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FARM NOTES.

Potato Storage.

In a state like Michigan, where late potatoes are an important cash crop, the question of adequate storage in which to hold the crop, or at least a portion of it, becomes an important one to the average farmer who makes this crop an important factor in the crop rotation. In very many seasons, the early market is unsettled and unsatisfactory to the grower, as is the case this year. On most farms where potatoes are grown on a commercial scale there is no provision for the winter storage of the crop, other than the cellar under the house in which the farmer lives, and this is usually filled to its capacity to the great inconvenience of the housewife and, where the crop is held until late in the spring, at some risk to the health of the family, although if the cellar is given a thorough cleaning and a liberal coat of whitewash after the potatoes are removed each spring this danger is reduced to a minimum. But since this storage room is inadequate on most potato farms, and since some other provision must be made for storing the bulk of the crop, it is a good plan to provide sufficient storage room for the whole crop where outside storage is planned on at all, since no one would store large quantities of potatoes in the cellar of the house in which he lives, as a matter of preference. While it is perhaps too late to build extra storage room for this year's crop on the average farm, it is a good time to plan on the future, since, if this is neglected at this time, when the need of extra storage for the potato crop is most keenly felt, it is likely to be neglected until the same situation confronts us again.

Economy in Adequate Storage.

This being granted, let us first consider the economic importance of having adequate storage for the late potato crop. There are many growers who plan on selling directly from the field at digging time, but this is not always practicable. There will be years, like the present season, when the stock will be too green to market to advantage, and when the tubers cannot be sold at what seems like a fair price. There will be other years when a scarcity of cars will prevail, and when for this reason dealers would be unable to move the crop anywhere near as fast as offered. Besides, the plan of marketing the crop as fast as it is dug entails considerable delay in harvesting it and a consequent danger of loss from freezing. If the potatoes are put in pits as dug, which is generally the only alternative, moving them is likely to be a disagreeable task in the uncertain weather of the late fall, to say nothing of the loss likely to be met by the freezing of pits before the potatoes are moved, or the greater loss from freezing where the pits are covered for winter protection and an attempt is made to hold the crop over until spring by this method. That the loss from these causes, together with the frequent loss due to the fact that the grower can not get at his potatoes to market them should the price favor selling during the winter is large enough in the aggregate to pay big interest on the investment required to provide adequate and safe winter storage can hardly be doubted. That in individual cases it is sufficient to pay the entire cost of such storage will be sorrowfully admitted by many. It is obvious that a large part of the late potato crop must be stored by growers, dealers or speculators until it is needed for consumption, and it is a logical conclusion that in most seasons it will be good economy for growers to do most of the necessary storing. At least it is certain, from the economic standpoint,

that they be in a position to do it, rather than be forced to sell the crop early because of a lack of suitable storage. It is the writer's experience that it costs little more to put the crop in winter storage quarters when dug, even if they are sold at a comparatively early date, than to pit them and move them from the pits in the uncertain weather of the fall season, while, if they are to be held for a later market, this method of handling them is much the cheaper.

Economy in Providing Storage.

The economic importance of adequate

ing will not be considered unless a large acreage of potatoes is grown or the grower has been so successful as to be unusually forehanded. In most cases adequate storage can be more cheaply provided in the form of cellar room under outbuildings. For several years the writer kept potatoes in a cellar built under a woodshed on a rented farm. This cellar held about 1,000 bushels. The floor over the cellar was made of two thicknesses of inch boards, with joints broken and building paper between, but the potatoes never froze, and kept perfectly.



A Northern Michigan Farmstead, Home of C. H. Beardslee, of Iosco County.

storage for the potato crop being granted, let us consider how it can be most economically provided. This will, of course, depend largely upon local conditions, and is an individual problem with each potato grower. Storage built entirely above ground is gaining in popularity among those who can afford the initial expense of such construction. Nor need this expense be excessive if the work can be largely done with home labor, as it can if the structure is made with a hollow wall of concrete blocks with two extra

In fact, this cellar needed ventilation, except in the very coldest weather. This was satisfactory, yet very cheap storage. Such a cellar could be made very cheaply on any farm by home labor, if concrete instead of stone was used for the wall. Another easy and cheap plan to make a potato cellar is under the drive floor in a barn which has no basement. Here the excavating, and even the building of the concrete wall, can be done in cold and stormy weather by the regular farm help, and another thickness of flooring, rein-



A Good Crop of Beans Grown on the Farm of N. J. Crawford, of Benzie County.

air spaces inside this hollow wall made by using building paper inside of a furring placed against the inside wall for the purpose, with another furring with a lath and plaster finish, and with the ceiling suitably protected.

But on the average farm such a build-

forced with a layer of building paper, will be the only other expense.

Where buildings are being remodeled or others built, very convenient potato storage can be cheaply provided. The writer knows of one potato cellar built of concrete under the approach of a basement

barn. This cellar is arched over with reinforced concrete and covered with dirt to form the driveway to the barn floor, with "manholes" covered with concrete slabs provided for putting the potatoes in from the driveway above the cellar, and provision for taking them out at a level only slightly above the cellar floor through a door opening into the basement which is accessible for a wagon. Cheap, temporary storage can also be provided where a side hill is available, by the use of rough poles, marsh hay and a covering of dirt, but where one is going to stay in the business it is a better and more economical plan to provide permanent storage room, as its construction will involve little more labor than the provision of a mere makeshift, while its permanent value will make the investment in material an economical one.

The Need of Inoculation in Growing Alfalfa.

Institute speakers and writers make a great mistake when they say so much about the culture of alfalfa. They tell you that you must inoculate your field with soil from an alfalfa field, and so on, going on to tell a whole lot of stuff to do, and it makes the farmer feel that there is no use for him to try to raise alfalfa, if he must do all this and then not be sure of a catch when the seed is so dear. There would be more fields of alfalfa growing if it was not for such advice. Whenever there is a seed dropped here it grows, along the road, in fields or anywhere. I had some in a field beside a plowed field. The horses turned around on it and trampled it, the harrow went over it, also disk drill, and the more it was abused the better it seemed to do. It seems to grow in any kind of soil. I also think it would be a hard thing to kill out in a cultivated crop.

Emmet Co.

G. F.

It is true that in some localities no inoculation seems to be required for the successful growing of alfalfa. It is also true that it can be grown in almost any locality without inoculation. The Wisconsin Experiment Station recommends the heavy manuring of land intended for alfalfa the fall previous to the time when it is to be sown. It is then plowed and worked over frequently the spring following, to subdue the weeds, and sown to alfalfa seed without inoculation. The available plant food provided in the abundant coat of manure will then keep the alfalfa growing until the bacteria, of which there are always some in the soil, get well distributed throughout the field and act favorably on the plants. But the average man who sows alfalfa will not fertilize it thus liberally and as the process of natural inoculation is a slow one, the crop will not amount to much for the first year or two, because it will not grow thriftily without the presence of the nitrogen-fixing bacteria. The sowing of soil from a successful alfalfa field brings about an even distribution of the bacteria over the field and hastens the process of inoculation to an extent which often will be found to save a year or two of time in the production of a profitable crop of alfalfa. The experience of successful growers who have tried both methods, as well as authentic experiments tried at several experiment stations have demonstrated this point until it is no longer a question of doubt. Nor is the trouble involved a reasonable excuse for not trying the growing of alfalfa where inoculation is necessary. In all cases where it is resorted to, however, it is a good plan to leave a strip uninoculated so that the comparative results may be noted. In cases where the soil already contains the bacteria in sufficient numbers to make artificial inoculation unnecessary it is likely to be condemned by the one trying it, but it does not follow that like results would be obtained on other soils. In fact, experience proves that such would not be the case. Nor should the inoculation theory be condemned if one fails to se-

cure a successful stand of alfalfa where it is tried. We do not yet know all about the requirements for getting a successful stand of alfalfa, but we are learning more about it each year. In cases where the stand is poor, even when artificial inoculation has failed to bring results, it may be that the soil needs lime. Where alfalfa succeeds well without inoculation, it will generally be found that the soil contains plenty of lime. Where it does not succeed with artificial inoculation when it has been given a good chance in other ways it is a safe conclusion that the soil does need lime. There are a large number of progressive farmers trying the effect of lime on soils intended for alfalfa this year, and the results secured will afford valuable knowledge regarding the necessity of or profit in liming soils for alfalfa. But where alfalfa grows as naturally and readily as G. F. states it does in his locality, there is every reason for sowing it, in a small way at least. When it is once given a chance to demonstrate what it will do for the grower, we believe that it will be grown to a larger extent in the community where the demonstration is made. There need be no fear that it will become a troublesome weed, for no man who gets it introduced on his farm will be anxious to get rid of it, and when he does plow it down he will be more friendly to it than ever, since it is a valuable soil renovator and improver, in addition to being an abundant producer of the most valuable forage which can be grown on any farm.

THE FALL WORK.

Corn cutting is about completed, in fact, most farmers finished some time ago, but some are always late and are just coming down the home stretch. The fodder cut so long after hard frosts is badly colored and mean to cut when a little dry, and it is pretty well determined that it is deficient in nutritive value. Husking has begun, mostly by hand as yet, though the shredders have begun to run. A couple of weeks of dry, warm weather has dried out the fodder very well, and after a rain it should be in good shape for hand husking and soon will be in condition for the shredder. Considerable corn is left uncut and will be husked from the stalk or the stock turned in.

Potato digging has begun, and the crop is turning out fairly well, but not a large yield. The warm weather and unripe condition of the tubers has acted against the market so it is down to the level of prices at this time last year, thirty cents. Whether the price will continue to fall or will rise later is problematical. I hardly look for a rise in prices until most of the stock is in the buyers' hands, and what it will do then will depend much upon the crop, though if we take last season's prices as a standard we need not look for very cheap prices to the consumer even if the grower has to take very low ones. It is possible that it will be good policy to store potatoes this season, but I think we will take a chance on selling them now. We can put them on the car as cheaply as we can pit them or put them in the cellar. Then we can sell to a buyer or consign to some good commission firm.

Early sown fields of wheat are looking bad owing to the warm weather this month with no frost for some time, which is conducive to the work of the Hessian fly. Some fields sown about the 10th are now quite barren and not as far along as those sown about the 20th. The higher spots where the wheat seemed to be a little earlier go first, as a rule. As yet our field sown on the 15th looks very well, and the corn ground which we finished late in September is looking well. As a rule, wheat sown about the 15th does better than that sown later, but possibly this year will be an exception.

New seeding is looking better than promised earlier, though most fields are thin in spots. Some tried disking in more seed with fairly good success. Hay is firm, and the crop is likely to be short next year in this region. Clover seed is turning out fairly well but considerable remains to be hulled. The short growth makes it difficult to handle.

Calhoun Co. S. B. HARTMAN.

CONCRETE—A YOUNG GIANT.

Concrete, that lusty young building material newcomer in the construction field, is coming more into general popular use. The latest annual figures of Portland cement production, compiled by the Geological Survey, are the largest on record, while the price is down within the reach

of all. The farmer, accustomed to build on a business basis, and thinking ahead as to the items of durability and cost of maintenance, is going in more and more every year for sanitary concrete cow-barns, for concrete dairies that can readily be kept clean, for fence posts that are ever-lasting, for concrete watering troughs, feed boxes and floors, water tanks and silos and a dozen and one foundations and equipments that need no repair.

G. E. M.

MANAGEMENT OF CLAY SOILS.

The average clay soil possesses an abundant supply of natural fertility, but unless conditions are very favorable this fertility remains in an unavailable condition. In the management of clay soils the practical point that we need to keep in mind is the fact that we must modify soil conditions so that this locked-up fertility may become available for the growing crops.

These stored-up elements in the soil are to be regarded as so much potential energy, which by our methods of cultivation and management may be converted into active energy. We must therefore seek to adopt such methods as will conserve and preserve this stored-up energy, or fertility, except such as is necessarily required to produce profitable crops from year to year.

Clay soils must be properly drained before they can be brought under a profitable system of cultivation. Without attempting to enumerate all of the advantages of thorough drainage on clay soils, attention may be called to its improving the temperature of the soil by removing the water from under the surface and giving the air and moisture an opportunity to separate the soil particles and permit a better growth of roots.

Drainage also prevents the washing of the surface and assists in conserving available fertility. Its influence on the temperature of the soil, especially in the spring, is of particular importance, as it lengthens the growing season and makes it possible for us to begin work earlier in the spring and to perform the work in a more thorough manner during the whole of the growing season. It is impossible to properly cultivate a soil saturated with water.

In addition to these direct benefits of drainage, there are a number of indirect ways in which the soil is improved, such as through the influence of a higher temperature on bacterial and chemical changes going on in our soils. There are bacterial processes that play an important part in this branch of natural economy, and we must so shape our methods of cultivation and management as to get the advantage of these processes.

These clay soils which are the most benefited by a thorough system of tile drainage are the most fertile soils in the country and they will therefore warrant the largest expenditure in improvement and development. While every farmer is not able to put in a whole system of tile drainage the first year, he can so plan his labors that what he is able to do from time to time will fit into a permanent system and not be a haphazard, disconnected work.

I believe that more injury has been done to clay soils by plowing too deep than by all the cropping yet done in the country. One fact worthy of our attention is that in the cultivation of clay soils we must keep the humus or organic matter as close to the surface as possible until the physical condition of the soil is such that the air may have an access to the soil as deep as the organic matter is plowed under.

Vegetable matter, when exposed to the action of the air will soon decompose into carbon or vegetable mold and carbonic acid. Large quantities of vegetable mold and carbonic acid make the soil plow light, loamy and free from clods. On the other hand, if this vegetable matter is plowed under deep the air cannot reach it in the saturated wet soil, and the decomposition goes on slowly and the product will be widely different. Under such conditions the nitrifying bacteria cannot perform their work.

When the air can have free action through the soil the sods will decompose into carbon and carbonic acid, which will liberate the plant food in the soil and provide the growing plants with nourishment. When it is desired to deepen the cultivation of clay soils the work should be gradual and there must be a very thorough intermixing of the soil with vegetable matter as fast as it is brought up from below.

As a general rule, it will be better to



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Notice to the Electors of Wayne County

Proposed Issue of \$2,000,000 in Bonds

For the Maintenance of County Roads in Wayne County.

Pursuant to the following Resolution Adopted by the Board of Supervisors October 15th, 1910:

Be It Resolved, that the County of Wayne contract an indebtedness of two million dollars (\$2,000,000) and issue bonds for the same, to be paid within fifteen (15) years from the date of the issues of the same, for the purpose of raising money for the construction and maintenance of county roads in the County of Wayne, and that the said bonds therefor, be issued in the following manner:

\$200,000 for the first year.
\$500,000 for the second year.
\$500,000 for the third year.
\$500,000 for the fourth year.
\$300,000 for the fifth year.

Said bonds to be redeemed serially at the rate of one hundred thousand (\$100,000.00) dollars each year from the date of the first issue, except that \$200,000.00 be redeemed fifteen years from the date of the last issue: that said sums be expended under the direction of the board of county road commissioners of said county, in approximately the amounts, each year, for which said bonds are issued for that year: that said bonds shall not be negotiated at less than par and the accrued interest.

Be It Further Resolved, that the question of issuing said bonds for the purpose aforesaid be submitted to a vote of the electors of the County of Wayne at the next general election to be held the first Tuesday after the first Monday of November, in the year 1910, and that notice of the submission of said election to a vote of the electors be given in the same manner and for the same length of time as now prescribed by law and that the manner of stating said question upon the ballots at said election shall be as follows:

INSTRUCTIONS TO VOTERS:

Mark a cross (X) in the square to the left of the word Yes or No.
In favor of issuing bonds of the County of Wayne, in the sum of two million of dollars for the construction and maintenance of county roads outside of the City of Detroit, in Wayne County.

☐ **Yes**

In favor of issuing bonds of the County of Wayne, in the sum of two million of dollars for the construction and maintenance of county roads outside of the City of Detroit, in Wayne County.

☐ **No**

THOMAS F. FARRELL, County Clerk.

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apply fresh manure to clay soils, for the reason that fresh manure mixed with the soil goes through a process of fermentation which not only increases the availability of its fertilizing elements, but also assists in rendering soluble the hitherto insoluble constituents of the soil. On a large proportion of clay soils there will be more benefits from the manure when it is applied as a top-dressing to the grass lands. In this way we grow more manure to incorporate with the soil when it is plowed.

After a clay soil has been improved by under-drainage, tillage and fertilization so that it will grow good crops of clover it is an easy matter to adopt a rotation of crops in connection with live stock feeding that will make sufficient manure to return to the soil to maintain it in a high state of fertility.

New York. W. MILTON KELLY.

ALLEGAN COUNTY FARMERS INTERESTED IN ALFALFA.

I am quite a thorough reader of the Michigan Farmer, especially the dairy and alfalfa discussions. The farmers of western Allegan county are just beginning to get interested in sowing alfalfa, some in a small way only as yet. We have had a small piece by the roadside for five or six years as an "object lesson." It has been mown twice each year and then grew the third crop. As there was no need for the third crop we did not cut it and during the very dry time when pasture dried up badly, this alfalfa came on finely and one man remarked that he thought this small piece was as good as ever this year. In the spring before the alfalfa started you could see nothing but June grass on the plot and one would be inclined to call it nothing but a piece of June grass.

I have sown a half acre near our horse barn to have for soiling as early as practicable and I put two wheelbarrow loads of inoculated soil over the piece and have a fine stand of alfalfa.

I got my first idea of sowing the alfalfa, and the best way, from a magazine article several years ago by Charles Dudley Warner, I believe, of how they sowed and grew it in the middle west. It was my good fortune to visit Hall county, Nebraska, a few years ago and it was very interesting to see the great meadows of alfalfa that they grow there for their cattle. They do not like it so well for their horses.

One of my neighbors has just sown a small piece of alfalfa on an excellent piece of sandy loam with a clay subsoil and did not inoculate the soil, and I shall watch it with interest.

Allegan Co. H. H. GOODRICH.

