted higher. Michigan wools are moving slower than those from other states and as yet it is not possible to fix prices, but based on Ohio sales prices here should be around 34@35¢ for fine washed and delaine, fine unwashed, 27@28¢; XX and better grades promise to open at 31@32¢. Local buyers in Michigan have gotten about all the wool they can find for 24 @25¢. They realize that there is much more to secure but are hesitating about taking hold, which is causing a cessa-

tion in the local wool business. It is generally believed that Michigan buyers will have to come over to the farmers' way of thinking and give prices asked.

THE LIVE STOCK MARKETS.

Buffalo.

July 8, 1912.

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

Receipts of stock here today as follows: Cattle, 155 cars; hogs, 70 double decks; sheep and lambs, 50 double decks; calves, 1,800 head.

With 155 cars of cattle on our market here today, and weather extremely warm, our butchers were slow buyers from start to finish. The best grades of strictly dry-fed cattle, only a few loads of which were here, sold full strong with last Monday's market; the handy weight butcher cattle of good quality and finish, weighing from 900 to 1,100 lbs., sold full strong with last Monday. All other grassy grades and in between kinds, including stockers of all descriptions, sold considerably lower than last Monday. The grassy beef grades of heifers, cows and steers were fully 10@15¢ lower than last Monday; the market closed extremely dull on this class. Milkers and springers fully 5¢ per head lower.

We quote: Best 1,400 to 1,600-lb. steers dry-fed, \$8.85@9.25; good prime 1,300 to 1,400-lb. do., \$8.60@8.85; do. 1,200 to 1,300-lb. do., \$8.25@8.50; medium butcher steers, 1,000 to 1,100 lbs., dry-fed, \$7.50@8; grass steers, 1,150 to 1,250, \$7.75@8.25; do. 1,000 to 1,100, \$6.50@7; light grass steers, \$5.50@6; best fat cows, \$5.50@6; common to fair kind, \$3.25@3.75; best heifers, \$6.50@7; fair to good do., \$5.25@5.50; light butcher heifers, \$4.50@5; stock heifers, \$3.50@4; trimmers, \$2.50@3; best feeding steers, dehorned, \$4.50@5; common feeding steers, \$3.50@4; stockers, inferior, \$3@3.25; prime export bulls, \$6@6.25; best butcher bulls, \$5@5.50; bologna bulls, \$4@4.75; best milkers and springers, \$45@55; common kind do. \$25@30.

Receipts of hogs today was some lighter than for some time past; 70 double decks on sale. The demand was just limited here today for the good weights, but anything from light yorkers down to pig weights was in strong demand and sold considerably higher; best hogs selling generally 10@15¢ higher; a few loads of fancy selected sold at \$8.10, with the bulk at \$8@8.05; pigs and lights, \$7.75@7.85; choice roughs, \$6.50@6.85; thin sows \$3@4; stags, \$5@5.75. Trade closed strong, and with a good clearance, we should have a fair market for the next few days.

The lamb market was active today; most of the choice spring lambs selling at \$7.75@8, which was about steady with last week's prices, and the same with yearlings; most of the best selling from \$6@6.50. Sheep market was also active and prices about the same as last week. Look for about steady prices on both sheep and lambs balance of the week.

We quote: Choice spring lambs, \$7.75@8, cull to fair do., \$5@7; yearling lambs, \$6@6.50; bucks, \$2.50@3; wethers, \$5@5.25; handy ewes, \$3.75@4; heavy ewes, \$3.50@3.75; cull sheep, \$2@3; veals, choice to extra, \$8.75@9; fair to good do. \$6.50@8.50.

Chicago.

July 8, 1912.

Cattle. Hogs. Sheep. Received today 19,000 30,000 18,000 Same day last year .. 28,705 34,853 19,316 Received last week .. 35,057 109,144 66,195 Same week last year .. 42,359 96,614 94,325

A blistering hot day makes a bad Monday market for the numerous consignments of big, heavy hogs, with old sows plentiful and moving off slowly at weak prices. The early market this morning was active for the best light butcher hogs at firmer to 5¢ higher prices, but long before noon trade became dull, the local packers refusing to pay the rise, and it was all lost. The day's sales took place at \$6.90@7.65. Hogs received last week averaged 237 lbs., compared with 229 lbs. a year ago and 244 lbs. two years ago. This hot weather is hard on heavy hogs, and dead ones are taken from stock trains in large numbers.

Cattle are active today so far as the better classes are concerned, and these are firm, but other kinds are slow and barely steady. Small receipts alone stand in the way of lower prices.

Sheep and lambs are firmer today on account of the moderate offerings. The packers received only about 2,700 southern lambs direct, while about 5,000 range lambs arrived from Washington and Idaho. The best range lambs sold at \$8, and range yearlings brought \$5.75@6.

Cattle and all other kinds of live stock were affected to a marked degree last week by the observance of the Fourth of July holiday, no business being transacted at the stock yards on that day. A Monday run of 20,661 head started a weak feeling in cattle not of the better class, and before the day closed prices were 10@15¢ lower, except for the best, which were higher than ever at \$9.65. A further decline took place on Tuesday, despite small receipts, but cattle with quality went higher on Wednesday on moderate receipts and a better demand. On that day another high record was made by the sale of 57 fancy branded 1,395-lb. Hereford steers at \$9.70. The bulk of the steer sales for the week took place at \$7.30@9.25, with grass-fed cattle selling at the lowest prices reached this season, the poorer lots going at \$5.70@6.75. Cattle classed as choice heavy brought \$9.30@9.70, with good heavy heaves going at \$8.70 and upward, while some prime little yearlings sold up to \$9.35, a bunch of 74 head that averaged 1,164 lbs. fetching that price. Medium class steers sold at \$8 and over, with fair killers selling at \$7 and over. Butcher cattle had a very fair outlet on the

whole, with cows and heifers selling at \$4.30@8.35, and anything fancy would have sold around \$8.50@8.75, as such heifers did a week earlier. Cutters brought \$3.30@4.25, canners \$2.25@3.25 and bulls \$3.75@7.25. Little interest was shown in the stocker and feeder branch of the market, notwithstanding further sharp reductions in prices, the former selling at \$4@6 and the latter at \$5.25@6.75. Country buyers were in small attendance, and those who showed up were able to pick up some good bargains. Calves sold very well usually, sales being on the basis of \$3.50@9 for inferior heavy to prime light vealers. Milkers and springers had a moderate demand at \$35@75 per head, the call being mostly for the better class of cows. The close of the week saw calves much higher than a week earlier, while grassy and medium steers were 20@30¢ lower, grassy cows sharing in the break. Stockers and feeders broke 15@25¢.

Hogs sold as well on the whole as could have been expected in a week broken into by a national holiday, with some extremely sharp breaks in prices, followed by rallies. The big run of the week was on Monday, 42,429 hogs showing up, but by Wednesday there was such a small supply marketed that prices ruled somewhat better. Eastern shippers took 7,104 hogs on Monday, but during most of the week their operations were hardly large enough to give much support to the market, and the undertone was weak as a rule. Extremely hot weather has been hard on big, heavy hogs in transit, many dead hogs being removed from arriving stock trains, and the heat has caused buyers to show at last a marked preference for hogs not over heavy. This is a matter of yearly occurrence, and as the season advances heavy hogs may be expected to sell at steadily increasing discounts, while the choice class of light hogs will bring good premiums. Hogs have made a very good showing in weights of late, the recent average being the heaviest in about nine months, and the average for June was 235 lbs. The week's receipts fell off so much that a late rally took place, with sales at the close at \$6.90@7.62½, compared with \$7.15@7.65 a week earlier. Hogs weighing from 200 to 300 lbs. were among the highest sellers, with a widening out of prices. Pigs sold at \$5.50@7.05 and stags at \$7.70@8.10, while boars brought \$3.25@4.

Sheep and lambs have been marketed too generously in recent weeks, lambs especially, and prices have undergone extremely large reductions. At times sheep and yearlings have ruled steady, with small offerings on days when the market was glutted with spring lambs, and this was the case on Monday last week, when out of receipts of 21,310 head the percentage of everything but lambs was small. On that day the first range lambs from Washington and Idaho arrived, and the bulk of the good lambs took a fall of 25¢, with some lots off 35¢@50¢. Many native lambs have also shown up, while the packers continued to receive many consignments of Tennessee and Kentucky spring lambs shipped to them direct from Louisville. Prices had such a hard blow on Monday that the receipts were checked, while many sheepmen held back stock because of the approaching holiday, and the result was that rallies took place in values, early sales of choice spring lambs at \$7.75, a late rally of 25¢ occurred in sheep and lambs, the latter selling at \$4@8, while ewes went at \$2@4.60, breeding ewes at \$4.25@5 and bucks at \$2@3.25. Native yearlings brought \$4@6.25 and Oregon range wethers \$4.75@5.