BLACK MEDICK.

Enclosed find a specimen of a plant I found in a small spot of my front doorway and would like to know what it is. The seeds are matured on the specimen, which has leaves and a tap root resembling clover, with a rather diminutive yellow blossom. Would like an answer in the columns of the Michigan Farmer.

Gratiot Co. J. L. S.

The plant is Medicago lupulina, Black Medick. It is a plant very closely related to the clover and alfalfa but more often regarded as a weed than a forage plant. It is usually introduced into lawns and fields through impure seed. As the plant is an annual, it can be exterminated by preventing it from going to seed by cutting it off at the ground every time it starts to grow up. Of course, since this plant was allowed to go to seed, more of it will have to be expected next year but if it is prevented from seeding next year, it will not bother in succeeding years unless re-introduced with seed.

E. A. BESSEY.

Prof. of Botany, M. A. C.

PLOWING VS. DISKING FOR WHEAT.

Having read the article with regard to disking or plowing wheat ground, will give my experience. The year of 1907 we built a new house, and when the time came for putting in wheat we were very busy, and thought to hurry our work along we would disk the oat stubble for wheat instead of plowing it. We got a light wheat crop, and the two years since we have had to cut the field for hay. One of my neighbors told me I would be bothered with weeds if I did not plow the ground, but I tried the experiment and in the two hay crops I cut and carried out enough yellow dock to make half a ton on 10 acres of ground, and think the cause has been disking instead of plowing the ground.

Gratiot Co.

E. C. FERRIS.



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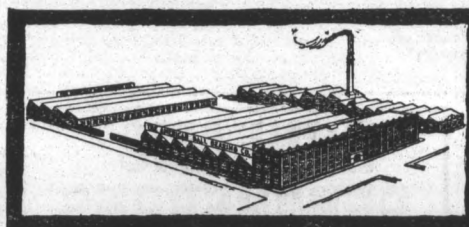
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LIVE STOCK

BREEDING THE FLOCK.

It is very evident, when we consider results, that there is not as much attention paid to the various details of breeding the flocks on the average farm, to maintain a high degree of excellence, as there should be. As it is in many other matters, there is an evident indifference, or a lack of appreciation of the necessity of making an effort to make some degree of progress at each year's mating, in order to secure the desired results, and the increased profits that are sure to come if the right methods are followed.

Viewed from the proper standpoint, the hope of making possible improvements ought to awaken within the flock owner a thrill of enthusiasm that would bring to mind a real vision of stock that will, if fully realized, show a marked improvement over the stock in hand. It was the hope of attaining to better things that has led to the sublime efforts that were made by the breeders, that has enabled them to make such rapid strides in individual and breed improvements as will stand as monuments to the skill and good judgment of the sheep breeders of the last half century. In many cases their highest hopes have been fully realized. All are not endowed with great foresight, or gifts as breeders, but by bestowing a reasonable degree of attention, and using fairly good judgment, the character of the flocks can be held to a high standard and gradually improved.

Selecting the Ram.

No matter what breed of sheep one may have selected as the one best adapted to his tastes and conditions, it is the wisest and best plan to follow, if within the range of reasonable possibility, to select every time a cross is to be made, a pure-bred ram. The grade, no matter how meritorious in looks and general appearance, is unreliable; he lacks the ancestral influence that backs the pure-bred ram, which makes it, not only probable, but a certainty, that he will leave his impress for the betterment of the flock.

The general makeup of the ram is a matter of prime importance, for it is to the sire that we look for improving the external conformation of the progeny. One of the first things to look at is the head. If he is wide between the eyes, has a clean, open eye, and a head of medium length you can rest assured that he is a good feeder, and is robust in character. The neck should be rather short and muscular with good width at the poll. He should stand on straight legs of medium length, and they should stand well apart, both in front and behind, which gives room for a large heart, lungs, and stomach. He should be well filled back of the shoulders, have a broad back, made by well sprung ribs, broad loin, and hams well let down behind, and should be low in flank. He should have the appearance of compactness, and yet be of good size. When moving he should have a bold, resolute carriage. Such a ram will transmit his desirable characteristics of beauty and constitutional vigor to his progeny with great certainty.

When to Breed.

The time in the season when the ewes should be bred ought to be well considered. The mistake is often made in having the lambs come too early, especially where the buildings are not warm and convenient for caring for lambs during cold weather. The period of gestation is around five months, or 150 days, but the time varies with the different breeds and with the different individuals of the breed. With the quick maturing breeds the time is some less than that stated. If the ram is put with the ewes the 10th of November the lambs will begin to appear soon after the first of April, which is a good time to have the lambs begin to come, under average conditions.

Handling the Ram.

Where the flock does not exceed fifty in numbers, it is customary to turn the ram in and pay no more attention to him. Such is poor practice as the ram should have some rest and grain feed each day. It is a better plan to get the flock in a roomy shed or yard at night, where they can be easily got to early in the morning. Put some paint or lamp black on the ram's brisket and lead him to the ewes. As soon as he sees the flock he will bleat, and the ewes that are in heat will generally come toward him. As soon as he serves a ewe, she will be marked, and should be put aside, as one service is as

good as more. If allowed his freedom the ram will often pay a good deal of attention to one ewe and neglect the rest of them. By guiding his movements this can be avoided and all the ewes that are ready can be served in a short period of time.

The ram should be returned to his pen or yard and should be well fed and cared for through the day. By taking him to the flock each morning and guiding his movements, the ram can serve a large number of ewes in one season and not become exhausted.

Wayne Co.

N. A. CLAPP.

THE EWES AT BREEDING SEASON.

The fall weather is here and cool nights and cloudy days bring the ewes into "heat."

How about your ewes and your ram? Are the ewes on good pasture, fresh stubble, or late meadows? They absolutely must have good grazing to "flush" them now if you expect them to breed regularly. How is your ram? If he is not in good health with plenty of vigor, he will fail as a good breeder if he has many ewes to breed. We want a strong, husky ram, one that will tease the ewes a little and be ready to serve the first ones, helping thus to bring the ewes in earlier. If he has his full number of 40 or 50 ewes to breed this fall he ought to have some extra feed in the shape of good grain. To know how your sheep are doing you ought to look them over once a day. Take a pail of corn and oats while you watch your flock, and let the few thin ewes and the ram have a bite or two of the grain. It will gentle them all, and, if you feed the grain carefully and regularly the results will be most gratifying. Give the sheep a little more attention anyway and see the good it does them.

To those farmers who have a large flock using two or more rams I would like to suggest that you divide the ewes into quite uniform bunches, giving about 50 ewes to a ram. Separate the flocks and apportion out the rams to those flocks whose ewes seem to be strong where the ram is weak. For instance, when you divide the flock you will probably put the long legged, narrow ewes in one flock, the little, younger ewes in a separate flock, and the blocky, thick-set ones in still another flock, as far as practicable. Then, in choosing the rams, choose the blocky ram for the long legged ewes, the robust, most vigorous ram for your smaller ewes and so on. This will, no doubt, seem foolish to many but just such foolish practices are what have brought the uniform improvement of the pure-bred and selected stock. Just such foolish apportioning of the ewes and rams has been one of the greatest helps in improving and realizing the marked uniformity that the range lambs show today. Separate the flocks thus as far as possible and in that way you can more easily give the weaker ewes the best pasture.

Iowa.

J. C. C.

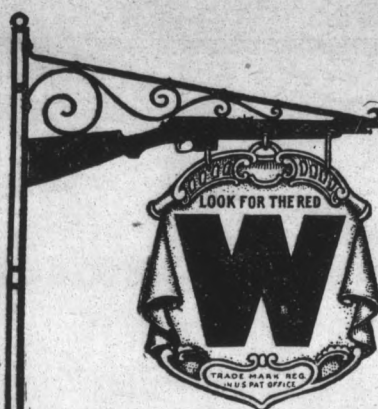
BEET TOP POISONING.

The proposition of feeding beet tops to live stock has been the subject of considerable discussion in the Michigan Farmer. Some beet growers have fed beet tops for many years without any ill effects, while others have met with serious losses from feeding them. Doubtless, the investigations relating to the cause of such trouble made by the Colorado Agricultural College will be of interest to those who have had costly experience in the use of beet tops as a stock food. The conclusions reached as a result of those investigations are as follows:

Death comes from two general causes: First, and probably most common, is the oxalic acid poisoning. Beet tops contain a considerable amount of this acid, and when a considerable quantity of tops is consumed, it is very likely to produce oxalic acid poisoning and death. Animals may die very quickly from paralysis of the heart, or they may show great depression and diarrhoea and live for several days, or even recover.

The other cause is mold, which grows on the beet tops and is more prevalent in damp weather. Anything moldy is dangerous as a food, but moldy tops and moldy beets are especially so. The tops that are dry, or nearly so, are really safer. In Northern Colorado a great many animals are lost every year from feeding on the tops, and, as a rule, wet years are the worst.

Feed in moderation. When in good condition, however, the tops save feed; but when given in too large quantities, or when moldy, they do a great deal of harm.



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to the core will convince. Send for book on all lam-
eness and copy of signed contract.

Port Deposit, Md., May 19, 1910. I tried "Save-the-Horse"
on a valuable mare that was lame over a year with bone spavin.
It effected a complete cure. She is as fast this year as she ever
was. I am entirely satisfied.
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Benton Harbor, Mich., May 22, 1910. Five years ago I got
"Save-the-Horse" of you to use on a fine horse that had
injured his hind leg, and it cured him when veterinary sur-
geons said it could not be cured.
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WHAT HORSE TRAINING IS.

Training horses is so fixing habits that
are suitable to man's use, that these ac-
quired habits are stronger than the natu-
ral instincts. For instance, you have a
horse that is nervous and frightens at
objects, its natural inclination being to
get away from that thing as quickly as
possible. Maybe in getting away from
the thing which frightened it, it took
buggy and occupants along with it, and
smashed things up in general. When a
horse is well trained he may look at the
object and tremble from fear; but the
word "Whoa" has been so taught that
the habit to stand is stronger than the
natural inclination to run.

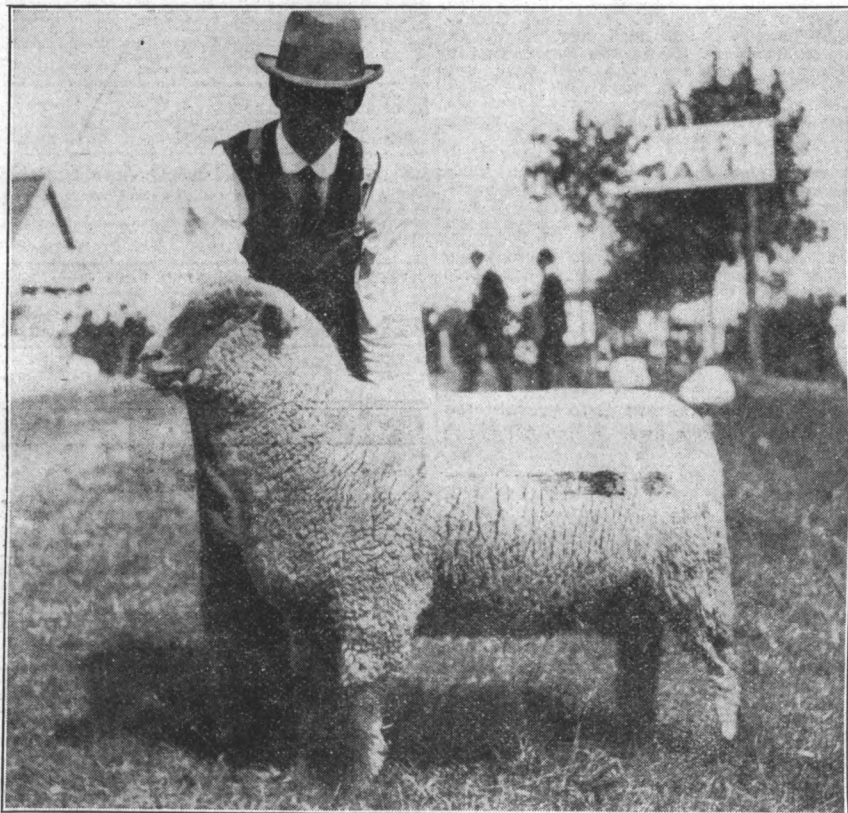
When it is fully understood that horses
do not reason, and that their actions are
the result of instinct and following the
line of least resistance, we must come to
the conclusion that, to the horse, his ac-
tions are neither good nor bad. He acts
instinctively and for self protection, and
when his actions coincide with what man
desires, we call him a good horse, and if
the actions of a horse are not those man
most desires, we call him a bad horse.

Man's place in training a horse is to
guide his actions in such a way as to
avoid the wrong and make it easy to do
the right, and then, by repetition, so fix
the desired act, that by word or signal
from the master, the action that has be-

ing that the eye is also watching in all
directions.

This horse is ready to act at the least
irritation. Some unfamiliar object or
sudden racket, or a slight touch upon
some part of its body, that is not accus-
tomed to being touched, is sufficient to
start it. Its fight will be quick and hard.
It will resist principally by kicking and
bucking. Unless overpowered, it will not
cease until it is entirely free. Rough
treatment with a horse of this disposition
only makes it more fearful and vicious.
It takes positive treatment; but one who
loses his temper has no business hand-
ling a horse that has been spoiled. It re-
quires cool, deliberate judgment to handle
horses. If treated kindly and judiciously,
this type of horse becomes one of the
most stylish and useful of all disposi-
tions.

Another head of a far different charac-
ter is the one with a small eye set back
in a heavy jowl, and the ears coming
from the same place at the top of the
head. Its actions belong more to the
sullen type. It will resist in any way a
horse can, and will do it with but little
or slight provocation. He principally de-
pends upon balking and usually kicks
with one foot at a time while balking.
He will fight slow, but keep at it a long
time. When once he gets "set," any
abuse will only fix him more firmly in
his stubbornness. His mind is sluggish



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come a habit through repetition will fol-
low as naturally as the instinctive habits
common to the horse.

Character Shown in Face.

Just as a student in human nature
sizes up the man by his facial and other
outward appearances, so ought a horse-
man be able to tell, by the contour of a
horse's face and head, the predominating
traits of his character. I have never at-
tempted to handle one horse, among the
many thousands handled, without first
knowing what I had to contend with.

I will describe a few heads and give
the predominating traits, that it may help
the readers to judge for themselves
whether disposition can be told by the
contour of the head.

The ideal head is uniform, without any
one feature becoming prominent. The
head has plenty of space between the
eyes, and from the eyes to the ears. The
eyes are large and kind. The ears are
good sized and well set on the head, not
being too close together. Such a horse
has a kind disposition and will obey
willingly without being easily aroused.
It will be teachable and have life enough
to do its work without continual urging.
It will never fight, except in extreme
desperation, and then it would fight for
its life and fight hard.

Another type that may be easily identi-
fied is the nervous type. Its eyes are
large but fiery. The eye sets well for-
ward as though it had been pressed for-
ward for something at which to scare.
The smoothness of the forehead will be
broken by creases in front of the eye.
The ears will be moving almost con-
stantly with nervous twitchings, indicat-

and he fails to comprehend as quickly as
others. When the least confused his
mind becomes inactive and any irritation
only brings out his anger.

His condition of mind resembles some-
what that of a boy who attempts to make
his first speech. He begins—makes a
mistake and becomes confused. He be-
gins again—makes a more ludicrous mis-
take and is more confused. He does this
two or three times until he is so confused
that he cannot think of anything and
simply stands—doesn't know enough to
take his seat. Notwithstanding his con-
fusion, if the crowd laughs at him he be-
comes angry enough to fight the whole
crowd.

I have space here to make mention of
only these three heads. There are only
a few types of horses with combination
of one or more of these types. After a
short study one is able to tell at a glance
the type or combination of types one has
to deal with, and know to a certainty the
natural propensities and go about his
work of training intelligently.

A horse's disposition must be under-
stood before any training becomes effec-
tive. One is so apt to do the wrong
thing, or do the right thing at the wrong
time, which is as fatal to success as to
do the wrong thing.

To one interested in horses, nothing is
more fascinating than studying the
horse's mind and be able to take advan-
tage of its many different whims and
turn him from wrong to right habits. To
do this, man must be absolute master of
himself, even tempered and calm under
all conditions.

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WHILE TO GET OUR CIRCULAR ON
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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.

Chronic Wound Soreness.—I have a mare that got caught on wire fence about two months ago; this made the leg sore on fore part of hock joint; the wound healed seemingly fairly well, and the lameness passed away. Three weeks ago she went lame again on the same leg, the limb stocks, the wound is open but our local Vet. tells me the wound is not painful and does not cause any lameness. R. F. Fenton, Mich.—I believe the lameness will subside as soon as the wound is healed, the soreness will leave gradually. Dissolve 1/4 lb. acetate of lead, 1/4 lb. sulphate zinc and 2 ozs. carbolic acid in one gallon of water and add one pint tincture opium, then apply to wound and stocked leg three times a day. Give a teaspoonful powdered nitrate potash in feed daily for ten days.

Impaction.—One of my pigs died today; I opened him and found the trouble in bowels; a portion of the bowels seemed to be closed. O. M. B. Vestaburg, Mich.—The bowels of your pigs should be kept open and active by giving either castor oil or epsom salts. Feed the sick pig milk. In a former letter I prescribed for your sick pigs, therefore it will not be necessary to repeat.

Bruised Joints.—I have two sows with lumps on their side; one of them has lumps on knee, the other has bunches on hock. O. B. Peacock, Mich.—Apply iodine ointment once a day, your druggist can doubtless supply you. Also give each sow five grains of iodide of potassium at a dose in feed twice daily.

Chronic Swelling of Sheath.—My 11-year-old horse has been troubled with a swollen sheath for the past two years and I would like to know what will reduce it. Our Vet. has cut the sheath three different times but it failed to do him any good. E. B. Grand Rapids, Mich.—You might as well leave him alone, for a chronic case of this kind is incurable. However, he may never get any worse and will be just as useful to work. I have tested different remedies in the treatment of this ailment, besides puncturing the sheath with a small knife and it never helps chronic cases. In acute cases puncturing always reduces a swollen sheath.

Bruised Hock.—I have a young horse that was kicked by another horse which wore a shoe. The calf punctured the joint, but wound soon healed, now the joint is swollen and leg stock. I am anxious to have the limb reduced to its normal size. R. M. L. Lansing, Mich.—Apply one part iodine and eight parts fresh lard to hock once or twice daily and give him 2 drs. iodide of potassium at a dose in feed or water twice a day. Bandage leg in cotton but don't apply bandage too tight.

Spinal Disease.—I have a pig that was born with a sore on its head, but the sore gradually healed and in a few days it seemed to be all right. It remained well until it was two months old, then it commenced to jump and bound around as if it had fits; later it carried the head high and seems to be unsteady in its gait and is inclined to travel, also makes a gurgling noise when breathing. E. H. R. Crosswell, Mich.—Keep his bowels active by giving him castor oil or sulphate of magnesia; also give 10 gr. doses bromide of potash three times a day. If he is fleshy reduce him.

Swollen Glands.—I have a horse that caught cold which resulted in swollen glands. This trouble causes him to breathe much like a horse that has the heaves. C. E. Cedar Springs, Mich.—Apply tincture iodine to glands once a day and give a teaspoonful tincture belladonna at a dose three times a day.

Asthma.—I have a buck that breathes much like a horse that is broken-winded. This sheep is fat, his appetite is good, but he pants continually and keeps mouth open. Have been giving him pine tar for the past two weeks, without results. R. H. L. Clare, Mich.—Give him 10 drops Fowler's solution, five drops fluid extract lobelia, 15 drops fluid extract belladonna and five drops tincture of gelsemium at a dose three times a day in one or two ounces of water. He should not be fed too much bulky food.

Atrophy of Shoulder Muscles.—Dummy. I have a horse that does not seem to understand what is said to him, but acts dumb; when told to move over in stall he fails to give you attention. This same horse sweetened in one shoulder, but does not go lame; he is only six years old and I am anxious to put him in saleable condition as soon as possible. S. D. P. Byron, Mich.—Give him 1/2 oz. doses bromide of potash three times a day, and blister shoulder with cerate of cantharides once a week; also give 2 drs. Fowler's solution at a dose in feed three times a day.

Acute Indigestion.—We have a cow that frequently bloats, showing a good deal of swelling in left flank. Her appetite is poor and whenever she eats much food she bloats. She has been treated by two different Vets, but they fail to do her much good. M. J. Richfield, Mich.—Give her 2 drs. salicylic acid, 1 oz. ground ginger and 2 ozs. powdered charcoal at a dose in feed three times a day.

Worms.—My turkeys are not well and two of them have died. I examined one after death and found quite a number of

worms in the bowels. I also found the liver had several yellow specks in it. Their bowels act too free. M. O. Altona, Mich.—Give each turkey 5 grs. powdered sulphate iron, 10 grs. powdered kamala at a dose in feed once a day for a week. Also give one-eighth of a grain of calomel—one dose every two weeks.

Sprained Fetlock Joint.—I have a three-year-old colt that fell some three weeks ago and sprained his ankle joint. He soon recovered from the lameness and the swelling left his leg, but a wind puff was left which caused no soreness. Later his leg has swollen badly and I would like to know what can be done to relieve him. W. H. R. Parkville, Mich.—Give him a teaspoonful of powdered nitrate potash at a dose in feed daily for 10 days, also bandage leg in cotton after applying equal parts alcohol and warm water, twice daily.

Barrenness.—I have a cow that came fresh June 25. She seemed to get along all right and she has failed to get with calf. We have had her served on the following dates: Aug. 10, Sept. 8-19, and again on Oct. 9. She calved when out in lot, therefore I am unable to state whether she cleaned properly or not. She has never had any discharge since calving. I am anxious to get her with calf. I also have a nice two-year-old grade heifer that has never been in heat and having noticed in The Farmer about the yeast treatment I would like to know if it should be applied on this cow. C. S. Fruitport, Mich.—Dissolve 1/4 lb. bicarbonate soda in one gallon clean tepid water and wash out vagina once a day until she comes in heat, then she might get with calf. Give the heifer 15 grs. powdered cantharides at a dose in feed twice a day for 15 days.

Bruised Udder.—I have a cow that gives bloody milk from both back teats daily for a few days, then seems to be all right for a week, then gives bloody milk again for a few days. W. S. F. Battle Creek, Mich.—Your cow bruises her udder in some manner and if you can ascertain the cause and remove it she will soon get well. Dissolve 1/4 lb. sugar of lead in a gallon of water, adding one pint tincture of arnica and apply to udder three times daily.

Abscess on Udder.—I have a cow that has a sore spot on side of udder. This sore heals but opens and discharges some every few days. The wound is small and bleeds freely when probed. I have been afraid of her bleeding to death. M. G. D. Boyne Falls, Mich.—Apply equal parts powdered alum, tannic acid and boric acid to sore twice daily.

Docking Sheep.—I have a lamb that is full grown which has never been docked and I would like to know if he can be docked with safety. G. H. Stanton, Mich.—Yes, there is no danger in cutting off the tail, but it will be necessary to tie a string tightly around tail to prevent too much bleeding and leave string on for a day, or apply Monsel's solution of iron or burn end of tail with a red hot iron to stop hemorrhage.

Indigestion.—I have a shoat that will weigh 150 lbs. that has been fed clover, June grass, separator milk and ground rye. Later he has not had a good appetite, refusing some of his feed. He walks weak and is not thriving well. A. M. B. Vestaburg, Mich.—Give your hog two or three ounces castor oil at a dose twice a day until it opens the bowels; also give 10 drops tincture nuxvomica and a desertspoonful tincture cinchona at a dose three times a day. A change of feed might help him.

Great Poland-China Hog Sale, THURSDAY, Nov. 3, Of 60 High Class Pigs, 25 Boars, 35 Sows.

Write for catalog and arrange to attend.
The Best Offering I ever offered.
WM. WAFFLE, Coldwater, Michigan.

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At my farm, 2 1/2 miles Northwest of Bath station, Michigan, on M. O. R. R., on

NOVEMBER 1st, 1910.

10 Registered Holstein Cows; 7 Holstein Cows not registered; 5 part Jersey Cows; all to calf soon. 1 Holstein herd Bull; 8 one year old and under Holstein Bulls eligible to register. Will meet both morning trains at Bath. 12 months time good notes; 5% off for cash. Sale commences at 1 p. m., sharp. J. P. SLEIGHT.

Registered PERCHERON STALLION

11 years old, color white, weight 1800. Bargain sale on account of disastrous fire. Also 14 registered Shropshire ewe lambs. THOMAS B. BUELL, Union City, Mich. Bell & Ind. Phones.

REGISTERED PERCHERON STALLIONS for sale. R. 1 and 2 years old. Gray and black. West Michigan Fair winners. R. OVERHOLT, Dutton, Mich.

For Sale.—Horses, Cattle, Sheep, Hogs, Dogs, or Poultry, nearly all breeds. Sires exchanged. Southwest Michigan Pedigreed Stock Association, R. E. Jennings, Sec., Paw Paw, Mich.

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Herd headed by UNDULATA BLACKBIRD ITO 83836, one of the best sons of PRINCE ITO 50006, and Grand Champion Bull at the Detroit and Grand Rapids Fairs of 1907, 1908, 1909 and 1910. Herd consists of Eries, Blackbirds, Princes, etc. WOODCOCK STOCK FARM, Ionia, Mich.

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ELMHURST FARMS, SMITH & WARNER, Props. Holstein Cattle and Oxford Down Sheep. Have 15 Choice Ram Lambs for sale. Address B. C. Banfield, Supt. Owendale, Mich.

FOR SALE.—2 yearling Holstein-Friesian bulls, pedigrees and photo on application. W. C. Jackson, 715 Rex St., South Bend, Ind.

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Register of Merit Jerseys.—Official yearly lot of young bulls from dams with official records of 483 pounds and upwards of butter.

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JERSEY BULL CALF born Oct. 21, '09. Dam Register of Merit of Cow. Maternal grand dam gave 9,900 lbs milk in one year, 520 lbs butter fat. Sire's dam gave 10,000 lbs. milk, test 5.2% in 10% Mo. Herd tuberculosis tested. THE MURRAY WATERMAN CO., R. F. D. 6, Ann Arbor, Mich.

Dairybred Shorthorn Bulls for sale. 7 mo. old, also a few yearling heifers. J. B. HUMMEL, Mason, Michigan.

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ROCKLAND Farm Delaines are in field form, strong, rugged and well covered. Prices right. Tell us your wants. D. E. Turner & Sons, Mosherville, Mich.

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Some Good Registered Delaine Merino Rams Also a few Delaine Ewes. C. M. MANN, Rockford, Kent Co. Michigan.

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LINCOLN SHEEP.—either sex, 2 years. Yearlings or Ram Lambs. Write or phone, A. H. WARREN, Ovid, Mich.

MERINOS & DELAINES.—One of the oldest, best bred, heaviest shearing flocks in Ohio. Yearlings and 2 choice "B" type stock rams, fit to head any flock. Write S. H. SANDERS, Ashabula, Ohio.

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OXFORD DOWN RAMS.—A few choice rams for sale. A postal will get description. J. P. GIBBS & SON, R. No. 4, Ithaca, Michigan.

OXFORD RAMS And ewes from Imported Rams, and ewes bred to same. Address B. F. MILLER or GEO. SPILLANE, Flint, Michigan.

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46 RAMS and 100 ewes (reg) Rambouillet descended from the best flocks. In perfect health in lots to suit buyers. J. Q. A. Cook, Morrice, Mich. Bell Tel.

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Will make special prices, for thirty days, on some choice one and two-year-old ewes, also ram lambs.

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THE MAPLES SHROPSHIRE.—70 good registered ewes and a few ram lambs for sale. E. E. LELAND & SON, R. No. 9, Ann Arbor, Mich.

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SHROPSHIRE Rams and Ram Lambs, eligible. Also Poland-China swine both sexes. Prices right. B. C. Raymond, Dansville, Michigan.

Shropshire Rams.—All ages, eligible from extra choice stock; also Poland China swine of both sexes. EUGENE LADNER, Big Rapids, Mich.

Shropshires.—Registered yearling rams for sale, from imported sires. Heavy bone & well woolled. C. W. Perry, Clare, Mich.

MUST sell at once a little flock of Shropshire ewes, mostly young, and 6 buck lambs. Very best breeding. Will sell cheap. J. W. Slater, Traverse City, Mich.

REGISTERED Shropshire Rams and ewes for sale from imported and Canadian bred stock. Satisfaction guaranteed. Willis S. Meade, R. No. 3, Holly, Mich.

SHROPSHIRE yearling and ram lambs, the best of wool and mutton type from registered stock. GEO. P. ANDREWS, Dansville, Ingham Co., Mich.

INGLESIDE SHROPSHIRE.—Rams of all ages. Bred ewes, singly or in lots. H. E. Powell, Robt. Groves, Shepherd, Ionia, Mich.

MAPLE RIDGE SHROPSHIRE.—Closing out sale choice yearling rams. Ewes all ages, will be sold without reserve. H. STEWART, Lannon, Michigan.

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DUROC JERSEY SWINE.—Shepherd Dogs, R. P. Rock Chickens, also 102-acre farm. A change of business and everything for sale before Sept. 25th. WILL W. FISHER, Watervliet, Michigan.

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RECORDED MULE FOOTED HOGS are said to be immune from hog cholera. Stock of all ages for sale. John H. Dunlap, Williamsport, Ohio.

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POLAND CHINAS.—Boars of the best of breeding and of great quality. E. D. BISHOP, Route 38, Lake Odessa, Michigan.

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Large Type Poland-Chinas.—Largest in Mich. Pigs now ready to ship, weigh from 150 to 160 lbs. at 4 1/2 months old. Will deliver what I advertise. W. B. Livingston, Parma, Michigan.

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Our P. C. Boars were sired by "Victor" by "Outlook" first prize at Ohio State Fair; dams by Medu Second, Oakwood Medu and others. A few large Minorca Cockerels. Satisfaction guaranteed. R. W. MILLS, Saline, Michigan.

YORKSHIRES.—A choice selection of boar pigs for sale. Price for delivery when three months old, \$15 each. A. McKAY & SON, Hershey, Michigan.

Large Improved English Yorkshires.

The hog that makes good. Boars ready for service. Glits bred for next spring farrow. Choice lot of fall pigs, pairs not akin. Satisfaction guaranteed. COLON C. LILLIE, Cooperaville, Michigan.



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R. C. B. Leghorn Cockerels, stock from selected breed. ing pen, large heavy laying strain farm range. Each \$2. **JAS. F. BUCK, R. No. 2, Marcellus, Mich.**

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POULTRY AND BEES

THE HENS' VACATION SEASON.

There will be fewer eggs laid during the next hundred days than at any other period of the year, this being the time the average hen takes her vacation. Now a long vacation is too expensive for her owner. Her few short years of life should be ones of usefulness. So it should be our endeavor to curtail this vacation as much as possible.

As the nights grow longer and cooler feed more heat-producing food—mainly corn. Don't shell it for they need the exercise, and shelling new corn gives them lots of it and it is a more satisfactory form of exercise than scratching up a favorite flower bed.

It is a good time to "clean house" and put in brand new nests with nice, clean, short straw. I sometimes think that Biddy possesses many of the natural instincts of her sex, and one of them is in regard to housecleaning. With what interest and curiosity she will peer around and watch you as you work about the hen yard. It seems to give the hens added interest in their "business" to see us start something in the yard.

I firmly believe that nests should be changed about at least every four months. It seems to be a hen's instinct to lay about so many eggs in a place and then, if she is broody, she will set, even if it be on a snowball at Christmas time. If not broody she is apt to take a rest. I find that changing the location of the nest quite often breaks up the hen's calculations. Hens get in "ruts," too.

Are your henhouses warm or are there cracks in the walls? Fill up the cracks, except one in the roof. As you value your flock, don't neglect proper ventilation. I had sooner my fowls roosted on the fence or in the tree tops all winter than in a poorly ventilated house. I would be sure that all that lived through the winter would be free from disease at least.

Feed the laying hens regularly. Don't be generous one day and starve them the next, for it will not bring the good results aimed at by the old lady who used this method on her pig to secure streaked bacon.

I don't think it good practice to feed much hot food except on very cold days. It is a practice which, once begun, has to be kept up. Keep trying something new. While not neglecting the old proved methods, it gives an interest and stimulus to the work. Originating, or trying to, at least, keeps us from getting stale, and so long as we do not allow ourselves to reach that condition the flock will not be apt to.

Isabella Co.

W. J. COOPER.

POULTRY FOR HOME USE.

Whatever the pros and cons of poultry raising for profit, the question of whether it pays to keep enough hens to insure fresh eggs for the table and plenty of young chickens for the frying pan can always be answered in the affirmative. It pays first from the standpoint of dollars and cents, and second from that of health. For young children and aged people eggs are much better, as an article of food, than meats, and any family will enjoy better health if eggs are eaten at least once a day than if meats are served three times.

Twenty hens should furnish enough eggs for the average family the year around if proper care is given them in winter. First, never allow hens free range during the three winter months of December, January and February. Better too little range than too much. A building at least ten feet by twelve, with large windows and high walls, should be provided for a stormy day home. It has been demonstrated that, given plenty of straw in which to scratch their breakfasts and dinners, hens can be kept in small quarters and convert all food stuffs into eggs. For sunny winter days there should be a park with a tight board fence on the north and a roof of boards. This roof should be not more than three feet above the ground, and under it the fowls find shelter from the winds.

Feed as many kinds of grain as your farm raises. The fowls will appreciate the change and repay you for the trouble taken. When potatoes are gathered in the fall save all small ones and cook these for the hens during the winter, being careful not to feed them until they are thoroughly cooled. Good bone meal is a desirable addition to the winter's feed

and should be given with the morning mash. Whole corn is an excellent evening feed in cold weather as it furnishes more heat than any other grain.

Warmth, plenty of feed and clean water given so often that the fowls need never drink ice water, a little grit, charcoal, broken oyster shells, table scraps, and bone meal will work wonders in the way of filling the egg basket during the cold months.

New York.

L. M. THORNTON.

MARKINGS OF THE R. I. RED.

To settle an argument will you kindly tell me whether thoroughbred R. C. R. I. Red cockerels have black feathers in tail. Please describe the markings of this breed.

Cheboygan Co.

Mrs. A. E. B.

The main tail feathers in the R. I. Red male are black, but shade to red in the undercolor. For a full and accurate description of the standard requirements of this breed, as regards both plumage and conformation in the male and the female, we suggest that you write Secretary Campbell, of the American Poultry Association, at Mansfield, O. Better still, secure a copy of the Standard of Perfection. This book is issued by the American Poultry Association and contains a detailed description of each and every recognized standard breed. It is the guide of all poultry judges when scoring fowls at high-class poultry shows and should be in the library of every breeder who desires to give attention to fancy points, or to make his flock conform as closely as possible to standard requirements. Some rather important changes, touching nearly all breeds, were made at the 1909 meeting of the American Poultry Association, so that the latest edition of the Standard of Perfection is the only reliable source of the information you request. The contents of the volume are covered by copyright, so that we are not at liberty to reproduce any part of them. The book may, however, be ordered through the Michigan Farmer.

FEEDING BEES THEIR WINTER STORES.

Colonies which are to winter on their summer stands require anywhere from 20 to 30 lbs. of good food for successful wintering. A little in excess of this amount will do no harm but, on the contrary, will stimulate the colony in building up faster the following spring. If one has on hand some sealed combs of honey, a few of them can be distributed among the light colonies, but in the absence of these it will be necessary to feed liquid honey or a syrup made of sugar and water. Use a good grade of granulated sugar. When bees can fly all the time you can safely feed them anything. But when they cannot fly, there is nothing better than sealed honey. When you cannot have that, use a syrup of granulated sugar.