Horses were marketed sparingly last week, and all that saved prices from a bad slump was the small supply, for the general demand was extremely light. As it was, the poorer animals had to go in some instances at concessions from former prices, but good horses sold no lower. Farm workers of 1,100 to 1,450 lbs. were slow at \$100@200 per head, while wagon horses that weighed 1,250 to 1,350 lbs. were salable at \$160@200, with high-class delivery wagon horses quoted at \$210@250. Inferior animals went as low as \$85, with nothing doing in drivers worth mentioning. Light drafters were salable at \$175@225, and better and heavier ones were mostly nominal around \$240@325.

NATIONAL CROP REPORT.

Winter Wheat.—Condition, 73.3 of a normal; indicated acre yield, 13.8 bu; estimated total production, 358,000,000 bu.

Spring Wheat.—Condition, 89.3; acre yield, 14.1; total production, 271,000,000; wheat remaining on farms, 23,876,000.

Corn.—Acreage, 108,110,000; condition, 81.5; acre yield, 26.0; total production, 2,811,000,000.

Oats.—Condition, 89.2; acre yield, 30.1; total production, 1,139,000,000.

Barley.—Condition, 88.3; acre yield, 25.6; total production, 194,000,000.

Rye.—Condition, 88.2; acre yield, 16.0; total production, not given.

White Potatoes.—Acreage, 3,689,000; condition, 88.9; acre yield, 95.5; total production, 352,000,000.

Tobacco.—Acreage, 1,194,200; condition, 87.7; acre yield, 844.9 lbs.; total production, 1,009,000,000.

Flax.—Acreage, 2,992,000; condition, 88.9; acre yield, 9.4; total production, 28,000,000.

Rice.—Acreage, 710,100; condition, 86.3; acre yield, 11.7; total production, 23,000,000.

Hay.—Condition, 85.2; acre yield, 1.4; total production, not given.

Apples.—Condition, 67.9.

Many stock farmers of the east and middle west who have good pasture land and find stocker and feeder cattle altogether too high-priced to suit their views, are expecting to invest in feeder lambs and sheep instead.

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.
July 11, 1912.

Cattle.

Receipts, 1,053. Prime grades and good butchers steady; common and little light grades and bulls 25c lower and very dull. We quote: Extra dry-fed steers and heifers, \$8@8.25; steers and heifers, 1,000 to 1,200, \$6.50@7.50; grass steers and heifers that are fat, 800 to 1,000, \$5@6; do. 500 to 700, \$3.50@4.50; choice fat cows \$5@5.25; good fat cows, \$4@4.50; common cows, \$3@3.50; canners, \$2@3; choice heavy bulls, \$4.50; fair to good bolognas, bulls, \$3.75@4; stock bulls, \$3.25@3.50; choice feeding steers, 800 to 1,000, \$4.50@5; fair feeding steers, 800 to 1,000, \$4@4.50; choice stockers, 500 to 700, \$4.25@4.75; fair stockers, 500 to 700, \$3.75@4; stock heifers, \$3.75@4.25; milkers, large, young, medium age, \$45@50; common milkers not wanted at any price; fair to good, \$30@35.

Bishop, B. & H. sold Parker, W. & Co. 6 steers av 905 at \$6.50; to Schlischer 7 butchers av 641 at \$3.75; to Elk 7 cows av 850 at \$3.80; to Sullivan P. Co. 11 butchers av 743 at \$4.25, 3 do av 593 at \$3, 14 do av 987 at \$4.40, 1 cow weighing 1,150 at \$3, 1 bull weighing 1,030 at \$4.40, 6 cows av 880 at \$3.50, 2 do av 985 at \$4.50, 4 butchers av 892 at \$6; to Hammond, S. & Co. 10 do av 785 at \$4.10, 6 steers av 816 at \$5.50, 3 bulls av 900 at \$4.10, 2 do av 910 at \$3.75, 1 heifer weighing 680 at \$4.60, 2 bulls av 965 at \$4.25, 1 do weighing 720 at \$3.75, 2 do av 1,085 at \$4.25, 2 do av 1,120 at \$4.10, 1 cow weighing 850 at \$3.50, 2 do av 1,250 at \$5.25, 4 do av 1,010 at \$5.25, 1 steer weighing 1,010 at \$6.50; to Rattkowsky 3 cows av \$8.50 at \$3.40, 3 do av 950 at \$4; to Sullivan P. Co. 14 butchers av 987 at \$4.40; to Kamman 20 do av 925 at \$6.25; to Newton B. Co. 2 canners av 875 at \$3, 3 do av 892 at \$3; to Fry 11 butchers av 750 at \$4.40; to Schlischer 5 do av 678 at \$3.50; to Sullivan P. Co. 2 cows av 935 at \$4, 2 do av 1,110 at \$4.75; to Goose 7 butchers av 534 at \$3.55; to Austin 4 stockers av 415 at \$3.

Roe Com Co. sold Kamman B. Co. 1 cow weighing 1,120 at \$4, 3 do av 811 at \$5.25; to Breitenbeck 26 steers av 877 at \$5.35; to Parker, W. & Co. 3 cows av 940 at \$3; to Sullivan P. Co. 20 do av 972 at \$3.75, 1 do weighing 1,000 at \$3; to Hammond, S. & Co. 3 bulls av 1,033 at \$4.35, 2 do av 1,150 at \$3.75, 1 cow weighing 1,030 at \$4.25; to Fry 8 butchers av 621 at \$4; to Sullivan P. Co. 3 cows av 970 at \$3.25, 5 bulls av 1,044 at \$4.25; to Parker, W. & Co. 1 cow weighing 1,030 at \$3, 2 do av 815 at \$2.50, 5 steers av 1,136 at \$6.25; to Mich. B. Co. 23 butchers av 886 at \$4.40, 26 do av 750 at \$4.75; to Regan 6 do av 431 at \$2.50; to Bockner R. & K. 5 stockers av 750 at \$4.50, 18 do av 500 at \$4, 14 do av 550 at \$3.50.

Veal Calves.

Receipts, 909. Market 25c higher than Wednesday; 50c higher than last week. Best, \$8@8.75; others, \$4@7.

Bishop, B. & H. sold Sullivan P. Co. 11 av 135 at \$8, 9 av 150 at \$8.50, 3 av 146 at \$6.50, 24 av 160 at \$8.75, 2 av 150 at \$6.50, 19 av 145 at \$8.50, 11 av 140 at \$8, 2 av 150 at \$8, 8 av 135 at \$7.75, 4 av 155 at \$6.50, 9 av 150 at \$8.50; to Parker, W. & Co. 31 av 140 at \$8, 11 av 150 at \$8.25, 4 av 155 at \$8.50; to Bray 11 av 185 at \$5.50, 32 av 155 at \$7.50, 8 av 150 at \$8.50; to Goose 20 av 125 at \$7; to Mich. B. Co. 24 av 145 at \$7, 2 av 170 at \$5, 7 av 150 at \$7.75; to Hammond, S. & Co. 10 av 155 at \$8.75, 3 av 150 at \$6.50, 10 av 173 at \$8.75, 10 av 165 at \$8.75, 3 av 120 at \$6.50, 9 av 150 at \$8.50.

Sheep and Lambs.

Receipts, 1,391. Market 25c higher than last week; steady with Wednesday. Best lambs, \$7.50@8; fair to good lambs, \$6.50@7; light to common lambs, \$3.25@5; yearlings, \$4@6; fair to good sheep, \$2.75@3.25; culls and common, \$1.50@2.50.

Bishop, B. & H. sold Mich. B. Co. 36 lambs av 70 at \$7.50, 11 do av 58 at \$6, 1 buck weighing 160 at \$3.50; to Sullivan P. Co. 16 lambs av 75 at \$7.25, 2 do av 75 at \$8, 7 do av 77 at \$7.75, 1 sheep weighing 100 at \$3.50, 16 lambs av 63 at \$5.25, 19 lambs av 65 at \$7.25, 11 sheep av 87 at \$3.25, 3 do av 150 at \$3.25, 5 lambs av 70 at \$6; to Thompson Bros. 15 do av 7 at \$6, 13 do av 68 at \$7.50, 19 sheep av 100 at \$3.25; to Fitzpatrick Bros. 19 do av 110 at \$3.25; to Hammond, S. & Co. 6 do av 95 at \$3.25; to Fitzpatrick Bros. 12 do av 110 at \$3.25, 13 do av 90 at \$2.75, 22 lambs av 65 at \$7; to Thompson Bros. 20 do av 60 at \$6.50; to Eschrich 22 do av 40 at \$5; to Fitzpatrick Bros. 12 sheep av 130 at \$3.40, 20 do av 110 at \$3.40, 17 lambs av 60 at \$5.25, 5 sheep av 110 at \$3.