If the feeding can be attended to while the weather is still moderately warm, the syrup need not be quite so thick, say about 2 lbs. of sugar to a pint of water, which will make 3 lbs. of syrup. If the feeding is deferred until cool weather has set in, the syrup will, of necessity, have to be somewhat thicker, for the bees will not be able to evaporate the superfluous water out of it. In making the syrup be careful not to burn it; just pour the boiling water over the sugar and stir until thoroughly dissolved; when cool it is ready to give to the bees.

If there are weak colonies unite two or more, retaining the most valuable queen. To unite, shake both lots on a cloth and let them run together into an empty hive where they had better remain until evening. Then shake them in front of a hive that has been properly prepared for wintering. Peace in such a united colony may be insured by sprinkling the bees lightly with sugar syrup flavored with peppermint, and placing the frames from the old hives, with adhering bees, alternately in a fresh hive. The stronger the colony and the bees, the less honey consumed during the winter. This appears strange, but it is quite true.

Any method of feeding may be followed which does not expose the feed to other bees and incite robbing. I will describe a simple device: After the syrup has been made, pour it into a glass jar, cover with a single thickness of cheese-cloth and tie with a string around the neck of the jar. Now invert on top of it a breakfast plate and turn the whole upside down on top of the brood frames. The syrup will ooze out as fast as the bees sip it up, and no faster. There is no danger of bees drowning in the liquid or even getting their feet wet.

New Jersey.

F. G. H.

When It's "What for Breakfast?"

Try

Post Toasties

Serve with cream or milk and every member of the family will say "ripping" good. And don't be surprised if they want a second helping.

"The Memory Lingers"

Postum Cereal Company, Ltd.
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Our TRAPPERS' GUIDE is just the book you need, whether you are an old-time trapper or inexperienced. Ask for it. We will send it free. It tells you when, where and how to trap, giving the game laws of every State and Canada. Tells you how to prepare skins, and how to get the most money for them. Reveals carefully guarded trapping secrets and gives methods that will increase the catch every time, no matter how long you have been trapping or what your experience. The facts as to Animal Bait have never been published before—are as important to a trapper as traps. Write today for this valuable, but free book.
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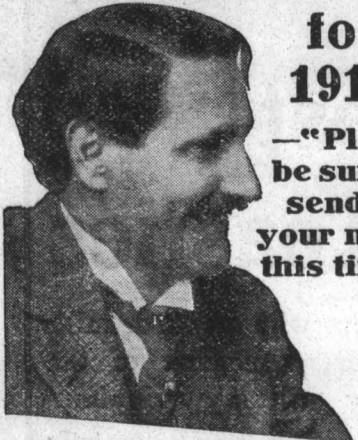
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THE DAIRY

CONDUCTED BY COLON C. LILLIE.

TREATING THE COW'S DIGESTIVE SYSTEM.

A common weakness with the average dairyman is his inability to treat common digestive disorders that are likely to occur in any herd. This is all the more regrettable because the very simplest treatment, namely, the administration of a physic, will overcome most of these disorders. I firmly believe that a proper physic applied at the proper time would save four-fifths of the usual veterinary expenses.

Most of the disorders of the digestive system are the result of injudicious feeding such as overfeeding, feeding too much coarse, indigestible feed, sudden change of feed, too much green clover and alfalfa, irregularities in feeding and the use of stale, moldy, frosted or decomposing feeds.

Digestive disorders usually manifest themselves in loss of appetite, suspended rumination, dull, sickly eyes, or constipation. At the first signs of illness, give a mixture of one to one and one-half pounds of epsom salts and one to two ounces of ginger dissolved in a quart of warm water; or give one to two pints of raw linseed oil, according to the degree of constipation. Other physic may be given, such as one pound of Glauber's salts dissolved in water, or one pint of castor oil.

Physics should be given from long-necked bottles, and a necessary precaution to observe is not to hold the cow's head too high because under such conditions the animal cannot swallow and the material will run into the lungs, with serious consequences.

In case of indigestion, always supply water freely and feed light rations containing laxative feeds such as linseed meal, pasture, roots, silage, etc.

Ordinary indigestion, if promptly treated as above suggested, is a matter of small moment, but, if neglected, we know that it may become the forerunner of numerous serious diseases, hence the importance of applying a physic promptly. Salts and raw linseed oil must always be kept on hand ready for instant use. Trouble from overfeeding must have immediate attention and there is no time to run to the store for a physic. Linseed meal should also be found in all well-regulated dairy barns. This feed has tonic and laxative properties and, if fed as soon as cows show an off-feed condition, may bring relief without resort to physics.

By the way, linseed meal is also one of the best milk-producers we have, and while rather high-priced as a milk feed, its tonic laxative properties should justify feeding small amounts of this feed as a part of the daily ration. Indeed, during the winter, where no silage or roots are available, the feeding of a few pounds of linseed meal a day to all heavy producers is strongly recommended. It should also be fed to cows just before and after calving. In fact, it will pay to feed cows some linseed meal one or two weeks before calving.

There is one peculiar digestive trouble which requires a treatment of its own; this is bloat (hoven) caused commonly by changing cows suddenly from dry feed or scant pasture to rich, luxuriant clover or alfalfa pasture. A great many cows in my section were affected with bloat the present summer and not a few of them died. With proper attention, however, there is no danger of cows dying from bloat. This trouble manifests itself by a swelling of the left side or paunch. As soon as the bloating is noticed, place a gag in the cow's mouth and in mild cases give an ounce of spirits of turpentine and one-half pint of raw linseed oil. Keep the animal moving and pour cold water on the loins. When relief comes give a physic. In severe cases, tap the left side (paunch) with a slender knife or better, a trocar. Tap at a point equidistant from the point of the hip, the last rib, and the spinal column.

One of the most ruinous digestive disturbances is calf scours. The dwarfing and blighting effect which this has upon the future cow is too little appreciated by dairymen. As suggested in a previous article, this trouble can be entirely prevented; but when it does occur it should be checked as promptly as possible. In my experience nothing has proved so efficient in checking scours as reducing

the milk one-half and adding six drops of formalin to it. In severe cases add eight or nine drops. One or two feeds of milk treated with formalin will usually stop the scouring completely.

Wisconsin.

JOHN MICHELS.

HOW SOON AFTER FILLING SILO SHOULD ENSILAGE BE FED?

I want to ask you for a little information regarding the silo as I am a green-horn at the business. I put up a silo this summer and filled it the 12th of September. How soon will it do to feed out of it? I have read a good deal concerning the silo in the Michigan Farmer but do not remember seeing what I want. How much should I feed?

Wexford Co.

H. A. S.

Ensilage can be fed just as soon as you are through filling the silo, but it is better and the cows like the ensilage better if you will wait three or four weeks, until after the rapid fermentation of the corn has ceased. When the corn is undergoing a very rapid fermentation and is quite hot, the cows do not like the ensilage as well, but they will eat it. I had to go to feeding immediately after filling the silo, and if you will take pains to tramp the ensilage down so as to keep the top down tight, as tight as possible, you can feed without any loss of the ensilage. Where the silo is left for a month or so after filling, some of it on top will rot or decay and has to be thrown off and discarded, but the ensilage immediately under this decayed portion is of better quality than the ensilage you feed from the top when the silo is in the active stage of fermentation, and the cows like it better. So I would simply recommend that you do not feed for a month. Keep the silo well tramped for the first three or four days after filling, then wait a month till the active decay of the ensilage is over, then throw off the decayed portion on top, and your ensilage is ready to feed.

The average cow will eat about 30 or 35 pounds of ensilage per day, or about an ordinary bushel basket full, night and morning, and this is the amount usually fed. In feeding ensilage you want to take a thin layer off the top, entirely over the surface of the silo for each feed. Don't dig holes in the silo, fork it up, or loosen it up, because the air gets in and the ensilage deteriorates in value. So rake or fork off the top a shallow layer sufficient for a feed.

ANOTHER SUCCESSFUL SALE.

Breeders of Michigan will be happy to learn the results of the third annual sale of cattle consigned by Holstein-Friesian breeders of the state, held at the state fair grounds at Detroit, Oct. 20. The men offering consignments at the sale last year were well pleased with the outcome, according to the record of that sale, and, based upon that ground, the consignors to this year's auction must be exceedingly happy for with 37 animals less they received within a thousand dollars of the amount of the sales a year ago—the amount of the sales this year being \$18,210. There were 110 animals of which 94 were cows and the remainder calves and young bulls. The average price for the whole lot was \$165.64 as compared with \$131, the average price paid last year. The highest priced animal went this year for \$400 while last year \$380 was the best figure. Five cows went for \$300 or more this year and four sold for that figure and above last year. Twenty-three of the animals sold between \$200 and \$300 while in the previous sale 13 went at prices ranging between these limits. But two of the females sold for less than a hundred dollars. The average for the cows this year was \$178.62, for the calves and young bulls \$95, and for the whole herd \$165.64. A good attendance of buyers was there and competition in the bidding was such as to get the prices at which the animals were “struck off.” It is most certain that after this third successful sale by the breeders of the Black-and-White dairy animals the feature will become an annual event toward which breeders and dairymen of the country will look as a place to get animals for building up their herds. The plan is an economical one both from the viewpoint of the seller and the buyer. In a single trip a buyer can see a large number of animals to choose from which enables him to buy more intelligently and with less expense. The seller, on the other hand, has the privilege of showing to a large number of buyers and thus is in position to get his product to the man who wants just such an animal. In all, it is a method of disposing of stock that must become more popular among breeders.

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THE CREAMERY BUTTERMAKER.

I am interested in learning the creamery business and particularly the butter-making work, as I understand it to be a good paying work and good chances for a position. I do not know very much about the work in a creamery and want to get some reliable information in regard to it. Can you suggest some place or way by which I can get the information I want? Would you advise going into a creamery to work, or going to the M. A. C. and take a course in creamery work? What do you think of the present outlook of the creamery business in Michigan and what are the chances of getting a position at this work if one goes at it and learns to do it thoroughly?

Leelanau Co.

G. M. L.

The creamery business in Michigan is on a solid foundation. There is no doubt but what there will always be creameries. It is the only practical way of making butter and in all of the better dairy sections, practically no butter is made on the farm any more, all being manufactured at the creamery. When people once get into the habit of having it made in the creamery, they will never go back to farm buttermaking. Consequently the creamery buttermakers will always have a job. Not only that, but better buttermakers are being demanded year after year. The creamery buttermaker can no longer make butter by the rule of thumb. He must know his business and know it thoroughly if he holds his job and gets good wages. If he does know it thoroughly, there is no trouble in getting a good position at good wages. The salaries of creamery buttermakers varies from \$75 a month to \$100 a month and up to \$150 a month, depending, of course, upon his skill, and upon the amount of business which he does. A small creamery cannot afford to pay so much. A large creamery can afford to pay what a man is worth. Many times the buttermaker also acts as manager of the creamery and when he combines the work of manager and buttermaker, or in other words, when a man can use his head and his hands at the same time, he can command a large salary. There is little difficulty for the expert buttermaker to get a good job and hold it, and there never will be any trouble for a good man in this business to get a good position. But he must understand his business.

The Michigan Agricultural College has an excellent creamery course. One cannot hope to be a first-class buttermaker unless he takes this course, or a similar one, but a man who has never worked in a creamery will never get as much good out of this course as one who has. You must have had some experience in order to get the most out of the short course at M. A. C. As a matter of fact, the college will not grant a diploma to a buttermaker unless he has had some actual experience in a creamery. Take a man who has never given the subject of creamery buttermaking and creamery management any thought, and it would be almost impossible for him to take this course and then be able to manage a creamery and make the butter. He ought to have had one or two years in practical work in a creamery, before he finishes this course. Then he can get all the good there is in it. Of course, one can learn to be a buttermaker by simply working in a creamery and getting his information by actual experience from an experienced buttermaker, and this kind of a buttermaker is a better man than one who simply has the theory without the practice. But a man is not well equipped until he has both the theory and practice. Therefore the only practical way to get a good course of information in creamery buttermaking, one that will fit one for the best kind of a position, is first to work in a creamery, begin at the bottom and do all the different kinds of work required. Learn to operate the machinery under the instruction of an experienced man and after you have learned to do all of this, get the scientific part of it. Then, if you are made of the right kind of stuff, you are qualified to hold the best kind of a position in a public creamery.

HOW TO BUILD A LATH AND PLASTERED SILO.

Can you tell me where to send to get full instruction for building a lath and plastered silo? Have recently moved and the back numbers of The Farmer have been lost or destroyed. I plan to build in the spring and wish to do what is possible towards getting ready this winter.

Hillsdale Co.

R. G. W.

I have explained a number of times in the Michigan Farmer how to build a lath and plastered silo, and it would be a good plan for R. G. W. to file his Michigan Farmers. If he doesn't want to get them bound, he can punch holes through and tie them with a tape. Then, with the index which is gotten out every six

months, it is easy to turn back to any article wanted.

A trench should be dug one and one-half to two feet deep to get down below the frost and give a solid foundation. Fill this with grout and stones, and build a grout wall a foot above the ground. This will preserve the sills and siding of the silo. Now make a circular sill. Make this out of inch lumber and double it so as to clap over the cracks, nailing together with eight-penny nails. Then on the circular sill set up your studding. Set up the first studding, toe nail it and stay lath it, then you can set your other studding with this. It will be better, however, when you get quarter of the way around the side, to plumb another one, and so on, to keep them perfect. Now lath on the inside with patent board lath. The lath is made out of six-inch matched lumber by having grooves cut in the board so that it will hold the cement. For a silo of ordinary diameter you cannot spring this lath around but have to saw it so that you can nail onto each studding. When you get through lathing you really have your silo sheathed on the inside with matched lumber. Now plaster from top to bottom with good Portland cement by mixing the cement with fine, sharp sand, two parts sand and one part cement. On the inside you can use common clapboards, or you can get inch boards split into half-inch stuff and use this. Get them jointed and set the boards down tight together. They will be sufficiently tight so that moisture can not get in to rot the studding. They make a very good siding and are much more easily put on than the common clapboards.

To make the doors into the silo, lath the first three feet from the bottom, then skip an opening of three feet, and then lath across again for three feet and then skim another opening, and so on. The same way in clapboarding. This will give you a succession of doors from top to bottom of the silo every three feet apart. Now frame in these openings just as you would a window in a barn. Set the studding so that the door will be a little wider on the inside toward the center of the silo than it is on the outside. Then after the opening is cased, make a door by double-boarding with tarred paper between and then allow for size so that they will just fit into this cased opening and come even with the inside after it is plastered. Then back of door put stops around so that it cannot press outward. Now the door can only be taken out on the inside and cannot go through.

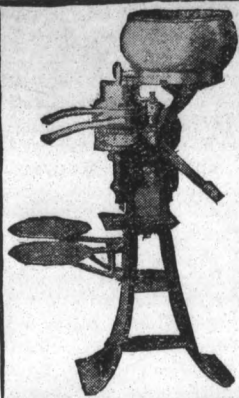
Now for the roof on the silo, put two 2x8's across the center of the silo and toe nail them. Then, on either side of the 2x8's, and about four feet from them, use 2x6's, and then three or four feet from them, depending upon the diameter of your silo, I would put a 2x4. Then put on roof boards and nail them to these joists over the top of the silo. Put some kind of roofing paper on the roof boards. Now you have left an opening clear across the silo through the center three feet wide. Put 2x6's above this and toe nail them to the 2x8's. Make a cap that will fit down over the 2x6's. You can have the cap in sections so that it can be removed. When you wish to fill the silo, the cap is removed and the carrier of the ensilage cutter is placed to one end of this opening. With this kind of a roof, which is inexpensive compared with a shingle roof, or with circular or eight-sided roof, a man can really walk right out of the silo and fill it full of corn, which is just what he wants.

If you build a very high silo, use 2x6 studding and put on a few hoops made of band iron under the clapboards.

The kind of corn to raise for ensilage is a question with many dairymen. I have some corn this year that is perfectly matured, and yet some of it is 12½ feet high. A rather late variety of corn that will mature in ordinary years, is what is wanted for ensilage. Not the early kinds of corn that has been bred to produce ears rather than stocks. The best yielding corn, of course, is bred to have short stubby stalks and big ears. What we want for ensilage is a kind that will grow taller on rich land. Select a rather late variety of corn for your neighborhood rather than an early-maturing corn for silage, and plant it thick.

FACTS ABOUT CANCER.

A booklet published by the Leach Sanatorium of Indianapolis, Indiana, contains interesting information about the cause of cancer. It tells what to do for pain, bleeding, odor, etc., and advises how to care for the patient. The booklet is sent free to those interested who write for it, mentioning this paper.



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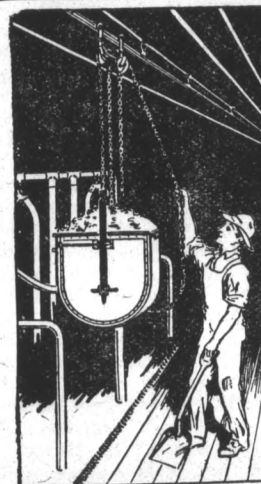
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ADVERTISEMENTS.

Did you ever stop to think that there is a liberal education in the advertisements that appear in a modern periodical? This is an age of advertising. An article can not be successfully placed upon the market—generally speaking—without good advertising; that is its introduction to the public. If you will think back a little you will recall the many pieces of first news that you have gained through the advertising columns—new machines, new devices, new breeds, new lands, new styles, new household conveniences, new places to get the thousand articles that must be bought, and where to get them cheapest or to the best advantage. There are some periodicals published that hold their subscribers almost entirely through their advertising columns, because, by studying these columns, the reader may know what particular article may be had upon the market.

The fact that a paper carries a large amount of the right kind of advertising is a clear indication that it has the confidence and respect of its readers. Otherwise it would not get the orders for the advertisements. The advertising business is now a well-defined cog in the modern industrial machine. Probably 90 per cent of the advertising is placed by men who do nothing else than handle this business for the men or firms who sell the goods. These agencies make it their business to investigate carefully the standing of all of the agricultural papers, for instance, and then place the advertisements where they know they will do the most good to the merchants or manufacturers. It is to the interest of the advertising agency to make the advertisements yield the greatest returns, just the same as it is the business of the attorney to advise his client wisely. Therefore, the large amount of advertising carried, provided it is high-class advertising, is a good feature of a paper, rather than a bad one.

Some people still frequently remark that they do not like this or that paper because it prints too many advertisements. This statement shows that the speaker is not a reader of advertisements, and that he does not place value upon any but the straight reading columns. It may further indicate that he does not place any faith in an article that is advertised, for the reason, perhaps, that he thinks a good article will sell itself and therefore does not need to be advertised. Such opinions

are incorrect, as no matter how good, or how necessary, an article may be, people will not buy it unless they know that it is for sale.

We know that, by the majority of our readers, the Michigan Farmer advertising columns are considered as guides to buying. They have faith in the advertisements because they know that they are carefully edited and that we are very careful to exclude from our columns advertisements that should not go into the home, or which are displaying a fraudulent article. The only way that we can make our readers retain this faith is by continuing, in the future, our policy of keeping our advertising columns clean and reliable. This we intend to do. This paper has been published by the same management for nearly twenty years. It has built up a patronage and a following that is the envy of every other publisher in the land. No great success can be built upon the frail foundation of deception or inconsistency; nothing will support real success except the solid rock of reliability and fair dealing. This foundation we have. Our readers are assured that our advertising columns are reliable and clean, and that our advertisers are safe people to deal with. Patronize them and they will give you square treatment. Read the advertisements, even if you are not thinking of making any purchases at the time. You will find information there that will be invaluable to you.

CURRENT COMMENT.

Providence Helps Those who Help Themselves. A letter just received from an old subscriber so aptly illustrates the point of view of so many people that we are reproducing it here to the end that Michigan Farmer readers may think a little more deeply and act a little more logically, both individually and collectively, than they have done in the past, upon the subject introduced in this letter. The text of the subscriber's letter is as follows:

I have just read your comments about the potato crop and it is enough to make a farmer swear. Why don't you tell farmers that the reason potatoes are nearly worthless is because a gang of thieves are robbing the farmers; and that when all the poor fellows who must have money are sold out and they can steal no more, then they will pay a decent price for those they must have. If your paper would help farmers to get a price for their goods, and quit telling them what they already know, (how to raise better crops), there would be some sense in it. Why don't you help the farmers to organize or get markets or something that would be of some use to them? I have been taking your paper for the best part of 15 years and I wish you would help us in a way that would amount to something. As it is, if the frost took one-half of the potato crop, or fire took half of the wheat, or murrain killed half of the cattle, the average farmer would be better off. Again I say, why don't you expose the trusts. Denounce the thieves who are holding up the farmers, get some legislation to put the scoundrels in jail or on the rock pile.

The comment above referred to was one which the conditions of the potato crop and market deductions drawn from same were presented to the readers of The Farmer, to aid them as much as possible in arriving at correct conclusions as to when the potato crop should be sold.

The writer of this letter is one of a large class who have been sorely disappointed in the condition of the potato market, and in commenting upon his letter what he says will be considered as impersonal and representing the sentiments of a large class of producers who are not satisfied with the present market conditions who have come to believe that they are being systematically robbed by what the writer of this letter terms a "gang of thieves," and who look to someone else to protect them through some remedial legislation instead of taking the matter in hand and putting up for themselves the kind of a fight that wins in this, or any other, proposition.

First, in our analysis of the sentiments expressed in this letter let us consider whether the writer's deductions are based upon reason. Potato market conditions are here indirectly connected with the nefarious operations of trusts. But the writer of this letter, and every other well informed man, if he will pause to think, knows that the potato market is not in the hands of a trust; that it is one of the few markets which is not organized at all; this food product being distributed by thousands of independent dealers who have no organization whatever.

In considering whether the present condition of the potato market is a natural one, as maintained in the comment above referred to, let us recall the conditions of a year ago when many of these same

potato dealers stored the tubers at a fair price, only to be compelled to sell them later on a lower market, an experience which they, apparently, have not forgotten. Not that we would maintain that present market conditions are all that might be desired. Undoubtedly the cost of distribution is altogether too high and the producer does not get as much of the consumer's dollar as he is entitled to, but in this case instead of a trust being to blame it may be attributed to an entire lack of organization. The writer of this letter asks why we don't help the farmers to organize or get markets or something that would be of some use to them. We have for years urged the farmers of Michigan, especially the potato growers, to organize along lines of community production for their own benefit and advantage. Column after column has been devoted to matter pertaining to such organizations, and we are glad to note that our efforts in this line seem to be bearing fruit as a number of co-operative organizations have already been effected and more are being promoted in the present time in the organization of producers of special crops in a number of sections of the state.

Just a word to that great class of people who, in common with the writer of this letter, seem to think that legislation is a panacea for every ill. While legislation is often helpful and necessary for the prevention and punishment of illegal or fraudulent acts, it cannot remedy our own shortcomings nor improve business conditions which affect us, but in which we do not take such an active interest as to try to remedy for ourselves. If the potato growers of Michigan were properly organized they would be in close touch with the best market for their product, and would be able to dispose of it to the best possible advantage, and also to discuss in an intelligent manner the proper control of marketing the crop. The dealers are not to blame for the fact that the bulk of a perishable crop which it will take months to consume is offered upon a weak market right at the beginning of the season, nor can they be blamed for the fall in the prices which results from such a course. That is a factor, however, which would be largely in control of growers were they properly organized, while the profits now made by the local shippers would accrue to the growers, providing their crops were handled through co-operative associations. We are glad the subscriber wrote us in the above vein, and we hope that his letter and the facts in connection with it to which we have called attention will stimulate the potato growers of many sections of the state to action as well as to thought upon this subject. It is of no use whatever to condemn conditions in a general way, as a means of alleviating our misfortunes, neither is it of any benefit to feel that some one else should help us to evade those misfortunes. The Michigan Farmer can not compel its readers to organize, for their own benefit, but it can and has and will urge them to organize and get in a position to do these things for themselves which others can not do for them.

It is all very well to say that the farmers would be better off if half the products were destroyed, but in practice we would all want it to be the other fellow's half. It would be a course more fitting to our dignity as business men to get busy and "pull our own chestnuts out of the fire."

LOOK OUT FOR THIS SWINDLE.

Editor Michigan Farmer:

Dear Sir:—This letter is to explain a new scheme for swindling farmers. The man who worked it was about thirty-five years old, weight 170 pounds, height five feet ten inches, clean shaven, regular features, clear, but not light, complexion. He had a pleasant voice and a joking way about him that makes people willing to shake hands when he comes the second time.

His game is like this: He claims to work for the "National Hay Car Draw-back Co." His device consists of four pulleys and a half-inch rope somewhat longer than the hay rope. These are to be so placed that when the team starts back to the barn after lifting a sling or fork of hay the small rope is made to draw the car back to the catch. He gets a farmer interested on the score of ease and rapidity of work. He persuades him to order a number of these outfits. He gives the farmer (who is now his bonafide agent by tacit consent), a quantity of posters which he claims will bring other farmers to his place to see the sample in operation.

The agent is made to believe he can dispose of them like hot cakes and clear one dollar on each set.

Before he leaves, however, it occurs to him that he is entitled to some sort of guarantee of good faith on the part of his agent. "How would a contract note be? Said note to be held until final settlement of the deal. All stock remaining unsold at the end of six months would be taken back at cost and the agent given credit on the note."

Almost anyone having gone thus far would not hesitate to sign this "security note," just as two of my neighbors did. They would have paid those notes also, amounting to some three hundred dollars and interest, if our local banker had not inquired by phone if it would be agreeable should he discount them. Imagine the surprise of these inexperienced young farmers to learn that their notes were negotiable; the swindler having detached the contract and inserted the legal interest rate in the note, which was stipulated should bear no interest.

The most remarkable thing about this affair is that anyone who has intelligence enough to make farming a success, should sign a paper which reads "value received," when they haven't a scrap of anything yet to show for it.

It is safe to predict that whoever has taken this agency, and the crook has succeeded in selling his note, will never receive any merchandise, however often he may inquire at the freight depot. Who would expect any company (located nowhere, as we can discover, except in the mind of the promoter), to make good its promise to anybody who held so loose a string on their wealth as that?

Wayne Co.

J. W. ROMINE.

HAPPENINGS OF THE WEEK.

National.

The balloon America II which started in the international race from St. Louis, October 15, has not been found. It is believed to have landed somewhere in the wilderness of Canada north of the Great Lakes or east of James Bay. Searching parties have been sent out to locate the balloon and her occupants if possible. Who is winner of the race cannot be determined until the last balloon has been located, but two of the craft are already known to have made new records, having flown over 1,200 miles.

A spectacle, never before seen in America, was the witnessing of ten aeroplanes in the air at once at Belmont Park, New York, Monday, where aviators are giving performances. On the same day Drexel took his flyer 7,100 feet into the air, thereby making a new American record for high flying.

The deficit in the postoffice department for the year ending June 30, was \$11,500,000 less than for the previous year. While changes in the department have resulted in economy, better service is also being given. The deficit for the year is \$6,100,000. That this reduction has come with the fast expanding volume of mail makes the showing more surprising.

United States Senator Elkins, of West Virginia, is reported ill at his home in that state.

In the compilation of the death registration reports of the United States it is shown that of the 210,507 deaths among employed or occupied persons, 14.8 per cent died of tuberculosis, 11.9 per cent from heart disease, 10.5 per cent from accident, 8.5 per cent from Bright's disease, 8 per cent from pneumonia, 7.3 per cent from paralysis and apoplexy, and 2.6 per cent from suicide.

Zion City, founded by the late Alexander Dowie, will take up intensified farming, dairying and poultry raising as the main features of her industrial activity as soon as the title to the property passes to Wilbur Glenn Oliva the new leader. No more manufacturing plants will be established.

The charge made by dairymen that a "milk trust" exists to their detriment has reached the department of justice at Washington and an investigation has been ordered by Attorney General Wickensham. Among the allegations of the dairymen is the charge that certain interests have control of the manufacturing of pasteurization machines and are now seeking to force upon dairymen their adoption in all large cities.

Edgar Allen Poe, regarded as the most original literary genius America has yet produced, has been accorded a place in the hall of fame. Ten others were also admitted: Harriet Beecher Stowe, Oliver Wendell Holmes, Roger Williams, James Fennimore Cooper, Phillips Brooks, William Cullen Bryant, Frances E. Willard, Andrew Jackson, George Bancroft, and John Lathrop Motley.

In order to secure immunity from prosecution many leading importers merchants of New York are anxious to make restitution to the government for goods brought into the country which they undervalued to reduce import duties. The government will make at least \$1,000,000 on the confession of these merchants.

In the contest between the leading baseball teams of the National and American leagues, the Philadelphia team representing the American group defeated the Chicago team of the National organization, by winning four out of five games. John W. Coombs, of Philadelphia, pitched three of the winning games.

Foreign.

Ischia, an island in the Mediterranean Sea about 16 miles from Naples, was swept by a storm in the past few days.

The loss of property is not known. The first reports indicated a heavy loss of life but it was later learned that the victims were few.

A hurricane swept over the eastern coast of the Baltic sea demolishing shipping interests and destroying many lives among sailors. On the shores long lines of houses were blown to the ground.

A petition signed by American delegates to the international good roads congress in session at Brussels where 26 countries have representatives discussing issues pertaining to the road question, was received at Washington asking this government to join the movement.

In order to properly handle the large farming lands recently occupied by immigrants and others, the farmers of western Canada are making a strong demand upon their government to arrange for free trade relations with the United States that they might get farm machinery to equip their farms.

The work of restoring the campanile or tower of St. Marks at Venice, which fell in 1902 after standing for 1,014 years, will soon be completed.

The Russian government has inaugurated improvements to her domestic transportation facilities which promise to solve some of the imposing economic problems of the great country. A canal planned to connect the Drina and Dnieper rivers was begun last week. The former of these streams flows into the Baltic Sea and the other into the Black Sea, which will enable a water course across the country from south to north without going into foreign territory. The plan also contemplates the joining of the Drina with the Volga river, which flows into the Caspian Sea, and thus will afford cheap communication between another great grain producing section and the Baltic region.

CROP AND MARKET NOTES.

Livingston Co., Oct. 22.—The weather thus far in October has been all that could be desired and corn husking is now progressing rapidly. Wheat is looking fine and will go into winter with a large growth. Not nearly as much rye sown as usual owing to the fact that the growth of straw has been so rank in recent years that much difficulty has been encountered in harvesting it. Bean threshing is nearing completion and the yield has been better than was anticipated, averaging about 12 bushels per acre. The fall rains have brought new seedling on in much better shape than was expected. Potatoes yielding well and of very uniform size. The prices paid for farm commodities are very satisfactory for this season of the year.

Genesee Co., Oct. 23.—Continued fine weather interrupted on the 21st by a much needed rain. Although the weather bureau predicted killing frosts they have failed to appear, giving an exceptionally long season. Potato harvest about concluded. Sugar beets now claiming attention with good tonnage. Good roads proposition much discussed at present. County commissioners have asked supervisors for \$40,000 to continue the work another year. Altogether the county has 17 miles in the several townships of gravel or macadam highway.

Eastern Oceana Co., Oct. 18.—Very warm, and dry again. No frost yet; picking ripe tomatoes off the vines today. Everybody busy securing corn, potatoes and beans. The bean threshers report beans turning out around 12 bu. per acre. Potatoes good where the blight did not get in its work. Corn sound and good but ears rather short on account of dry, hot weather in August, will husk from 60 to 80 crates of ears per acre. Sept. 30 the writer cut his fourth crop of alfalfa on part of field, getting about one ton per acre. It is now 8 to 10 inches high. Pasturing the rest to see which will come out the best next year. A good many are going to sow alfalfa in the spring. The potato market started in at 35c here but the farmers glutted it with so many green and rotten potatoes from the fields that were blighted that the market closed entirely for the present or until about Nov. 1. Butter, 25c lb. for dairy; 30c for creamery; eggs, 22c dozen and very scarce; hogs, \$3.50@9; good beef cattle bring 4c; hens, 9c; chickens, 11c.

Mecosta Co., Oct. 19.—We have only had one killing frost so far this fall, and are at present having delightful weather. Farmers are getting along well with their fall work. Many of them have a nice lot of corn husked. Fruit picked and potatoes dug. Potatoes were either exceptionally good or exceptionally poor. They went all the way from 75 bushels sorted, to 250 bushels sorted. Due in most cases to the time they were planted. The early ones set in the dry weather and it stayed so dry that the potatoes were small. Corn is generally a good crop this season. More wheat was sown this fall than usual and less rye. Beans were a good crop and good quality. Clover is well filled. Live stock looks well.

Illinois.
Marion Co., Oct. 22.—The month of October has been warm so far with only a light frost to date. Considerable rain the first week, with some damage to corn on bottom land. Wheat all sowed with small acreage. Corn cutting done. Silos filled. Threshing of redtop about all done and bringing a good price, 12c per lb. Not much trading in stock. Several farm sales with good stock bringing good prices. Not many fat hogs on hand, selling at \$8 per cwt; hay, \$12 per ton; eggs, 23c; butter, 25c.

Western Warren Co., Oct. 24.—After an exceedingly hot, dry spell for this time of the year rain came on the 18th and lasted for three days, bringing the first two killing frosts on the morning of the 23rd and 24th. Fall wheat all in with a larger acreage than in former years. Pastures short but not dried up. Quite a number of wells gone dry. A good second crop of clover which is threshing out from one to three and a half bushels per acre. Some farmers rushing their hogs to market.

(Continued on page 361).

Are You Going to Build?



One Great Problem Before You is YOUR ROOF

To settle it right will save you cost of repairs and a new roof—to settle it wrong means dissatisfaction from the start.

You read many extravagant claims; you are frequently confronted with high-sounding guarantees; you have heard of countless brands of roofings, but there's only one way to tell the good from the bad. *Make them show you what they've done.*

We are ready to show you actual buildings in your neighborhood where NEPONSET PAROID Roofing has been on roofs for years. The money saved in repairs more than offsets the difference in price between Bird NEPONSET Roofings and the cheaper kinds. Back of Bird NEPONSET Products are records of long service and 115 years of experience in one line of business. We originated the ready roofing idea and make different roofings for different types of buildings.

NEPONSET PAROID Roofing

for your barns, poultry buildings, etc., gives service equal to that of the highest grade shingles

Unlike shingles, it resists fire, doesn't blow off or deteriorate. NEPONSET PAROID has been in service for many years on United States Government, Railroad, Industrial and Farm Buildings, in all climates. If it meets these severe conditions, it will surely meet yours.

For such poultry buildings, brooder houses, sheds and temporary buildings as require a low-cost roofing, you should use NEPONSET RED-ROPE Roofing rather than tarred felts—more satisfactory in every way—it has been the standard low-cost roofing for 25 years.

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Consult Our Building Counsel Department

Tell us the nature of the buildings you propose to erect or repair and we'll send you the BIRD NEPONSET Book which treats your special case. There are dealers in BIRD NEPONSET PRODUCTS everywhere. If you don't know the one in your locality, write us and we'll tell you.

F. W. BIRD & SON, 95 Neponset St., EAST WALPOLE, MASS., U. S. A.

Established 1795. Originators of Complete Ready Roofing and Waterproof Building Paper.

New York Washington Chicago Portland, Ore.

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A Blessing to the Farmer's Wife

THE Bell Telephone Service lightens the domestic tasks of the farmer's wife.

In the family circle, the Bell Service is indispensable. It is a constant household companion. It shops for her when she is too busy to go to town. It brings her in close touch with the social life of the community. Loved ones far away may be reached, for the Bell field is almost limitless. It relieves the monotony of life. She *cannot* be lonesome with the Bell Service at her command. It is a constant source of pleasure and profit in the home circle.