Hogs.

Receipts, 2,515. Market steady at Wednesday's prices; 10@15c higher than last week.

Range of prices: Light to good butchers, \$7.55@7.60; pigs, \$7.25@7.40; light yorkers, \$7.40@7.50; stags one-third off.

Spicer & R. sold Hammond, S. & Co. 100 av 210 at \$7.60, 607 av 190 at \$7.55, 75 av 170 at \$7.50.

Haley & M. sold same 125 av 200 at \$7.60, 460 av 190 at \$7.55.

Roe Com Co. sold Sullivan P. Co. 325 av 195 at \$7.60, 140 av 190 at \$7.55, 85 av 180 at \$7.50, 15 pigs av 150 at \$7.25.

Bishop, B. & H. sold Parker, W. & Co. 405 av 220 at \$7.60, 410 av 190 at \$7.55, 525 av 160 at \$7.50, 156 av 170 at \$7.40.

No-Rim-Cut Tires 10% Oversize

Winners of the Ten-Year Race

In the first decade of this 20th century came a race for supremacy in pneumatic tires.

All the great makers were in it.

And all of us knew that the tire which won must excel all others.

Now motor car owners have

200,000 Users

1,250,000 Goodyear tires have now gone into use. They have been tested out on some 200,000 cars.

So the present demand tells the final decision of 200,000 users.

And the increasing demand—sales doubling every few months—shows how these users endorse these tires to others.

How Goodyear Won

We won this race to the topmost place by cutting tire bills in two.

First we built a tire more wear-resisting than any other tire.

To do this we built a testing machine, where four tires at a time are constantly worn out under all sorts of road conditions.

Thus we compared 240 formulas and fabrics. Thus we compared every material and method. And thus we compared rival tires with our own.

By this metered mileage, in the course of years, we learned how to build an almost perfect tire.

Rim-Cutting Ended

Then we got rid of rim-cutting forever by inventing this patent tire.

With the old-type tires, 23 per cent of all ruined tires were rim-cut. And rim-cut damage is beyond repair.

No-Rim-Cut tires make this ruin impossible, so they save this 23 per cent.

10% Oversize

Then we made these tires—No-Rim-Cut tires—10 per cent over the

rendered their final verdict, and the result is this:

No-Rim-Cut tires by far out-sell every other tire.

The demand today is twelve times larger than three years ago.

And our monthly output of nearly 100,000 tires fails to keep pace with the call.

rated size. We did that to carry the extras added to a car. To save the blow-outs due to overloading.

This 10 per cent oversize, under average conditions, adds 25 per cent to the tire mileage. Tens of thousands of users have proved that.

Save 48%

So No-Rim-Cut tires, under average conditions, save 48 per cent.

Men began to find this out about three years ago. Since then the demand for these patent tires has doubled six times over.

No-Rim-Cut tires have now become the most popular tires in the world.

You will never buy a lesser tire when you learn what these tires mean.

Our 1912 Tire Book—based on 13 years of tire making—is filled with facts you should know. Ask us to mail it to you.

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AKRON, OHIO

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More Service Stations Than Any Other Tire

We Make All Kinds of Rubber Tires, Tire Accessories and Repair Outfits

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A RUMELY HULLER. WHY?

If you are interested in Clover Hullers or Alfalfa Hullers, here are seven good reasons why you had better buy a Rumely.



- One —It rubs, not threshes.
- Two —It has no equal as a seed-saver.
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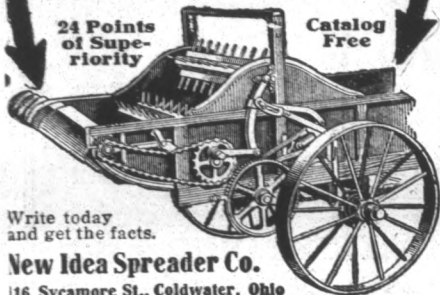
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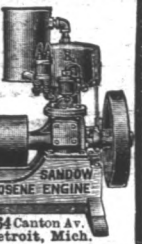
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HORTICULTURE

A FEW OF THE INSECT PESTS OF THE GARDEN.

The squash vine is affected principally by two species of insects, the squash-bug and the squash-vine borer.

The Squash Bug.

The first is a true "bug" and obtains its food by piercing the stalks and leaves with its long beak and sucking their juices. The adult bugs are black in color and give off an offensive or sickening odor when crushed. The young bugs much resemble the adults in appearance but of course are smaller in size and have only partially developed wings. They hatch from the reddish-brown eggs which are laid in patches, usually, upon the under side of the leaves.

About the time squash vines are putting out their third or fourth leaf the first bugs, which have wintered over, put in an appearance. This is the only time that it is practical to kill them. Early in the morning they are more or less sluggish and if pieces of boards have been laid down near the vines bugs will be found beneath them if the night has been slightly cool. Here they may be collected and destroyed by dropping into a bucket of water with a film of kerosene upon the surface.

In the fall after the crop is gathered, the bugs continue to feed upon the vines; by plowing these under the bugs are forced to go into hibernation earlier than is their custom and fewer are able to survive the winter. Plowing also destroys large numbers of the immature bugs by burying them. If it is impracticable to plow the squash ground the old vines should be destroyed in some other way.

The Squash-vine Borer.

The squash-vine borer has given us less trouble than the preceding insect. The adult moth lays her eggs upon stalks and the young larvae burrow into them forming tunnels. Sometimes the tunnel extends down into the roots and at other times the "worm" burrows towards the extremities of the vine.

If the squash vines have commenced to run before the borers appear they may be protected against attack by inducing them to strike roots at their joints. This is done by covering the joints with a couple of inches of moist earth. This is a precautionary measure and not a cure. If the borers injured your vines last season give this method of combating them a trial this year.

Using early squashes as a trap crop is practical. A week or ten days before planting the regular crop plant a row of summer squash across the middle of the field. These early hills attract the moths to lay their eggs upon them and later they may be destroyed, but see that they are destroyed early in the season for when the borer or larva becomes full grown it goes into the ground to pupate and, of course, is out of reach.

Wayne Co.

W. POSTIFF.

COLLEGE STUDENT HELP ON FRUIT FARMS.

A larger number of young men are being educated in the agricultural colleges today than ever before in the history of education. The only reason for this condition is that there is a great demand for young men who have a training and knowledge of the things that are studied in an agricultural college.

In the books on agriculture and horticulture published two decades ago may be found uncomplimentary references to persons who possessed what were called "book farming notions," and to students who wasted their time in going to an agricultural college.

But the old order changeth. Slowly, at first, but more rapidly during the past few years. There has been one simple reason for this change and that is that the young man who has a grasp on the kind of knowledge that comes from a scientific agricultural training is a valuable man. He knows about the many things that must be known to grow crops and fruit successfully. And, as long as knowledge is power, and crops are grown, he will remain a valuable man.

In some agricultural newspapers can be seen, once in a while, a reference to agricultural college students that is a little uncomplimentary. The idea is deftly put that they are a little "too nice" to get out and do hard heavy work—that they even think that beneath them, etc.

It is a satisfaction to know that such a

notion as this could not be formed in Michigan, and I seriously doubt if it is justified anywhere. Students in agricultural colleges are there for a purpose; many of them have worked hard to get there, and others have to work hard to remain. A lecture upon the "Dignity of Labor" would fall upon uninterested ears.

During the ten-day Easter vacation last April, about twenty advanced students in horticulture in the Michigan Agricultural College went to various fruit farms to prune orchards. The parties who hired them were well pleased with them and several have already spoken for the services of students. Last summer, a number of students worked, from the time college closed in June until it opened in late September, on fruit farms. They were not "visitors" or "company" but workers, receiving not "salary" but wages, and no further consideration or favors than any "hired man" would be granted. That these students were good workers and were worth employing can be better told by the men who employed them than in any other way. Read what the following Michigan fruit growers have to say:

"Student help has paid me well. They come at a season of the year when help is very hard to obtain in this section. In years of full crops, the thinning season is just on and they can stay until the summer and fall fruit is mostly harvested. I have found these students bright, industrious, ambitious fellows, ready to do any and all kinds of work, of which there is a great variety on the average fruit farm."—George E. Chatfield, Van Buren County.

"There is little of sentiment in this matter of employing help. Our prime idea is efficiency and industry. However, I have rather given preference to the students, because they are looking for opportunities of gaining experience in orchard work and I have wanted to help them along in such ways as fall within my power. I have, at different times, had boys from both M. A. C. and Wisconsin University and have found them all good, faithful, conscientious and industrious workers. They are, too, rather above the ordinary run of help in intelligence and are thoughtful and careful about their work."—Edward Hutchins, Allegan County.

"Student help has paid me. It is difficult to find men who will take an interest in the work from more than a financial standpoint, but the young man who is aspiring to a place in the fruit-growing world, or who wants practical experience for educational purposes, has an interest almost akin to that of the owner of the orchard. Intelligence, alertness and enthusiasm characterize the student who hopes to succeed in his chosen line."—Wm. L. Harter, Mason County.

"My idea on the question of students as help on the farm, is this: It should be a co-operative proposition between the agricultural college and each individual farmer. As the farmer derives great benefits from the college, he should in return be glad to do all in his power to push the work along. The benefits should be mutual, as the students have all the up-to-date methods and the farmer the practical ideas. Besides this, they are pleasant, gentlemanly fellows to have in your home."—J. O. Fraleigh, Muskegon County.

Such testimony certainly should have considerable weight with Michigan fruit growers who are "up against" the help question.

Agri. Col., Mich.

H. J. EUSTACE.

ENCOURAGING PEPPER PLANTS.

My pepper plants have not grown at all thus far. They are on heavy land, inclined to bake. What can I do to hustle them along?

Wayne Co.

P. A. R.

After a crop has started to grow it is usually too late to put the soil in better condition for improving that particular crop. In such short time as is left there are but few fertilizers that can be added which will become available to this crop, and also the mechanical condition of the soil cannot be greatly improved before the season is over. There are, however, two things that may assist our correspondent in his predicament. One is to scatter about the plants a liberal application of nitrate of soda, using from one to two pounds per square rod. This fertilizer should be carefully worked into the surface so that it will have opportunity to dissolve quickly in the soil moisture. The other thing is to give the plants thorough cultivation. The tendency of the soil to bake will thus be overcome in part, and by loosening up the ground air will be admitted. This gives the bacteria in the soil a chance to prepare food for the plants.

After the crop is removed this fall it would be advisable to apply a heavy coat of barnyard manure. If this is not available and it is possible to draw vegetable material from another field and plow it under, good results are certain to follow. The addition of vegetable matter will loosen up the soil and make better ground for the growth of plants.

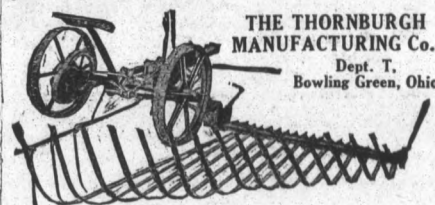


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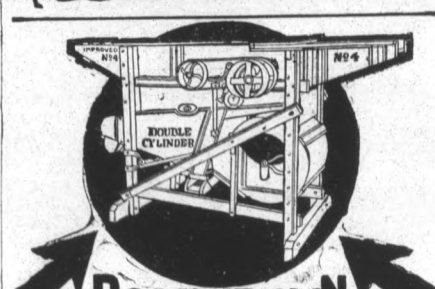
The timothy, clover, alfalfa, etc., is left on the field in loose, hollow bunches or windrows so that it can be quickly cured, without bleaching, and is ready to be loaded onto wagons. The crop is absolutely free from dirt or rubbish. There is no loss of seed by being run over by the team and mower or by being dragged over the stubble and kicked with a tedder.

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Woman and Her Needs

At Home and Elsewhere



THE YOUNG MOTHER'S WORRIES.

IS there anyone who is more in need of help and sympathy during the summer months than the young mother? If there is I can't think at this moment who it can be. Thanks to modern educational methods the new mother is usually as ignorant of what the baby needs as is the child itself and she brings to her task nothing but fears and worries and a desire to do the very best for baby. Teething, summer complaint, heat rashes and other ills loom before her. She knows neither how to avoid them nor how to cure them when they do arrive, and the advice given her by older mothers is usually so varied as to plunge her deeper into indecision. Then, at a time when she ought to be almost entirely free to care for baby, her housework doubles up. There is gardening to think of, fruit that must be picked or wasted, young chicks to look after, extra help on the farm, but usually no extra help for her, since towns have robbed the farms of the girls who could go out to housework. The young husband can not help her in her perplexities for he is even more ignorant on the subject of babies than is she, and is besides deeply concerned in the problem of making the money to keep the home going.

First of all, on the hot days, make the baby comfortable. A vivid memory lingers with me of a young mother who took her year-old baby out on the hottest day in July clad in woolen shirt and band, wool stockings, flannel petticoat, outing flannel ditto, lonsdale dress and coat! Needless to say, the baby cried and fretted and was actually sick, until the old aunt who was entertaining him and his mother, took off all his clothes but the woolen band, diapers and slip and put him on the floor on a blanket to creep and roll and kick.

It is always a good thing to keep the baby's abdomen covered with woolen for the first two summers, and for this the

little sleeveless wool shirts, or bands, are sufficient. These bands with the diapers and a cool slip are enough for the young baby on the hottest days, and on cool days a flannellette skirt and stockings or crocheted booties may be added.

If the mother uses care in the diet she may approach the summer even with teething before her, with not great worries ahead. If the baby is a nursing baby there is little to fear, provided the mother uses discretion in her own diet. In any case, the feeding is simple. Give nothing but milk until baby is seven months old, then add a little starch in the form of crackers or dry toast. Follow this up later with a spoonful of rice, well cooked, farina, tapioca, or perhaps oatmeal, all well cooked and given with a little milk. They do not need sugar, as the starch is converted into sugar during digestion. Avoid potatoes for the first two years, as potato starch is very difficult of digestion. Fruit, too, should be avoided, unless you wish to run the chance of trouble. The practice of giving the baby a taste of everything on the table is bound to give trouble sooner or later. While it may be strong enough to stand it for a time, its stomach is really not ready for every sort of food any more than its brain is ready for books, and mischief is the invariable result.

Orange juice is the only thing in the nature of fruit which can escape this rule. This may be given, a tablespoonful at a time, for constipation. Do not dope the baby with medicine, no matter who advises it, unless ordered to do so by a competent physician.

Then don't worry. A worried, nervous mother upsets the baby. For the first few years the mother is the child's world and everything that affects her affects her baby. Keep cool and happy and baby will be more apt to do the same. DEBORAH.

COMBATING THE FLY.

BY H. L. G.

Before this article can possibly find its way into print, the flies will have got a fair start; but this should not discourage the fly-fighter, for it is as true in this case as in any other, that it is "better late than never."

Prevention should, of course, be given first thought. The first few stragglers that show themselves on the window panes in early spring should be killed. Keep a good lookout for everything in the way of breeding places, such as decaying bones, dead animals, the offal from butchering, etc. If these are found to be already infested with larvae, pour plenty of kerosene over them and bury immediately. If an outside closet has to be tolerated, keep plenty of dry road dust at hand to use in it. Wood or coal ashes are a good substitute when dust is not available.

The extra work of warring against the pests is greatly lessened by the many patent devices for that purpose, such as the screen trap and the various poison boxes. But should these not be at hand, one can readily contrive makeshifts at home. Almost everyone has seen the trap made by putting soapsuds into a tumbler, covering with a dry bread crust into the center of which a small hole has been cut, and lower side, within the tumbler, plentifully daubed with molasses and vinegar to attract the flies. Have the suds made of soft soap if possible for the insects seem to like the odor of this best. Let the suds be within an inch of the crust and the latter should be dried rather hard else a few slaps to precipitate the flies into the water will break the slice into pieces. Bread is further objectionable on account of its being food for those too wary to go down through the opening. Cardboard substituted for the bread has neither of its faults while

it has all of its virtues. Of course, such a trap has to be constantly watched to be effective, a good rainy day job when the pests are most persistent in coming into the house.

Most of the pests can be driven out of the house after the morning work has been done and most of what remains can be destroyed with a "swatter." A most effective one is the screen swatter. It is made of a piece of new window screen (old screen soon goes to pieces), two short cloth-covered dress stays, and an old whip handle or smooth slender stick that may be split at one end. Cut the screen about 8x10 inches and turn over a hem on the sides so that the ends of the dress stays are under it, one at each end, and then turn the end hems over the stays. Sew all around with wrapping cord to strengthen the hems and hold the stays into place. Split the small end of the whip handle and push the screen down into it about one and a half inches and clasp a pig-ring about it. A wire may be used for the purpose, but see that the ends do not stick up. One made like this lasted all last summer and is still good. The stays prevent warping or twisting. Such a swatter is most effective after the time-honored flour sack driver has done its dullest best.