Talk it over with our local manager.



Michigan State Telephone Company,

Detroit, Michigan.

200,000 TELEPHONES IN MICHIGAN!

Connections Everywhere.

Don't Wear A Truss

After Thirty Years Experience I Have Produced An Appliance for Men, Women or Children That Cures Rupture.

I Send It On Trial.

If you have tried most everything else, come to me. Where others fail is where I have my greatest success. Send attached coupon today and I will



The above is C. E. Brooks of Marshall, Mich. who has been curing Rupture for over 30 years. If Ruptured write him to-day.

Send you free my illustrated book on Rupture and its cure, showing my Appliance and giving you prices and names of many people who have tried it and were cured. It is instant relief when all others fail. Remember I use no salves, no harness, no lies.

I send on trial to prove what I say is true. You are the judge and once having seen my illustrated book and read it you will be as enthusiastic as my hundreds of patients whose letters you can also read. Fill out free coupon below and mail today. It's well worth your time whether you try my Appliance or not.

FREE INFORMATION COUPON

C. E. Brooks, 3701 Brooks Bldg., Marshall, Mich. Please send me by mail in plain wrapper your illustrated book and full information about your Appliance for the cure of rupture

Name.....

Address.....

City..... State.....

Do You Feel This Way?



Do you feel all tired out? Do you sometimes think you just can't work away at your profession or trade any longer? Do you have a poor appetite, and lay awake at nights unable to sleep? Are your nerves all gone, and your stomach too? Has ambition to forge ahead in the world left you? If so, you might as well put a stop to your misery. You can do it if you will. Dr. Pierce's Golden Medical Discovery will make you a different individual. It will set your lazy liver to work. It will set things right in your stomach, and your appetite will come back. It will purify your blood. If there is any tendency in your family toward consumption, it will keep that dread destroyer away. Even after consumption has almost gained a foothold in the form of a lingering cough, bronchitis, or bleeding at the lungs, it will bring about a cure in 98 per cent of all cases. It is a remedy prepared by Dr. R. V. Pierce, of Buffalo, N. Y., whose advice is given free to all who wish to write him. His great success has come from his wide experience and varied practice.

Don't be wheedled by a penny-grabbing dealer into taking inferior substitutes for Dr. Pierce's medicines, recommended to be "just as good." Dr. Pierce's medicines are OF KNOWN COMPOSITION. Their every ingredient printed on their wrappers. Made from roots without alcohol. Contain no habit-forming drugs. World's Dispensary Medical Association, Buffalo, N. Y.

Try My Chatham Fanning Mill 30 Days Free

Cleans and Grades all Seeds. I'll Pay Freight no Matter Where You Live. Take a Year to Pay Me if You Keep It. By that time this remarkable machine will pay for itself and keep on making big money for you every year. No money down—no note—no contract. Return at my expense if you wish. You'll see what wonderful work it does. Don't grow weeds or plant weak seeds and get only half a crop of grain or grasses. Clean and grade with a Chatham.

Doubles Crop Values

Send For Free Book No. 167

Learn how thousands of farmers are making extra profits by planting and selling seeds cleaned and graded by a Chatham. Taxes are too high, land too valuable to go on in the old way. Experiment Stations and Farm Papers are telling you this and all endorse the Chatham. Get my free book and liberal offer now. Address Manson Campbell, President.



The Manson Campbell Co.

Detroit, Mich.
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PROMPT SHIPMENT

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STEAM POWER

—proven best by years of greatest efficiency, utmost dependability, wonderful economy, absolute simplicity and durability. The power for 100 farm uses. And

LEFFEL

Steam Power is the proven best of all steam outfits—far better than gas or gasoline. Send name now for "The Farmer's Power"—Free. Address

JAMES LEFFEL & CO.

Box 249,

Springfield, Ohio

HARVEY BOLSTER SPRINGS



FREE TRIAL TO YOU

Apple & Cherry Trees 10c. Peach & Carline Poplar 5c & up. Other Fruit Trees and Berry plants at lowest prices. Cat. free. ERNST NURSERIES, Moscow, O., Box 2

HORTICULTURE

APPLE SPRAYING EXPERIMENTS.

In order to show the best kind of spray, the proper time to spray and the best way to spray apples to prevent codlin moth and curculio injury, the Missouri Experiment Station in 1908 conducted a practical experiment upon a block of about 20 acres of Ingram apples in a large commercial Ozark apple orchard.

Three early sprays resulted in 97.6 per cent picked apples free from curculio crescents while 45.5 per cent were damaged on the trees unsprayed. Of these apples 99.83 per cent were free from codlin moth wormholes, 14.5 per cent being infested on the trees unsprayed, and 97.4 per cent of the apples were free from both kinds of injuries as compared with 46.1 per cent from the unsprayed trees. The three early sprays preventing windfalls also gave 45 per cent more picked apples than the unsprayed trees. It was found that the spraying had doubled the cash returns for the crop, the net profit due to spraying amounting to \$65.36 per acre, or \$7 for every dollar expended for spraying.

It is considered that three early sprays, if thoroughly applied, will be sufficient to control both codlin moth and curculio under the average conditions similar to that of Missouri. Paris green was not quite so efficient as arsenate of lead and, although used with every precaution, seriously damaged the fruit by causing blackened areas about the blossom end, nearly one-fourth of the picked fruit being rejected from the first grade for this cause. The rainy weather prevailing at the time nearly all the sprays were applied intensified the damage from the Paris green, but the adjoining block treated similarly with arsenate of lead failed to develop more than about one per cent of apples blackened at the blossom end. In the picked fruit sprayed with arsenate of lead, 3.8 per cent bore either curculio crescents or codlin moth wormholes, while 7.67 per cent bore these injuries in the plat sprayed with Paris green. Including both windfalls and picked fruit, 96.18 per cent in the arsenate of lead plat and 93 per cent in the Paris green plat were free from these injuries.

EXPERIENCE IN THINNING PEARS.

I am sure that an experience in thinning Kieffer pears will be of interest to the readers of the Michigan Farmer. Three years ago the old homestead came into my hands and on this is a block of these pears containing 48 trees about 30 years old. For a number of years prior to my occupancy these trees bore a crop of about 100 barrels on alternate years, yielding a large crop one season and then taking a year off. Not much care was given them, aside from harvesting the fruit, though the ground was not pastured. The first year under my care, which was two years ago, these trees set a full crop and were well thinned. I do not recall the exact time consumed in this work, but it was not far from two weeks.

Now, as to results. That season there was a large crop of pears generally, and ordinary Kieffers were slow sale, but those were nice in quality and sold for \$70 on the trees. I do not know how many barrels there were, but probably 100. The next year, or in 1909, no crop might have been expected, but as a matter of fact, those trees again bore, many of them too full, and should have been thinned. We put up 84 barrels which sold for \$2.25 per barrel at the station, or about \$1.60 on the trees, leaving \$134.40 as the net proceeds. This season these same trees blossomed well, but the cold weather at the time greatly reduced the setting of fruit. However, we last week put up 37 barrels of good pears which sold at the station at \$2.50 per barrel. There were also two barrels of second grade pears, worth probably \$1 per barrel net. The cost of packing this year's crop is \$12.21 for barrels and \$16 for labor, \$28.21 in all, or a little over \$60 net for the crop. This has little to do with the proposition of thinning, however, as the crop would doubtless have been about the same this year if the trees had carried the full setting two years ago and then been barren last season, as has ordinarily been the case.

The point worthy of emphasis is that while most men would hesitate to spend two weeks' time in thinning the fruit on 48 pear trees, or an expense of approxi-

mately \$25, fearing that they would not get the money back, yet this experiment resulted in a much better sale than would have otherwise been made the same year and a crop netting \$134.40 or thereabouts the following year. It should be stated that I have made a practice of thinning the Kieffers for a number of years but have not succeeded in getting annual crops before this. It has been our practice to thin the peaches first and then do this work on the pears, so it has been well into July before the pears were thinned, while on this place where these pears stand there are no peaches and the Kieffers were thinned early in June. I am of the opinion that the early thinning made the difference. Doubtless, too, the extent to which the process is carried would have its effect. Kieffers commonly set two to three fruits on each fruit spur and my instructions were to thin to about eight inches. This required the removal of from six to ten pears to one left on the trees. Some experience in this work seems to be necessary before one quite acquires the courage to take off so many. The sight of so many pears on the ground gives one the panic. But if a tree is observed that is bearing a maximum crop with all specimens of full size it will be noticed that the fruits are at not less than this distance apart. I question if the crop would have been secured the second year had the thinning been less severe.

But I do not regard the matter of thinning fruit as very much of an added expense. The fruit must be harvested, anyway, and no more time or motions are required to pluck the fruit and drop it on the ground than to drop it into the picking basket. Further, help is more plentiful and wages lower, usually by about 25 per cent, during the thinning season than at harvest time. It is a recognized fact that a force of men will put up more barrels of large fruit than of that which is smaller, in a given time, so that I am right in making this statement. The work of grading is made easier, too, as the poorer specimens are always removed in thinning, and more of the fruit goes into the first grade.

Allegan Co. EDWARD HUTCHINS.

FALL AND WINTER TREATMENT OF THE STRAWBERRY BED.

The easiest, quickest grown and one of the best and most profitable of all fruits upon the farm should have the care and attention it merits. I set plants 18 in. x 6 ft. between the rows. Why? Because these times, with hired help very scarce, the work of cutting off and training runner plants I dispense with; set at this distance the plants mat in rows 2 and 2½ ft. wide, most plants having ample room to grow and mature their fruit properly, thus leaving a row to pick from for crates, 2 ft. wide. After picking, the vines are immediately mowed and all tops, weeds, old mulch, etc., raked with a horse, free from the bed and while dry, burned; the ashes resulting, saved and used the next spring as a fertilizer for the bed. Next, to renew the bed (I have had splendid beds ten years old), after the cutting and raking, two stakes are set in a line on one side of the bed opposite or contrary to the way the original rows lie and a sharp-toothed, one-horse cultivator, closed to 18 in., run across them from side to side, leaving a six-inch space between the new made rows. The vines left in this space are the young plants for the new bed. All plants cultivated up are also gathered and burned for fertilizer. Thus, I have a new bed on the same ground from year to year, with slight expense compared to the setting of a new plot elsewhere. If plants are too thick in the space left, a sharp hoe in careful hands will soon thin them to the proper distance apart, all old plants are usually mostly renewed by the cultivator. Always save the younger plants, rejecting those older than one year. They are now ready, after a few later cultivations, to kill such weeds as may in the meantime have grown between the newer rows, for the winter mulch, after a hard freeze. This mulch is preferably bright, clean, rye straw, as this straw is long and usually free of all weeds, etc. Be sure your mulch is reasonably free of seeds. Two or three inches of straw all over the piece applied before the later fall rains, so that it may settle, prevents it largely from bunching or blowing off. Under this they are reasonably sure of wintering well. Do not remove the mulch in the spring until all danger from frosts has passed, leaving it between the rows to keep the fruit, berries, boxes, etc., clean as well as to keep down weed growth.

G. A. RANDALL.

Free to Pile Victims

Next Morning Worst Cases Wonder Why They Never Before Tried The Remarkable Pyramid Pile Cure.

IT IS FREE.

By making a free test of the Wonderful Pyramid Pile Cure you are sure of being right. Nothing is more disappointing than to invest in something that don't do the work. So, write at once to the Pyramid Drug Co., Marshall, Mich., for a free trial package and know to a certainty that here is a sure, quick and permanent cure, an instant relief in worst cases of any form of piles. The trial will enable you to rest comfortably over night, and in the morning you will hustle to the nearest drug store, can't help it, for the regular 50c package that puts you on your feet and keeps you going. Be sure you get what you ask for.

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Fill out the blank lines below with your name and address, cut out coupon and mail to the PYRAMID DRUG COMPANY, 269 Pyramid Bldg., Marshall, Mich. A sample of the great Pyramid Pile Cure will then be sent you at once by mail, FREE, in plain wrapper.

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HERE'S the best investment you can make now. Does the hard, dirty barn work—keeps the manure away from the barn and yard—saves all the liquid manure (worth \$7 a ton)—saves lumber and paint which manure rots away—and keeps ammonia and other poisonous gases away from your stock—eliminating danger of contaminating milk. Inspectors are strict.

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Absolutely the best wagon built for every kind of heavy toading. Low steel wheels, wide tires. Will last a lifetime without repairs.



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FARMERS' CLUBS

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

Associational Motto.—

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

Associational Sentiment.—

The farmer, he garners from the soil the primal wealth of nations.

THE ANNUAL MEETING.

The Annual Meeting of the State Association of Farmers' Clubs, will be held in the senate chamber, Dec. 6 and 7, 1910. Questions of vital importance will be discussed by competent men and liberal time given for general discussion. We trust that every Club will send at least one, (better two), delegate to this great inspiration meeting. No Club can afford to miss the enthusiasm and aid to be derived from association of Club workers.

As a special favor the secretary requests the local secretaries to promptly acknowledge the receipts of the report blanks. This is absolutely necessary that the State Secretary may give a complete report at the Annual Meeting. Again, please be prompt, and oblige.

Mrs. C. P. JOHNSON, Sec.

A MOST SUCCESSFUL CLUB FAIR.

The Annual Fair of the Washington Center Farmers' Club, of Gratiot Co., was held Oct. 13, 1910, at Riverside, the home of Mr. and Mrs. C. N. Curren. Much interest is manifested in this event which is becoming an important factor in Club work. A large number of visitors, together with the Club members, enjoyed the chicken-pie dinner which is always a feature of this meeting. The hall, under the management of the executive committee, had been suitably decorated with autumn leaves, flowers and bunting. A large banner announced that all were welcome to the W. C. C. Fair. A committee received the exhibits, placed them in their proper departments, and the hall was thrown open for inspection.

Much care had been taken to have the exhibits in the best possible shape, and their appearance far surpassed many of the exhibits at the large fairs. A new feature was small banners bearing the names, such as wheat, corn, oats, barley, beans, etc., placed directly above the exhibits, and were both useful and ornamental. There was an immense display of all kinds of grains, the wheat and corn being extremely fine. All kinds of vegetables in abundance were on exhibition. The fruit display was small, but what was shown was of fine quality, while canned fruit was more plentiful and exceptionally fine. Mrs. C. A. Matthews showing a call of 17 varieties. Mrs. Emmet also had a fine display of canned fruit and jellies. Mrs. French exhibited jellies. Mrs. Keiser showed strawberries, and all received first prizes on the different varieties. The sugar beet growers showed fine specimens, for "beets" are grown in large acreage in Washington.

The display in domestics and fancy work far exceeded that of any previous fair, and some most elaborate exhibits, such as embroidered bed sets, center pieces, scarfs, towels, and many beautiful specimens of fancy knitting were shown.

A collection of old letters bearing 10c postage stamps were something of a curiosity.

A fine exhibit was made by one of the Club boys of corn and potatoes grown by himself, and the Club will have a department especially for the Club boys and girls at the next fair. There was also a good display of plants and cut flowers. C. A. Matthews won first prize for the largest number of exhibits; L. C. and C. N. Curren, second; S. N. French, third. F. Cammet and J. Keiser and Geo. Hill were also large exhibitors. The blue ribbons awarded by the judges at this fair are greatly prized and the judges are required to exercise great care in awarding them.

The fair is becoming more important each year, and is of considerable benefit to the farmers. Many exchanges and gifts of different varieties of grains and vegetables are made and new friends and acquaintances are made at the Club Fair. A very short program was given, consisting of music and recitations, following the usual order of business. The next meeting will be with C. B. Doan the second Thursday in November.—Cor. Sec.

GRANGE

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

THE NOVEMBER PROGRAMS.

State Lecturer's Suggestions for First Meeting.

Song—Page 34, Grange Melodies.
An account of some movement for the uplift of humanity.
Song, "Help It On," Song Knapsack.
Recitation and music.
Beautiful objects for home and school—1. pictures.

Roll-call, responded to by each describing a picture he or she admires. (Show picture if possible).

Legislative matters—discussion, followed by instructions to delegates to State Grange.

Suggestions for Second Meeting.

Song.
Three current events, with comments upon the same.
Life of Florence Nightingale.
Feeding Animals, II—1. Their foods, water, mineral, nitrogen and non-nitrogenous. 2. Digestion and assimilation of foods by animals.
Instrumental music.
Beautiful objects for home and school—II, vases and flowers.
Question box.
Dialog, "A Golden Wedding."
Song, page 54, Grange Melodies.

"GREATEST OF THESE."

A fall series of Lecturers' Conferences has just been completed in conjunction with the Pomona Granges of Menominee, Alger, Marquette, Delta, Schoolcraft, Luce and Chippewa counties, besides a conference in Dickinson where no Pomona is yet organized. The tour of these counties was made by R. N. Seward, newly appointed general deputy for the upper peninsula, R. D. Bailey, representing the state's traveling libraries, and myself as representative of the lecture department of State Grange. We traveled, in the upper peninsula alone, about 700 miles by railroad and drove eighty miles more over the famous rock and gravel county road system of the peninsula. The trip carried us, by these miles, through new and cultivated sections which were resplendent beyond belief in autumnal glory. We

But greater than these—greatest by far of all—are the people of this upper empire so recently added to our Grange field. At every one of the nine points where we attended gatherings of them we found staunch characters in plenty, ready for any endeavor that would increase the value of their farms and develop "a better and higher manhood and womanhood" among themselves. They were of the stuff that loyal Patrons are made. They are fast in the making, too. Leaders are being discovered and are in training for service. Their children are being imbued with Grange principles and habits. They are on all hands falling into step in the mighty agricultural march forward that this region has started upon—a territory that for long has been related to Michigan much as Alaska has been to the United States and which, also like Alaska, is possessed of unguessed riches and resources, besides a people valuable far beyond mere material wealth.

JENNIE BUELL.