It is better to use sticky fly-paper in the house and poison outside. If a sheaf is put up outside in the sunshine, the paper may be set upon it. When the flies fall they do not need to be constantly swept up or else crushed on the floor. Small chickens have been known to eat many of these dead flies without suffering ill results.

Generally speaking, as little poisoning should be done about the house as possible as the odor draws them wherever it is set. The most successful work along this line can be done by taking the poison where they are found thickest, such as in a hoghouse. One such building

which had a cement floor, had a half dozen plates of poison constantly setting about with all the swill barrels and pails kept carefully covered. It is safe to say that at least a bushel of dead flies were swept up from that floor during the summer. It helped materially in preventing the nuisance about the house.

In the cold fall weather, it is the habit of flies to collect at night on the outside of window screens, especially where there is warm air escaping as at a kitchen window let down a little at the top. After the windows are closed for the night, they still remain clinging to the screen and are numbed by the cold when morning comes. Formerly these were brushed down into a basin of hot water; that is, all that could be before the warm vapor aroused them. Now a method somewhat different is used; for, knowing their habits, measures are taken to control their collecting places. As night approaches, all doors and windows are closed but two kitchen windows which are lowered a little at the top. The escaping warmth attracts nearly all the swarm to these places. I rise early the next morning, dress warmly, put about a half inch of cold water into a square cake tin and pour enough kerosene over it to cover the surface, moisten a wing or long quill with the oil to use as a brush, stand on a kitchen chair to get the tin as near them as possible, and press its side against the screen. The oil goes at once into the insects' spiracles, or breathing apparatus, killing them instantly. A week of such warfare will kill thousands of them.

HUMAN WELFARE QUERIES.

J. A. W.—To can strawberries without cooking, mix equal parts of the berries and sugar, let stand 24 hours and then put into clean, cold cans, taking care to seal tightly. The strawberries used at soda fountains are prepared by mixing them with sugar until no more sugar will dissolve. It is claimed that these can stand in an unopened dish for weeks without spoiling. You may send all the short cuts and recipes you wish, but we do not promise to print them all.

Household Editor:—Can you tell me a good way to prepare strawberries to serve with ice cream? Half of my family like strawberry ice cream and half do not, and none of them like it with just sugared strawberries on top.—Mother.

Make a strawberry sauce by boiling three cups of sugar with two of water for ten minutes, then adding four cups of crushed strawberries. Of course, let the syrup cool before adding the berries, and if possible, chill the mixture before pouring over the ice cream.

Household Editor:—How do you make sherbets?—Twenty-one.

An easy way is to boil two cups of sugar and four of water for 20 minutes. Then add your fruit juice and half freeze, open the freezer and add the stiffly beaten white of one egg and finish freezing. For lemon sherbet use three-fourths of a cup of lemon juice with the amount of syrup given above. For orange sherbet use two cups of orange juice and a quarter of a cup of lemon juice. Raspberry and pineapple sherbet call for two cups of the fruit juice and a quarter cup of lemon juice. The raspberry sherbet is improved by adding a half-cup of currant juice instead of the lemon. Of course, this recipe can be doubled, trebled, etc., but be sure to use these proportions.

Household Editor:—I am five feet and five inches tall and weigh only 99 pounds. How can I increase my weight?—Mary.

Stop worry and work first. Sleep as many hours a day as you possibly can, eat regularly and slowly and avoid alcoholic and other stimulating drinks. Drink milk in moderation, beginning with a half glassful and increasing the amount gradually until you take a glassful at a time. Drink it slowly, allowing 15 minutes to a glass of milk. Eggs, that is, the yolks, are reckoned among fattening agents, cereals, and butter, olive oil and fat bacon. Do not take anything in ex-

cess. If you have not been eating eggs begin with only one a day and gradually increase this number until you can take three or four daily. Use the olive oil in salad dressings.

PROVIDE WATER FOR THE BIRDS.

BY ELLA E. ROCKWOOD.

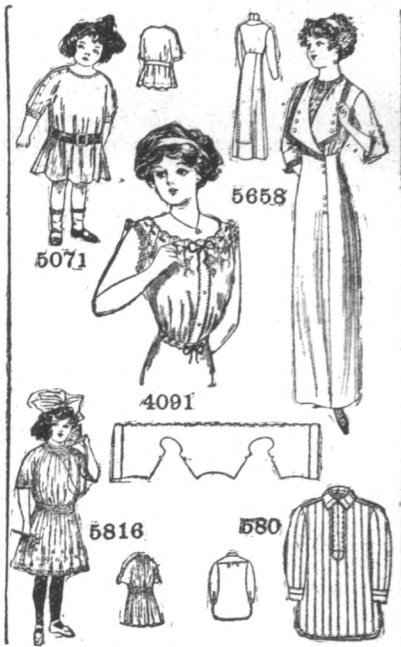
The spring months have been cold and wet, but now that warmer weather has come provision should be made for the birds. No matter if your home is quite near some water course or lake the robins and other songsters which frequent the premises will be quick to take advantage of a dish of clear water set near the house where they have access to it. I have seen an old robin call her three young ones recently fledged, to drink from the shallow basin placed for them. Later all four took a bath in the same receptacle. Birds love fresh water but will suffer from thirst before they will drink that which is stale or dirty.

The troublesome English sparrow will no doubt find the drinking vessel and make use of it. They may attempt to drive other birds away when they approach it but an old robin can take her own part and will not suffer such attacks without defending her rights. Sometimes this old mother robin is the selfish one and drives away the others who wish to drink or bathe.

If you have no drinking dish set for your feathered friends place one now and see what a fund of enjoyment it will become as soon as discovered. But be sure to cleanse the dish and provide fresh water every day. If this means adding another task to hands already full, let the children take charge of it. The responsibility will do them good and they will be increasing their stock of bird-lore while doing a kindly and humane action.

MICHIGAN FARMER PATTERNS.

These patterns may be obtained from the Michigan Farmer office at the prices named. Be sure to give pattern number and the size wanted.



No. 5071, Children's Dress with Body and Sleeves in One. Cut in sizes 1, 3, 5 and 7 years. Age 3 requires 1½ yards of 36-inch material. Price, 10 cents.

No. 4091, Ladies' One-piece Corset Cover. Nine sizes, 32 to 48 inches bust measure. For 36 bust it requires 1½ yards of 17-inch flouncing. Price, 10 cents.

No. 5658, Ladies' Empire Dress Closed at Front. Cut in sizes 32 to 42 inches, bust measure. Size 36 requires 5½ yards of 36-inch material, ¾ yard of 24-inch satin and ¼ yard of 18-inch all-over. Price, 10 cents.

No. 5816, Girls' Shirred Dress. Cut in sizes 4, 6, 8, 10 and 12 years. Age 8 requires of one material 2½ yards, 36 inches wide. Price, 10 cents.

No. 580, Men's Negligee Shirt. Cut in 10 sizes, 32 to 50 inches, breast measure. For 36 breast it requires 3 yards 36 inches wide. Price, 10 cents.

HOME AND YOUTH

THE "DISGRACE" HOUSE.

BY ELISABETH R. LITTS.

A little group of girls and boys had gathered on the front steps of the Foster home and were talking earnestly. Occasionally one or another would cast a scornful glance towards the little cottage next door which was the cause of all the arguing that had been going on among the young folks for almost an hour.

Gertrude and Harold Foster were the most determined of any that the Morton boy and girl should not be countenanced by any of their set, nor recognized in any way. The rest of the young folks were fast coming to think their way—all except Hal Chase and his sister Carolyn, who declared it a shame to ignore people just because they lived in the "disgrace" house; and, in truth, that was the only reason existing in the minds of the others.

Now, the reason the humble little house was to blame was this: the particular block in which this set of young folks lived was one of the nicest and best appearing of the town. Each home was large and well kept, with beautiful grounds. Every resident vied with his neighbor in having his place look the neatest and in consequence it was almost an ideal block—all except the "disgrace" house, which was the one eyesore to the proud owners of the other homes. This was the only small and unsightly place in the block. A little five-room cottage, brown and dingy from the long years it had stood without even one refreshing coat of paint. It belonged to a woman who had moved away years ago and left it in the hands of a nephew, who collected the rent and that was all. It was so run down it could not command much rent, and only poor families occupied it. The old lady could not be influenced to sell it, or to repair it, although every man in the block had tried to buy it from her. So, naturally enough, it was very obnoxious to all the other inhabitants of the street, and it had been given the name of "disgrace" house by the young folks, who could not be blamed much for the feelings they cherished against the occupants as they came and went, for come and go they did. It was generally so unpleasant for them that they did not care to remain long in the neighborhood.

The young people in the block, always cliqued together, had held themselves aloof from everyone in the little cottage and never recognized any of the young people who happened to be so unfortunate as to live there. But the last tenants of the little house seemed to be different, somehow, from their predecessors. Even Gertrude Foster, who was the proudest and haughtiest girl in the block, had to admit that they were different.

There was a young man whom they had heard called Manly, by his sister, whom he called Grace. And manly he was, indeed. He was about the same age as Gertrude Foster, tall, well built and intelligent looking. Both he and his sister were quiet and unassuming. They always dressed neatly, carried themselves well and never seemed to notice the intended coldness of the young people in the block. They had lived in the little cottage several months but not one friendly nod or encouraging smile had they received from one of their neighbors.

This evening the young folks were gathered at the Foster home and the question was under discussion. Hal Chase said he had learned that the Mortons had moved there from the city, had once had money and that Mr. Morton had been a man of some prominence, but sudden losses and poor health hastened his death and now the widow and two children had only a slight income. The circumstances caused them to move into this small town where expenses would be lower and where the widow might find sewing to do to help keep the young folks in school and increase their meagre income.

"I tell you, girls," Hal added, "I think it is a bit snobbish to keep up this indifference toward the young people who happen to live in the 'disgrace' house when we find that they have been as well raised as we ourselves. The boys, here, don't say much, but I would be ashamed of my comrades if they did not prove themselves honorable enough to be willing to accept young Morton as a companion, even though he does live there,"

with a shrug of his shoulder towards the house next door.

For a moment the girls did not answer. Gertrude was generally the spokesman when they were together. She admired Hal very much and did not wish him to think she was really so small as to hold such a feeling when it was not right. Finally Ruth Merrill, Gertrude's chum, replied:

"We have all snubbed them so long that I, for one, do not feel like coming down now and showing them that I desire their acquaintance, and I won't. You boys go ahead and cultivate Manly's friendship, if you care to, but I think you can't make us girls welcome him very graciously, and as for Grace Morton, why I know she would feel very uncomfortable with the rest of us girls, even though we did condescend to take her into our circle. We don't care whether you boys—"

"Oh, well, let's not have any hard feelings over it," broke in Carolyn Chase. "I think Hal is right, though. I have never seen anything to criticize in either one of them, and Mrs. Eldon, who had Mrs. Morton make a dress for her, said she never met a more refined lady; and Margaret Eldon told me that she accompanied her mother to the house one day and that she was very much charmed with Grace Morton; that Grace took her into her room to show her some embroidery she was making; while there, Margaret was admiring a beautiful picture and asked Grace who the artist was, and she answered that she did that when she was in school. I believe she must have gone to college and that is more than any of us girls have done, yet."

Just then some of the party were called away and no more was said regarding the Mortons. As the days and weeks passed, things continued just as they had been before. No one seemed to care to be the first to speak to either of the young people, and all felt that they would be humbling themselves in doing so.

For several weeks the whole town had been very much interested in the erection of a big monument, which was to be unveiled soon, in honor of the soldier boys of that county who marched away and never returned. The eventful day was close at hand and the girls in the clique were greatly excited because four of their number were among the young ladies chosen to bear the flowers, their fathers or grandfathers being veterans of the late war. The guest of honor and speaker of the day was to be the governor of the state, and as the town had never before been honored with the governor's presence there were great anticipations and much preparation for the affair. Gertrude Foster, whose father was the mayor and of course knew all about things, confided to the girls that they expected the governor to take supper with them that day, as the unveiling was to take place in the afternoon and the governor's train did not leave until evening.

When the day finally arrived it was beautiful and clear and everyone was dressed in holiday attire. The girls were crowded together on the grandstand awaiting the arrival of the speaker. Carolyn Chase leaned over in her seat and whispered to Gertrude.

"Will the governor be at your house this evening?" she asked.

"Oh! no," sadly replied Gertrude. "We are so disappointed; he wrote father that he has some very dear friends in town and he wishes to spend all his free time with them. Isn't it too bad?"

Just then the sound of the band announced his approach and everyone became interested in what was going on.

The governor's address was very stirring and he spoke in glowing terms of the veterans in this loyal town. He hoped their sons would prove themselves the heroes that their fathers had been. He added that he had just had the pleasure of securing an appointment to West Point Academy for a bright young man of the town, and had heard that he passed his preliminary examinations with high honors. He said that this young man's grandfather had been a general of prominence in the time of war and that he knew the town would some day be proud of its young citizen.

When the address ended, a buzz of curiosity spread among the young people and a little group of them soon clustered together at the foot of the grandstand.

"Say! boys," called Harold Foster, as soon as he came within hearing of the others, "who do you suppose the boy is in this town that is going to West Point? I haven't heard a thing about it, have any of you? I wish I was going."

"And I wonder who the people are that the governor is going to take supper with," his sister added. "They must be very important to be friends of his, as father said he has always been a very prominent man. But there is father, now, talking to him. Perhaps he will find out. And who is that young man the governor is shaking by the hand? Why! Just look, girls, it is Manly Morton—you don't suppose—Oh, no! it could never be he. And there is Grace Morton coming up, too, and her mother, and look—he is introducing them to father."

"Goodness me!" exclaimed Carolyn, "I do believe they are coming this way. I do hope father won't stop and introduce us to the governor. It will be so humiliating; he will have to introduce the Mortons, too, and the governor will think it strange that we do not know them. Come on, let us go at once."

"It is too late now," cautioned Harold in a low voice as he noticed his father start toward them and motion to their little party. "We will have to stand up and take our medicine."

After the introductions were over the governor looked at the group of young people and exclaimed in his hearty voice: "Strange you young folks here have not become acquainted with the Mortons before. I am sure you will enjoy their society. Manly's father and I have always been great friends, and Mrs. Morton and my wife are cousins. Come now, Manly, lead the way home; I am hungry and it has been a long time since I have tasted your mother's excellent cooking."

He raised his hat and bowed to the amazed listeners and, taking Mrs. Morton's arm, they started off in the direction of the "disgrace" house. After they had passed, the little group walked quietly down the street, keeping a respectful distance behind them, until they saw them turn in the gateway to the little cottage. Each one felt ashamed to look into his friend's face. At last Hal Chase broke the silence by saying:

"I think everyone of us will be glad to admit the Mortons to our circle. I have always felt mean about the way we have treated them, and I intend to apologize to Manly the first chance I get. I believe, Ruth, you will find that Grace Morton will not feel so uncomfortable in the presence of you girls as I think you will in hers, and I wouldn't be afraid to wager my hat that you will all be trying to win Manly's good opinion, and that you will be proud to walk with him on the street when he comes back from West Point. I have admired him for some time and, if you will all be honest about it, I believe you have, too. How about it, Gertrude?"

But Gertrude did not answer, nor look up, for down in her heart she knew it was true.

SENSE AND NONSENSE.

Manhood begins when we have in any way made truce with necessity; but begins joyfully and hopefully only when we have reconciled ourselves to necessity.

The little Sloan boy across the street is forever asking questions.

"You'd better keep still or something will happen to you," his mother told him one night. "Curiosity once killed a cat, you know."

This made so deep an impression that the boy was quiet for three minutes. Then: "Say, mother, what was it that cat wanted to know?"

I honor any man who, in the conscientious discharge of his duty, dares to stand alone; the world, with ignorant, intolerant judgment, may condemn, the countenances of relatives may be averted, and the hearts of friends grow cold, but sense of duty done shall be sweeter than the applause of the world, the countenances of relatives, or the hearts of friends.—Charles Sumner.

"So you want a position in my firm?" said the merchant to the applicant. "Well, what were you in your last job?" "A doer, sir," answered the sad-eyed applicant.

"What's that?" asked the employer. "Well, sir," said the sad-eyed one, "I was the doer, and the rest were the tellers. When my gov-nor wanted a thing done he would tell the cashier, the cashier would tell it to the bookkeeper, and the bookkeeper would tell it to his assistant, his assistant would tell it to the chief clerk, and the chief clerk would tell it to me."

"And what would happen then?" "Well, sir," replied the sad-eyed applicant, "as I hadn't got any one to mention it to, I'd go and do it."

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THE AMERICAN GOVERNMENT.