AMONG THE LIVE GRANGES.

Onsted Grange, of Lenawee Co., recently closed a contest which resulted in the addition of a good number of members and many meetings of unusual interest. The side captained by Sister Elva Laur won in the contest by about 500 points, and the opposing side furnishes a chicken-pie supper.

Sanilac Pomona was entertained by Amadore and Croswell Granges, Saturday, Oct. 15, at Mills hall in Croswell. Although practically all of the Pomona officers live on the other side of the county, all were in attendance. Only about 50 Patrons were present, the fine weather for farm work keeping many at home. After a short business session the doors were thrown open to visitors and a good program of short talks, recitations and music was given.—W. N. Cook.

Wayne Pomona held a good meeting with Harmony Grange at Romulus, Saturday, Oct. 14. It was the last Pomona meeting for this year and Pomona officers for the next two years were elected as follows: Master, J. C. Neir, Flat Rock; overseer, J. C. Pullen, Belleville; lecturer, Mrs. J. F. Lindsay; steward, Jas. Pinck; assistant steward, Emory Bird; chaplain, Rev. P. C. Cyphers; treasurer, Robt. Bird; secretary, Jas. W. Brighton; gatekeeper, H. C. Packard; Ceres, Mrs. Jas. Pinck; Pomona, Mrs. H. C. Packard; Flora, Mrs. S. W. Spencer; lady assistant steward, Mrs. Emory Bird. Delegates elected to attend the State Grange: Mr. and Mrs. H. A. Munroe, of Flat Rock Grange. Six new members were received and given the fifth degree work. Romulus Grange served dinner to about 175 Patrons. After dinner an excellent program was rendered, the features of which were addresses on the benefits of good roads by Hon. H. S. Earle and ex-State Master Ladd, of Massachusetts.

State Grange Exhibits.—Mason County Patrons contemplate making a showing of fruit from their county at the State Grange meeting in December. Benzie Co. has a committee collecting material for its exhibit and the Pomona master of that county recently informed the com-



The Best Crop Grown by the Patrons of Delta County, Mich.

saw at nearly every point, but notably at Escanaba and Manistique, fine exhibits of farm products, specimens grown in the counties and shown as display features of the Pomona meetings. It is entirely within bounds of imagination and veracity to say that these exhibits of grains, vegetables and fruits would be hard to equal or excel in any other county of the state. We saw even peaches and grapes that were grown in Delta county; tomatoes ripened on the vines in Dickinson; acres and acres of giant corn in Marquette; numerous grains, vegetables and fruits, which had been adapted to the climate, growing upon the experiment farm in Alger, and the celery fields of Newberry. The apples from Menominee and Chippewa would make the "fruit belt" section look to its laurels in competition.

mittee that the Granges of Benzie will shortly hold a Grange fair at Honor. The best of the vegetables, grains and fruits shown there will be saved for the big display to be made at Traverse City. Benzie Co. also promises a larger representation at State Grange than last year. Manistee Co. Granges have shown their interest in the big display by making a contribution to the fund being collected for the purpose of getting together the exhibits and otherwise entertaining State Grange.

COMING EVENTS.

National Grange, Forty-fourth annual session, at Atlantic City, N. J., Nov. 15.
Michigan State Grange, Thirty-eighth Annual Session, at Traverse City, Dec. 13-16.

Pomona Meetings.

Charlevoix Co., with Barnard Grange, Thursday, Nov. 17.
Mecosta Co., with Aetna Grange, at Borland, Thursday, Nov. 17.

VELLASTIC Underwear is a real comfort to the body—warm, soft and easy. It is ribbed for elasticity—fleece lined for warmth.

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Ribbed Fleece-Lined Underwear

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We want agents in your locality. Write us the names and addresses of some of your neighbors. Do it now.

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Incandescent. 100 Candle Power. Burns common coal oil. Gives better light than gas, electricity or six ordinary lamps at one-sixth to one-tenth the cost. Fits your old lamp. Unequaled for fine sewing or reading. COSTS ONLY ONE CENT FOR SIX HOURS. We want one person in each locality to whom we can refer new customers. Take advantage of our special offer to secure a Beacon Lamp BURNER FREE. Write today. Agents Wanted. HOME SUPPLY CO. 322 E. C. Life Bldg., Kansas City, Mo.

Unpolished Table Rice.

Like the Japs eat it. Most delicious and nutritious of all the cereals. Our specialty. 100 pounds in double sacks freight prepaid to your railroad station. \$5. Reference—The Houston National Exchange Bank, Houston, Texas. J. Ed. Cabaniss, Rice Farmer, Katy, Texas.

WANTED—A Woman for general housework, near Detroit. Only two in family, a good home, kind treatment, liberal wages. Address E. H. HOUGHTON, Box 47, Grosse Pointe Farms, Michigan.

Try "Noxall" Potatoes next year. Fine, white, heavy cropper. Guaranteed. \$1.25 per bu. Sacks free. J. W. Mitchell, R. No. 2, Hart, Mich.

Please mention the Michigan Farmer when you are writing to advertisers.

MARKETS

DETROIT WHOLESALE MARKETS.

October 26, 1910.

Grains and Seeds.

Wheat.—The opposing interests in the wheat market are both finding news to support their claims for changes in prices, and in the meantime values have kept close to the prices ruling a week ago. The bears are delighted with the heavy receipts from Russia at European markets and with the reports coming up from South America that Argentine is growing a big crop. On the other hand, the bulls feel encouraged over the fact that they have held the market steady, that the farmers are not delivering grain as plentifully as some weeks ago, and that the reports of the Hessian fly working in the growing grain is increasing to an alarming degree, although even the bulls are compelled to confess that the fly news is not weighty at this time. Flour is not in heavy demand this week, but the mills continue grinding. The news from abroad has demoralized the foreign demand. One year ago the price for No. 2 red wheat was \$1.23½ per bu. Quotations for the week are as follows:

	No. 2	No. 1	White.	Dec.	May.
Thursday .....	.96	.93½	.98	1.03	
Friday .....	.96	.93½	.97½	1.02½	
Saturday .....	.95½	.93	.96½	1.01½	
Monday .....	.95½	.93	.96½	1.01½	
Tuesday .....	.95½	.93	.96½	1.01½	
Wednesday .....	.96	.93½	.97	1.02½	

Corn.—While dealers were all but convinced of the mammoth crop of corn being produced in the country, the reports from the fields, the past week, gave the bears a "hunch" that all might not be easy sailing toward lower values in that the yields were disappointing to the farmers where husking is the order of the day. Consequently the bulls have been able to keep prices steady. The visible supply shows a decrease of nearly a million bushels. One year ago the price for No. 2 corn was 63½¢ per bu. Quotations for the week are:

	No. 2	No. 2
	Mixed.	Yellow.
Thursday	51½	53
Friday	51½	53
Saturday	51	52½
Monday	51	52½
Tuesday	51	52½
Wednesday	51½	53

Oats.—None of the grains showed the strength exhibited by oats. An unusually large decrease in the visible supply, for this season of the year, prompted sellers not to cut prices. The chief feature of the week, however, was the report that France has suspended the import duty of 8½¢ per bu. upon the grain. This was the best evidence to be had of the shortage of oats in that country and that a call from other countries would be made. At this date in 1909 oats were selling at 42¢ per bu. Quotations for the week are:

	Standard.	No. 3	White.
Thursday	34½	34	34
Friday	34½	34	34
Saturday	34½	34	34
Monday	34½	34	34
Tuesday	34½	34	34
Wednesday	35	34½	34½

Beans.—The trade here is not giving a great deal of attention to beans. Sellers are less numerous on the market than buyers. The latter make bids which sellers will not accept as a fair exchange basis. Following are the range of bids for the week:

	Cash.	Nov.
Thursday	\$2.00	\$1.94
Friday	2.00	1.96
Saturday	2.00	1.96
Monday	2.00	1.96
Tuesday	2.00	1.96
Wednesday	2.00	1.96

Clover Seed.—Prices are ruling on the same basis as seven days ago. All through the sessions of the market dealing has been active and much seed has changed hands. Quotations for the week are:

	Prime Spot.	Dec.	Alsike.
Thursday	\$8.75	\$8.80	\$8.75
Friday	8.75	8.80	8.75
Saturday	8.75	8.80	8.75
Monday	8.75	8.80	8.75
Tuesday	8.50	8.55	8.75
Wednesday	8.50	8.55	8.75

Rye.—Market is firm and demand not well satisfied. Quotation for No. 1 is 77¢ per bu., which is the price of a week ago.

Visible Supply of Grains.

	This week.	Last week.
Wheat	39,978,000	37,573,000
Corn	2,996,000	3,796,000
Oats	16,989,000	17,886,000
Rye	421,000	406,000
Barley	2,848,000	2,596,000

Flour, Feed, Provisions, Etc.

Flour.—The flour trade is easy at last week's figures. Quotations are:

Clear	\$4.30
Straight	4.80
Patent Michigan	5.45
Ordinary Patent	4.50

Hay and Straw.—Market steady. Quotations on baled hay in car lots f. o. b. Detroit are: No. 1 timothy, \$16@16.50; No. 2 timothy, \$14@15; clover, mixed, \$14@15; rye straw, \$7@7.50; wheat and oat straw, \$6.50@7 per ton.

Feed.—Values remain steady at last week's figures. Carlot prices on track are: Bran, \$25 per ton; coarse middlings, \$25; fine middlings, \$28; cracked corn, \$25; coarse corn meal, \$25; corn and oat chop, \$23 per ton.

Potatoes.—The comment of a week ago describes the market this week, which is easy and ruling at the same values. Demand fair and supply good, just now. In car lots Michigan potatoes are selling at 45¢@50¢ per bu.

Provisions.—Mess pork, \$21.50; family pork, \$22.50; medium clear, \$21@22; smoked hams, 15c; dry salted briskets, 14½c; shoulders, 11c; picnic hams, 11c; bacon, 19@22c; lard in tierces, 12@13c; kettle rendered, 13½c per lb.

Dairy and Poultry Products.

Butter.—The influence of decreased production and the constant large demand has forced butter prices higher. Creamery goods advanced a half cent and dairy offerings are steady with last week. Quotations are: Extra creamery, 30c; firsts, do., 29c; dairy, 23c; packing stock, 23c per lb.

Eggs.—The wholesale price of eggs is unchanged from last week. The supply is limited to a rather small volume, while the demand is causing the offerings to move quickly to the consumers. Fresh receipts, case count, cases included, are quoted at 25½¢ per dozen which is the price of last week.

Poultry.—Quite liberal numbers of coops are coming to the market; but the supply is offset by a fairly good demand and prices rule on the basis established a week ago. Chickens are steady at 13@13½¢ per lb; hens are also unchanged at 10@12½¢; turkeys have not changed from 16@17c, nor geese from 10@11c, and ducks continue at 14c per lb.

Cheese.—Michigan, late made, 15c; Michigan, fall made, 17½@18c; York state, 17@18c; limburger, old, 17@18c; Swiss, domestic block, 21@22c; cream brick, 16½@17c.

Fruits and Vegetables.

Apples.—The fruit is in good supply and trade is steady at unchanged figures. Choice consignments selling at \$3@3.50; common kinds and grades, \$2@3 per bbl.

Cabbage.—Steady. Selling at \$1.50 per bbl. for new.

Tomatoes.—Market higher. Generally quoted at 90¢@1 per bu.

Grapes.—Concord, 4-lb. baskets, 16c; Niagara, 17c; Delaware, 18c.

Pears.—Steady. Selling at 75¢@1.50 per bu.

OTHER MARKETS.

Grand Rapids.

The potato market is doing somewhat better than last week. Farmers are refusing to sell at the low prices and this has had its effect, while the cooler, more reasonable weather has also helped. Prices are still low, ranging from 30c in this freight zone to 25c at northern loading points. Michigan has fine stock to offer this season and it is felt that prices will improve as the season advances. Potatoes brought 40@45c on the Grand Rapids city market Tuesday morning. Tomatoes are about all in for this season. They are of poor quality and bring from 30@50c. Hay is steady at \$16@17. Apples range from 60¢@1.10. Creamery butter is up ½¢, dairy remaining the same. Eggs hold at 24@24½¢. The poultry market is steady. Dressed hogs are worth 10½@11c. The market on beans is weak at \$1.85 and prospects indicate a drop to basis of \$1.70 to farmers before the week is over.

New York.

Butter.—Steady, and unchanged from last week's higher range. Creamery specials quoted at 32c; extras, 30½c; thirds to firsts, 24@29c.

Eggs.—Steady at former values. Near-by eggs quoted at 34¢@42c; fresh gathered extras, 28½¢@30c; firsts, 26¢@27c dozen.

Poultry.—Live poultry is steady, while dressed fowls are weak. Live Springers, 14c; fowls, 14@16c; turkeys, 12@15c. Dressed stock quoted as follows: Western broilers, 17@20c; fowls, 11@17½c; spring turkeys, 14@22c.

Chicago.

Wheat.—No. 2 red, 93½¢@94½¢; December, 92½¢; May, 99¢ per bu.

Corn.—No. 2 mixed, 47½¢@47½¢; December, 45½¢; May, 49c.

Oats.—No. 2 white, 31½¢@32½¢; December, 30½¢; May, 34½c.

Butter.—Market here is steady with last week. Creameries, 24@29c; dairies, 23@27c.

Eggs.—Choice eggs are higher while ordinary grade rule steady with a week ago. Quotations are: Prime firsts, 26½¢; firsts, 24½¢; at mark, cases included, 18½¢@21½¢ dozen.

Hay and Straw.—The advance on hay of two weeks ago was lost this week with a decline of \$1 per ton. Wheat straw is also down, while rye straw is in demand at advanced figures. Quotations are: Choice timothy, \$19@19.50; No. 1 timothy, \$17@18; No. 2 do. and No. 1 mixed, \$15@16.50; No. 3 do. and No. 2 mixed, \$12@14; rye straw, \$8.50@9; wheat straw, \$5.50@6 per ton.

Potatoes.—The trade has a fair movement at prices slightly advanced over the figures of a week ago. Choice to fancy are quoted at 50¢@55c per bu; fair to good 40@45c.

Boston.

Wool.—The wool market here has suddenly awakened from its sleep and, during the week gone by, there is estimated that fully 10,000 deals were completed for territory wool and fleeces. The manufacturers had arrived at a point where it was necessary to stock up, and conditions of the raw supply was such as to almost warrant values not being lower in the immediate future. As a result of the activity brought on by the large volume of buying, prices became firm and values now look upward. Quotations for the leading domestic grades are: Ohio and Pennsylvania fleeces—Delaine washed, 24c; XX, 30c; fine unmerchanted, 24@25c; half blood combing, 28@29c; three-eighths blood combing, 28@29c; quarter blood combing, 27@27½c; delaine unwashed, 26½¢@27c; fine unwashed, 22@23c. Michigan, Wisconsin and New York fleeces—Fine unwashed, 19@21c; delaine unwashed, 25@26c; half blood unwashed, 27@28c. Kentucky, Indiana and Missouri—Three-eighths blood, 28@29c; quarter blood, 27@28c.

Toledo.

Clover Seed.—Values are steady with a week ago. Closing quotations were: Cash, \$8.54½; December, \$8.55; alsike, cash \$9; December, \$9.10.

Elgin.

Butter.—Trade firm at 29½¢ per lb., which is a half cent advance over the price of last week. Sales for the week amounted to 683,700 lbs., as compared with 689,300 lbs. for the previous week.

THE LIVE STOCK MARKETS.

Buffalo.

October 24, 1910.

(Special report by Dunning & Stevens, New York Central Stock Yards, East Buffalo, N. Y.)

Receipts of stock here today as follows: Cattle, 187 cars; hogs, 16,000; sheep and lambs, 14,600; calves, 1,100.

With 187 cars of cattle on our market here today, and 25,000 reported in Chicago, our market opened up steady, and in some cases a little stronger, and everything was sold at the close; feeling better than last week.

We quote: Best 1,300 to 1,400-lb. steers \$6.85@7.25; good prime 1,200 to 1,300-lb. do., \$6.25@6.75; best 1,100 to 1,200-lb. shipping steers, \$5.65@6.25; medium butcher steers, 1,000 to 1,100 lbs., \$5@5.40; light butcher steers, \$4.50@5; best fat cows, \$4.50@5.10; fair to good cows, \$3.25@4; common to medium do., \$3@3.50; trimmers, \$2.75@3; best fat heifers, \$5.25@6; good do., \$4.25@4.75; fair to good do., \$3.75@4.25; stock heifers, \$3.50@3.75; best feeding steers, dehorned, \$5@5.25; medium to good feeding steers, \$4.25@4.50; stockers, all grades, \$3.50@3.75; best bulls, \$4.75@5.25; bologna bulls, \$3.75@4.25; light thin bulls, \$3.25@3.75; best milkers and springers, \$7@8; good do., \$5@6.50; common to good do., \$3@4. Late springers from \$5@10 lower. A few extra good fat cows brought \$5.25.

With 100 cars of hogs on sale here today, our market opened weak to 5c lower than on Saturday. Opening prices were from \$9.15@9.20; Receipts in Chicago being light, and reports coming favorable here, our market strengthened later in the day and sold from \$9.20@9.25, and later \$9.25@9.30; closing steady at the later prices. All sold that was yarded in time for the market, and prospects look fair for the near future.

We quote: Medium and heavy, \$9.20@9.25; mixed and yorkers, \$9.25@9.30; pigs mostly \$9.30; rough, \$7.75@7.90; stags, \$6.50@7.

The lamb market opened active today, with prices about 15c per hundred weight higher than last week; most of the best heavy lambs selling at \$7.15. Market close on heavy lambs; most of the northern Michigan lambs selling at \$7.10. Closing steady, about all sold. Look for steady prices, the balance of the week. Handy sheep were strong today, and prospects are for about steady prices on sheep the balance of the week.