Paper read by Valois B. Todd at the March meeting of the North Shade Farmers' Club, of Gratiot county. Published by request of Club.

(Continued from last week).

Another phase of this question which presents itself very forcibly to us is, whether this is to be a government for all the people or for the special, privilege-seeking corporation. Some 30 years ago Chief Justice Ryan, of Wisconsin, in an address before the graduating class of Madison University, said: "The accumulation of individual wealth seems to be greater than it ever has been since the downfall of the Roman Empire. The enterprises of the country are aggregating vast corporate combinations of unexampled capital, boldly marching, not for economic conquest only, but for political power. The question will arise, and arise in your day, though perhaps not in mine, which shall rule, wealth or man; which shall lead, money or intellect; who shall fill public stations, educated and patriotic free men, or the feudal serfs of corporate capital?" The fulfillment of that prophecy has arrived. The condition in Wisconsin before the overthrow of the political ring which run the state in the interest of the railroads is a fair sample of the condition which exists more or less in every state as well as the nation. The interests in Wisconsin, for instance, would elect their candidate governor and he would serve them well, so well, in fact, that they knew they could never elect him again, so to pull the wool over the eyes of the people they put up a new man and he served the same purpose; and the next election they would have another new man. After the people had been aroused to the condition of affairs under the leadership of La Follette, and sent delegates to the convention pledged to support a progressive man for governor, for three successive campaigns these delegates were bought off by the interests. After the people had elected their governor and legislators for another term, the money power bought and coerced enough of the legislators so no reform measures could be passed.

To know that the legislative branch of our national government has been controlled by the money power ever since the Civil War, it is only necessary to review its acts. The special privilege class by no means own all the people's representatives. There are many who try to stem the tide. The executive and judicial departments of the government are by no means free of the influence of special privilege. One of the principal methods of special interests in securing control of the government is through the corruption of the people's representatives. There is no dishonorable method but what is used. Some are gotten through bribery, some by the threat of financial ruin, some by the promise of better positions. Those who are strong for equal rights for all and special privilege to none, and are especially valuable to this great power, "special interest," are taken upon a high mountain and shown the kingdoms of the world to be theirs for the sacrifice of their principles. It is only the strongest and most steadfast character that can withstand their influence and temptations.

Another trouble we have is the ignorance and carelessness of many of the voters. It is the duty of every citizen to vote but it is his first duty before he votes to know not only who he is voting for but what the candidate is and what he stands for, which is of more importance. Then there are many who do not vote as their conscience dictates. They will say, I believe in that man's principles, I believe he is honest and patriotic, but I am afraid to vote for him because the money power is against him; he is afraid he will lose his position if the election goes against the great financial powers. They will bring on a panic and injure the business, and this fear is not authority that 96 men control the United States, and 14 of these predominate in power, and so many go on from one election to another selling their birthright for a kettle of pottage.

(Continued next week).

GRANGE

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

THE NEW GRANGE PRIMARY LAW.

This law provides for the advisory election of master, secretary, and members of the executive committee of State Grange. Any fourth degree member, in good standing, is eligible to office. Nominations of candidates must be made by resolutions passed in subordinate Granges, without debate, at the last meeting in September. Said resolutions shall be signed by master and secretary, and sent, over the seal of the Grange, not later than Oct. 1, to the secretary of the State Grange.

Resolutions from ten Granges shall be necessary to have the name of a candidate printed on the official ballot. A sub-committee of the executive committee, of whom one shall be the secretary, shall meet on or before Oct. 10, and canvass the resolutions and inform the candidates who have been nominated. In case any do not care to have their names printed on the official ballot they must advise the secretary prior to Oct. 20. Prior to Nov. 1 each Grange will receive twice as many ballots, from the secretary of the State Grange, as the number of members shown by the report for quarter ending June 30, and the election shall occur at the first regular meeting in November.

In order to take part in nomination or election of officers under this law, Granges must be in good standing with the State Grange. In other words, their dues must be paid for the quarter ending June 30, and members, to be entitled to vote, must have the annual word or be entitled to receive it.

At the first meeting in November, when the election shall be held, the polls shall open at the regular hour for calling the meeting, and remain open for two hours. The result of the election shall be declared to the Grange, the master, secretary, steward and tellers shall sign the report and send one copy to the secretary of the State Grange, and keep one copy on file.

On the first day of the next session of Michigan State Grange, the election committee of the executive committee shall make its report, and the names of candidates having the largest number of votes shall be placed on the ballot for ratification by the State Grange.

I have endeavored to give the reader, in a few words, some idea of this new departure in Grange elections. It is important that every patron should understand the law thoroughly, and it would seem wise to discuss it in Grange meetings so as to be ready to carry out its provisions and avoid mistakes.

The Michigan State Grange has always stood for primary election, but this is the first time that the opportunity has been given to put the theory in practice in the Grange itself. The election is only advisory, because the constitution of the order makes the delegates to the State Grange the electors, but there is no doubt that they will ratify the result of the primary, unless some candidates should be elected by a minority of the voters, in which case there may be some question as to the action of the State Grange in the matter.

The writer is heartily in sympathy with the new law, but regrets very much that it does not provide for a second choice. It is to be hoped that every Grange in the state will be in good standing with the State Grange and be ready to take part in the election, and that every member will qualify to do his or her part in the election, and thus demonstrate the wisdom of this new law.

W. F. TAYLOR.

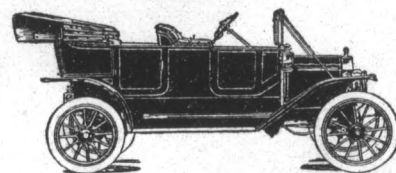
The twelve scholarships to Cornell Agricultural College, offered by New York State Grange, have recently been awarded, the fortunate young men and women being chosen by a series of competitive examinations. These scholarships are valued at \$50 each and it is understood to be the purpose of the Grange to award such scholarships annually.

COMING EVENTS.

Pomona Meetings.
Lenawee Co., with Fruit Ridge Grange, Thursday, Aug. 1. J. C. Ketcham, state speaker.
Kent Co., at John Ball park, Wednesday, Aug. 14. Picnic dinner, address by National Grange speaker, and athletic program.



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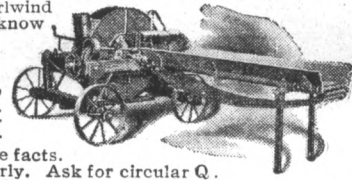
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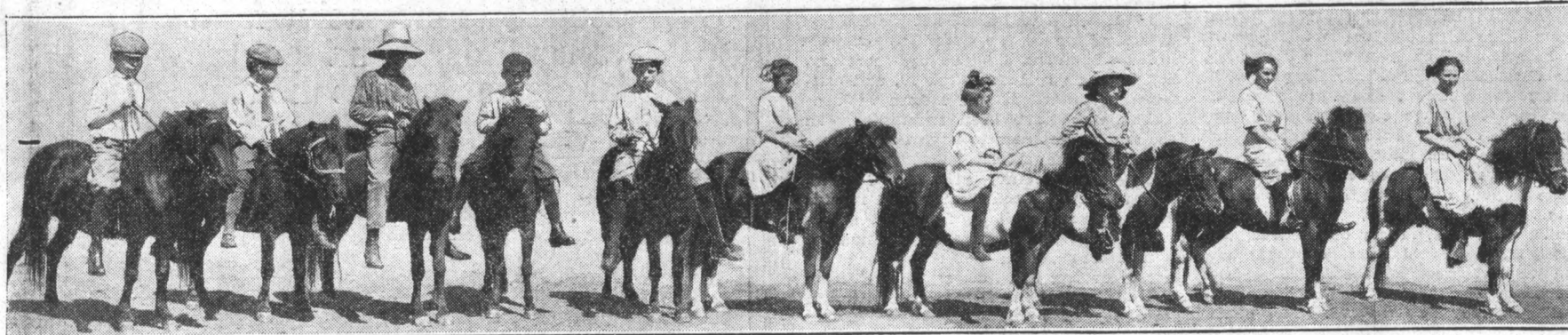
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2. "ST. NICK," Marcella Conley, Chickasaw County, Iowa
3. "TOM," Helen Herrmann, Cuming County, Nebr.
4. "DANDY," Grace Burrows, Wright County, Minn.
5. "DUKE," Dorothy Lee Eagle, Jackson County, Mo.
6. "DIXIE," Walter McLaren, Moody County, S. D.
7. "SPOTTY," Mildred Etter, Watonwan County, Minn.
8. "TRIXIE," Frank Harris, Yellowstone County, Mont.
9. "MAC," Ruth Mead, Saline County, Mo.
10. "TONY," Maurice Himle, Chippewa County, Minn.
11. "BONNIE," Amyle Kafer, Carroll County, Iowa
12. "FRITZIE," Marie and Margie Parker, Knox County, Ill.
13. "JERRY," Clea Johnson, Douglas County, Kans.
14. "DON," Oliver E. Olson, Koochiching County, Minn.
15. "BINGO," Jeanette Lansing, Knox County, Nebr.
16. "KING," Vic J. Breitbach, Dubuque County, Iowa
17. "EVANGELINE," Gladys Houx, Saline County, Mo.
18. "QUEENIE," Stan J. Mallick, Redwood County, Minn.
19. "CAPTAIN," Ida O'Keefe, Mountrail County, N. D.
20. "ROINE," Clarence F. Busick, Adams County, Ind.

21. "TEDDY," Geo. Cooper, Stearns County, Minn.
22. "SONNY," Elmer Roth, Allamakee County, Iowa
23. "JIM," Joey Edwards, Barton County, Kans.
24. "FAIRY," Lawrence Ulrich, Washington County, Minn.
25. "JACK," Bernice Harvey, Union County, Iowa
26. "PATSY," Rena Smith, St. Lawrence County, N. Y.
27. "GUS," Frank and Vera Brown, Dakota County, Nebr.
28. "MISCHIEF," Orville Himle, Chippewa County, Minn.
29. "SPARKLE," Elsie Savage, Codington County, S. D.
30. "NED," Jules and Ruby Kobell, Yellowstone County, Mont.
31. "PRINCE," Norris Nupson, Fillmore County, Minn.
32. "EMPRESS," Avery and Orrie Knight, Chickasaw County, Ia.
33. "BROWNIE," Twyla Hart, Shelby County, Ohio.
34. "BEAUTY," Bertram Eldridge, Stark County, Ill.
35. "INEZ," Edwin Kobenstein, Goodhue County, Minn.
36. "FUZZY," Mary McMahon, Cavalier County, N. D.
37. "DAISY," Leta Hainline, Adair County, Iowa.
38. "MAJOR," Margaret Roth, Rice County, Minn.
39. "LADDIE," Robbie E. Notten, Chickasaw County, Iowa.
40. "JOE," Harold R. Palmer, Oswego County, N. Y.

41. "POLLY," Alfred Hokenstad, Dane County, Wis.
42. "RASTUS," Herbert Hill, Clay County, Minn.
43. "BILLIE," Hazel McMartin, Kingsbury County, S. D.
44. "DERBY," A. Fitzsimmons, Clayton County, Iowa.
45. "GINGER," Chas. Foster, Randolph County, Mo.
46. "HERO," Gudrump Ekeland, Lac-qui-Parle County, Minn.
47. "BUSTER," Clifford Turos, Brookings County, S. D.
48. "PONTO," Joseph Dziuk, Benton County, Minn.
49. "JEWEL," Arthur Marode, Douglas County, Nebr.
50. "GENERAL," Geo. and Peter Hentges, Yellow Medicine, Minn.
51. "BESS," Wilfred Dearchs, Kosuth County, Iowa.
52. "HAPPY," Harry Parker, Fergus County, Mont.
53. "PEPPER," Merle Herschleb, Dodge County, Minn.
54. "JEAN," John H. Elrod, Smith County, Tenn.
55. "SPORTSMAN," Harold A. Pierce, Waushara County, Wis.
56. "CHEYENNE," Marguerite Hallett, Winnebago County, Iowa.
57. "SCOTT," Catherine Rohrbach, Pacific Co., Wash.
58. "MIDGET," John McCartney, Mossac Co., Ill.

Your Best Chum

"Chum" is the pony's name and he's the best chum you or any other boy or girl could ever have. "Chum" is not like your other chums. He's always around when you want to play with him. He will learn to know you and come a-running when you call or whistle. He's never too tired for a canter in the saddle or to be harnessed up to his nobby pony wagon which we also send free, and he will carry you and all your boy and girl friends just about as fast as you would want to go. If you have been to circuses you have seen some ponies who look something like "Chum," but no matter how many circuses you may have seen, you never saw a prettier pony than "Chum," nor one that you can teach to do more clever tricks. And say! this buggy and harness are about the nicest you ever saw. We have bought so many we know just the kind to get—strong, comfortable, easy running, and as pretty as can be.

Here's "CHUM" and His Dandy Outfit



You'd Be Proud of Chum

"Chum" is a real Shetland Pony, three years old, 42 inches high, and weighs about 320 pounds. We selected him at the famous Heyl Pony Farm, at Washington, Illinois, where we had over 100 ponies to choose from. In lots of these towns where we have sent ponies free, our Lucky Pony Winners are the only children who own a real Shetland Pony in their town. Think how proud you would be driving "Chum" to school, and to the post office, and to church, and everywhere. You would be just the happiest child alive if "Chum" were yours. Didn't you ever notice what good times children have who own ponies, and how pretty these cute little fellows look trotting up the road? Everybody runs to the door and stops to look at a Shetland Pony going by. Can you think of anything you would like to own better than "Chum"? Read this page through carefully and then send us your name and address at once.

1000 Votes Free

Don't Let Anyone Persuade You That You Cannot Win "Chum"

If you send us your name and address right away we will at once send you 1,000 votes free toward winning "Chum." See what a fine start these free votes will give you, and if you follow our directions and do as these 58 other boys and girls did, you will have just as good a chance to get "Chum" as they had to get their ponies, and none of our Lucky Pony Winners nor their brothers or sisters can get "Chum," but you have a chance to get him if you send us your name and address today. Boys and girls who write us quickest are generally the luckiest in winning our ponies. Cut out the coupon good for 1,000 free votes, write your name and address on it, paste it on a postal card or put in an envelope and mail it to us today. Be sure to write your name and address very plainly so that you will get the 1,000 free votes at once.

Just as soon as we hear from you we will send you the coupon good for 1000 free votes, enter your name in the contest, and tell how to take care of Shetland Ponies and feed them. And we have a surprise for you which will double your chances of getting one of our Shetland Ponies free. The work we require you to do to become a registered contestant for "Chum," is something that pretty near any boy or girl who could drive a pony can do, and we promise every contestant a fine prize of their own selection.

Probably some folks will tell you that we won't give you "Chum," just like people told these other 58 boys and girls and if you believe these people you'll never be one of our Lucky Pony Winners. But the bankers or the postmasters in their towns told these other 58 boys and girls that the Webb Publishing Company, publishers of the Farmer's Wife, is one of the largest Publishing Companies in the United States and that of course we could afford to give away so many ponies and outfits to boys and girls to advertise our paper. So these 58 boys and girls sent us their names and addresses and won their ponies, and you will have to send us your name and address if you want us to send "Chum" to you. Wouldn't you rather be one of our Lucky Pony Winners and believe that we give away ponies. If we didn't give away ponies free the editor of this paper wouldn't let us print this advertisement. But you know we do give them away, so you must send us your name and address if you want "Chum," and we will help you right away by giving you 1,000 votes free toward him.

Did You Ever Dream You Would Own a Pony

Almost every boy and girl sometimes dreams that they will own a pony. All of our 58 "Lucky Pony Winners" did, and we made their dreams come true by sending them their Ponies and outfits. We never heard of one of these 58 boys and girls until they wrote us that they wanted one of our Ponies. As you can see by reading over the list the 58 Lucky Pony Winners live all over the United States, some of them more than 1,000 miles from St. Paul, the home of The Farmer's Wife, so it doesn't make any difference where the winner lives, "Chum" will be sent without any cost to you. More than half of our 58 Lucky Pony Winners live in towns with less than 500 population, and some of them in places with less than 100 people, so no town is too small or too far away for us to send "Chum" and his whole outfit. No child, no matter how rich his parents may be, owns a nobbier or more desirable pony and outfit than this one which we shall send free and all freight and express charges paid. This is surely the best chance you ever had to get a Shetland Pony, so if you haven't any and think you would like to have us give you this one, send your name and address to us right now so it will be sure to get to us quickly.

Address Your Letter or Postal to **THE FARMER'S WIFE 323 WEBB BUILDING, ST. PAUL, MINNESOTA.**



Cut Out and Sign This Coupon and Mail Today. Do It Now

GOOD FOR 1,000 FREE VOTES!

THE FARMER'S WIFE, 323 Webb Bldg., St. Paul, Minn.

Please send me 1,000 FREE VOTES for "Chum," for the contest to win a Shetland Pony and outfit. I have not any other votes.

Name _____

Address _____

City _____

State _____

R.F.D. _____