We quote: Spring lambs, \$7.10@7.15; wethers, \$4.50@4.75; cull sheep, \$2.50@3; bucks, \$2.50@3.25; yearlings, \$5@5.50; heavy ewes, \$4@4.10; handy ewes, \$4@4.25; northern Michigan lambs, \$7@7.10; veals, choice to extra, \$10@10.25; fair to good do., \$7.50@9.75; heavy calves, \$6@7.

Chicago.

October 24, 1910.

Cattle. Hogs. Sheep.
Received today 28,000 25,000 45,000
Same day last year .. 26,490 24,072 41,538
Received last week .. 78,142 109,148 203,886
Same week last year .. 85,515 97,834 136,194

This week opens with smaller receipts of cattle and sheep than on recent Mondays and only a moderate "run" of hogs. Cattle receipts embrace about 7,000 western rangers, and these sold largely 10@15c higher. Farm shipments were well taken at well maintained prices, fat butcher stock and the better class of steers being about a dime higher, with a sale of fancy cattle at \$7.90. Last week's cattle receipts were the largest of the year, with the gain over recent weeks wholly in natives, as fewer range cattle arrived, and cattle prices were off largely 15@25c. Hogs were about a dime higher today under active early buying, sales being at \$8.10@9.40, with light selling highest. The top last week was \$9.65 and a week ago \$9.50. The hogs received last week averaged but 249 lbs., compared with 257 lbs. a week earlier, 261 lbs. two weeks ago, 264 lbs. three weeks ago, 226 lbs. a year ago, 204 lbs. two years ago, and 240 lbs. three years ago. Sheep were steady and active today while lambs were lower, selling at \$4@6.50 for feeders, up to \$7 for best muttons. Fewer range flocks were received, and with fewer feeders, these were active and firmer. Wethers were salable at \$3.50@4.40; ewes at \$2@4.25 and yearlings at \$4.50@5.50. Breeding ewes were active at \$3.50@5.50; feeding wethers at \$3.50@4 and feeding yearlings at \$4.50@5.25.

Cattle have continued for another week in extremely large supply, with liberal receipts from western ranges, these comprising a large percentage of steers much better adapted for feeding than killing. As the season advances there is a diminishing supply of choice, heavy beefs, and local packers and eastern shippers have been compelled to pay higher prices for these, while the cheaper grades, especially such natives as come into competition with range stock, have been selling at declining figures. There is the same rush of short-fed, ordinary cattle to market seen every year as the winter season approaches, and this may be expected to continue up to cold weather. Farm-fed steers have sold largely at \$5.50@7.50, with the better class of fat cattle at \$7@7.90 and the poorer lots of light steers at \$4.60@5.60 and a medium class of steers between \$6 and \$7. Cows and heifers have shared fully in the decline, selling at \$3.45@6.50, while canners and cutters sold at \$2@3.40, and bulls at \$3@5. Calves sold at \$3@10 per 100 lbs., with the principal activity in choice lightweight vealers. The trade in milkers and springers had a marked falling off, in which even the best cows shared, and prices were \$3@5 per head lower, sales ranging at \$30@70. There was an enormous business in stockers and feeders, prices ruling lower for the commoner light stockers. Stockers were taken at \$3@5 and feeders at \$4.60@5.75. Western range cattle had a

very good outlet on the whole at \$4.25@7 for steers and \$3@5.50 for cows and heifers, but steer sales near the top figure were few and far between. A great many range cattle have gone to feeding districts, and numerous good bargains have been picked up in this line by country shippers. A good many cattle will be roughed through the winter by farmers who have found this a profitable method in recent years.

Hogs were marketed on several days of last week with more freedom on account of the good advances in the choicer class of light and medium weights, but the coarse, heavy sows were slow to advance with the other offerings, and there was a big widening out in quotations. Later in the week sharp reactions occurred, as is customary after a rapid advance, and even prime lots had to be closed out very much lower. It should be understood by country shippers that the market is in an unsettled state, and when fluctuations are 15@25c up or down in a single day it is necessary to buy in the country on extra large margins in order to prevent big losses when the hogs are sold on the market. The eastern shipping outlet is not to be depended upon to any great extent, for of late only a few thousand hogs have been taken daily for shipment in the Chicago market. The best demand runs on hogs best adapted for the fresh meat trade, and not enough of these are coming on the market. The packers discriminate strongly against extra heavy hogs, and it is best to market these without delay, but growing pigs should be matured before selling.

Sheep and lambs continued for still another week to come to market in extremely liberal numbers compared with past years, although the runs were smaller than a week earlier. As has been the case all along, the receipts consisted mainly of flocks from the ranges, and these were largely better qualified for sending to feeding districts than for slaughtering. Fortunately for sellers, the call for feeders was even larger than heretofore, and this held the decline in check. Range offerings showed a noticeable falling off in quality, indicating that the season is nearing a close. Packers bought up the good killing classes freely and not enough prime lambs and sheep were offered to satisfy buyers. Coarse, bulky native lambs were discriminated against, and there was a widening out tendency in lamb and sheep values. Breeding ewes had a larger outlet, and higher prices were paid for prime yearling breeders from the range.

Horses so far this autumn have, on the whole, failed to sell as freely as is usual at this season, and doubtless the abnormally warm weather has had an influence in checking the demand from some quarters. The offerings have been too large much of the time, and this resulted in weakness, prices in numerous instances involving losses to country shippers. Heavy drafters are selling at \$170@250 and now and then at \$275@370 for extra heavy animals of fancy grade, such horses sometimes weighing a ton. Wagon horses go at \$140@210, while loggers and feeders sell at \$170@225, and drivers have a moderate sale at \$150@300. Small southern chunks are in very good request at \$70@125. There is a limited demand for high-class drivers at \$300@500 for export to Mexico and England. F.

LIVE STOCK NOTES.

Several manufacturers of silos say that they have erected more of these structures this year than in any previous five years, farmers everywhere having become aroused to the importance of silage as a feed for live stock. With the great advance in the value of farm lands, it has become necessary to carry on the feeding of meat animals and dairy cows more economically in order to get the largest results and to make the land pay properly, and this is obtained by using silos. By this method succulent corn is kept in good shape for winter use, and silos are going up all over our best farming sections.

A year ago there was an active and advancing market for well fattened cattle, and November started off with sales in the Chicago market as high as \$9.10 per 100 lbs. Early in the following month steers sold up to \$9.50, but the other end of the market was not satisfactory, common steers going as low as \$3.85.

Already sheep and lambs that were taken out recently from Chicago for fattening have been shipped back after being given a run on grass, and sold below their first cost. Premature marketing occurs every autumn, and it is a costly mistake, and in this instance without valid excuse, as pastures are fine, forage plentiful and a good corn crop assured.

David Rankin, of Missouri, who died recently at the age of 85, was one of the largest farmers and stockmen in the country. He began his career in 1846 and died owner of 25,640 acres, on which 250 men are employed. Mr. Rankin was a great stickler for maintaining the fertility of the soil. He once said: "The way I keep the corn land in such a high state of fertility is by keeping a lot of it in tame grass, using it for feed lots, or pastures as some call them, and then where there are weak places that require an extra amount of fertilizer I bring my manure spreader into use. It pays to use it, and it will pay every farmer to have a spreader and use it. Hunt up these weak places. There is no land but what has them, unless it is rich valley land. While the land is in grass, I feed cattle on it and let them eat grass and corn and then I haul out manure, all I can. It pays big. You can see the benefit the first crop, and for several succeeding crops. I farm by rotation, corn for four or five years, then clover for a few years, and then back to corn. After I get my crops all harvested and a good bunch of steers on each farm, I feel contented, as the mills are grinding. I have about 25,000 head of hogs every year, and we usually figure about three hogs to the steer. I always talked to my boys as partners, counseled with them, and got many good ideas, too."

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.
October 27, 1910.

Cattle.

Receipts 729. Market active and strong at last week's prices on all grades.

We quote: Best steers and heifers, \$5.75@6; steers and heifers, 1,000 to 1,200, \$5@5.50; steers and heifers, 800 to 1,000, \$4.50@5; grass steers and heifers that are fat, 500 to 700, \$3.75@4.25; choice fat cows, \$4@4.50; good fat cows, \$3.50@3.75; common cows, \$3@3.25; canners, \$2@2.75; choice heavy bulls, \$4; fair to good bolognas, bulls, \$3.50@3.75; stock bulls, \$3.25@3.50; choice feeding steers, 800 to 1,000, \$4.25@4.50; fair feeding steers, 800 to 1,000, \$3.75@4.25; choice stockers, 500 to 700, \$4@4.25; fair stockers, 500 to 700, \$3.50@3.75; stock heifers, \$3.25@3.50; milkers, large, young, medium age, \$4@4.50; common milkers, \$2.50@3.50.

Haley & M. sold Sullivan P. Co. 14 butchers av 660 at \$3.85, 8 do av 762 at \$4.25, 1 bull weighing 1,140 at \$3.50, 1 steer weighing 970 at \$5; to Fronn 1 do weighing 370 at \$4.10; to Thompson Bros. 2 cows av 1,000 at \$3.50, 1 do weighing 700 at \$2.50, 4 do av 1,017 at \$3.75, 1 do weighing 840 at \$3; to Parker, W. & Co. 1 steer weighing 1,040 at \$5; to Sullivan P. Co. 8 butchers av 653 at \$4.30, 3 cows av 990 at \$3.75, 5 cows av 930 at \$3.60, 1 do weighing 790 at \$2.50; to Breitenbeck Bros. 15 steers av 793 at \$4.80; to LaBoe 5 butchers av 808 at \$4.50; 15 do av 770 at \$4.70; to Otter 23 stockers av 747 at \$4.25; to Sullivan P. Co. 1 cow weighing 910 at \$2.50, 8 do av 1,000 at \$3.85; to Cooke 3 steers av 976 at \$5.50; to David 2 stockers av 615 at \$4.25, 3 do av 547 at \$4.25.

Spicer & R. sold Sullivan P. Co. 1 cow weighing 1,230 at \$4.50, 2 do av 965 at \$2.75, 3 bulls av 1,010 at \$3.75, 1 do weighing 520 at \$3.25; to Bresnahan 2 cows av 1,100 at \$4, 3 do av 793 at \$3; to Heinrich 6 butchers av 741 at \$4.15; to Breitenbeck Bros. 2 cows av 1,000 at \$3.75, 1 do weighing 1,020 at \$3.50, 1 bull weighing 1,240 at \$3.85; to Regan 1 heifer weighing 620 at \$4; to Schlicher 4 butchers av 762 at \$4.50, 2 do av 430 at \$3.75, 4 cows av 850 at \$3.50; to Fry 1 do weighing 830 at \$3, 8 butchers av 682 at \$4.25; to Thorborne 9 stockers av 621 at \$4; to Breitenbeck 10 butchers av 778 at \$4.15, 1 cow weighing 1,000 at \$3.75; to Thompson Bros. 1 bull weighing 1,200 at \$4, 1 cow weighing 800 at \$2, 2 do av 935 at \$3.25; to Sullivan P. Co. 2 steers av 1,170 at \$4.50; to Lachalt 3 butchers av 773 at \$4.40.

Bishop, B. & H. sold Mich. B. Co. 11 butchers av 609 at \$3.85, 6 do av 740 at \$4.25, 1 heifer weighing 680 at \$3.50, 1 bull weighing 930 at \$3.85, 2 cows av 905 at \$3; to Bresnahan 6 cows av 1,116 at \$4, 2 do av 820 at \$3.25; to King 2 stockers av 650 at \$4; to Kamman 11 butchers av 654 at \$4.05, 1 bull weighing 650 at \$3.50, 1 do weighing 770 at \$3.75; to Sullivan P. Co. 1 cow weighing 500 at \$2.75, 1 do weighing 730 at \$2.25, 5 butchers av 922 at \$4.85, 8 do av 653 at \$4, 1 bull weighing 1,440 at \$4, 3 cows av 907 at \$2.65, 3 heifers av 750 at \$4.50, 2 cows av 850 at \$3.75, 2 do av 1,050 at \$4.25, 3 do av 900 at \$3.50, 1 do weighing 1,240 at \$3.75; to Bresnahan 3 caners av 943 at \$2.50; to Mich. B. Co. 12 steers av 1,200 at \$6, 3 do av 1,083 at \$5; to Hammond, S. & Co. 4 do av 700 at \$4.35, 1 bull weighing 1,050 at \$3.85, 1 cow weighing 1,200 at \$3.50.

Roe Com. Co. sold Thompson Bros. 7 cows av 986 at \$4; to Hammond, S. & Co. 8 heifers av 742 at \$4.35, 1 do weighing 890 at \$5, 4 do av 590 at \$4; to Mulheron 6 stockers av 666 at \$4.35, 3 feeders av 757 at \$4.35; to Heinrich 1 cow weighing 1,150 at \$4, 20 steers av 864 at \$5; to Breitenbeck Bros. 4 cows av 1,030 at \$3.60, 2 do av 945 at \$3.60.

Johnson sold Sullivan P. Co. 8 butchers av 550 at \$4.20, 5 do av 336 at \$3.75.

Lovell sold same 1 cow weighing 1,130 at \$4.25.

Lovell sold Regan 10 butchers av 575 at \$4.

Johnson sold same 4 do av 645 at \$4.

Lovell sold Hammond, S. & Co. 8 cows av 916 at \$3.

Fenton sold Ladelt 2 cows av 800 at \$3.75, 6 butchers av 760 at \$4.20.

Veal Calves.

Receipts 590. Market steady at last Thursday's prices. Best \$9@9.50; others, \$8@8.50. Milch cows and springers steady. Bishop, B. & H. sold Mich. B. Co. 2 av 135 at \$9, 1 weighing 150 at \$9, 6 av 130 at \$8.75; to Parker, W. & Co. 2 av 140 at \$9, 6 av 130 at \$8.75, 2 av 170 at \$9, 13 av 150 at \$9.25, 9 av 265 at \$4, 2 av 150 at \$9; to McGuire 25 av 135 at \$8.50; to Mich. B. Co. 6 av 155 at \$8, 4 av 150 at \$9, 7 av 145 at \$8.75; to Hammond, S. & Co. 14 av 140 at \$9, 2 av 115 at \$7.50.

Haley & M. sold Parker, W. & Co. 2 av 145 at \$9, 1 weighing 120 at \$9; to Goose 2 av 260 at \$4.50, 2 av 180 at \$6.50, 3 av 125 at \$9, 12 av 130 at \$8.50.

Wagner sold Sullivan P. Co. 6 av 140 at \$9, 14 av 130 at \$8.50.

Long sold same 2 av 140 at \$9.

Johnson sold same 2 av 135 at \$6, 6 av 120 at \$8.

Spicer & R. sold Mich. B. Co. 10 av 142 at \$8.75, 3 av 140 at \$9; to Parker, W. & Co. 4 av 140 at \$9, 11 av 145 at \$8.50, 1 weighing 170 at \$8.50, 6 av 120 at \$8.50; to Marx 5 av 155 at \$6.50; to Rattkowsky 2 av 320 at \$4.50; to Breitenbeck Bros. 10 av 136 at \$8.50.

Roe Com. Co. sold Parker, W. & Co. 4 av 150 at \$9.25, 7 av 165 at \$9.25, 3

av 155 at \$9.50; to Breitenbeck Bros. 2 av 150 at \$9.50.

Kendall sold Burnstine 9 av 150 at \$9, 1 weighing 180 at \$9.25.

Belheimer sold same 7 av 145 at \$9.

Haddrell sold same 11 av 150 at \$9.25.

Fenton sold Mich. B. Co. 2 av 120 at \$9.

Sheep and Lambs.

Receipts 5,926. Market 15@25c lower than on Wednesday; about steady with last Thursday. Best lambs, \$6.50@6.60; fair to good lambs, \$6@6.25; light to common lambs, \$5@5.75; fair to good sheep, \$3.50@4; culls and common, \$1.75@3.

Spicer & R. sold Stocker 4 lambs av 68 at \$6.35, 12 do av 78 at \$6.50, 5 sheep av 100 at \$2.50; to Nagle P. Co. 21 lambs av 83 at \$6.25, 16 sheep av 85 at \$6.35, 44 sheep av 95 at \$2.75; to Sullivan P. Co. 20 lambs av 72 at \$6.25; to Mich. B. Co. 32 do av 60 at \$5.70; to Young 70 do av 70 at \$6.30; to Sullivan P. Co. 14 do av 48 at \$5.25; to Fitzpatrick Bros. 21 sheep av 100 at \$3.25; to Sullivan P. Co. 44 lambs av 65 at \$6.25.

Kalahar sold Nagle P. Co. 98 lambs av 65 at \$6.10, 59 do av 70 at \$6.40, 2 sheep av 100 at \$2.50.

Roe Com. Co. sold Parker, W. & Co. 58 lambs av 82 at \$6.65, 17 sheep av 70 at \$2.50, 44 lambs av 96 at \$6.40; to Newton B. Co. 41 do av 85 at \$6.60; to Mich. B. Co. 25 yearlings av 110 at \$4.50.

Taggart sold Hammond, S. & Co. 40 lambs av 75 at \$6.60.

Wagner sold Sullivan P. Co. 119 lambs av 80 at \$6.25.

Sharp sold same 19 do av 74 at \$6.

Long sold same 26 sheep av 78 at \$2.10.

Belheimer sold same 10 do av 110 at \$3, 22 lambs av 70 at \$6.

Haley & M. sold Nagle P. Co. 65 lambs av 85 at \$6.60, 85 do av 80 at \$6.40, 6 sheep av 110 at \$3, 30 do av 73 at \$4.75; to Gordon & B. 2 do av 125 at \$3, 4 do av 130 at \$2.50, 23 do av 120 at \$3.50, 27 lambs av 70 at \$6.25; to Parker, W. & Co. 45 do av 75 at \$6.35; to Hammond, S. & Co. 21 do av 70 at \$6.35; to Gordon & B. 27 do av 80 at \$6.25, 24 sheep av 90 at \$2.75; to Eschrich 28 lambs av 70 at \$6.10.

Bishop, B. & H. sold Mich. B. Co. 28 lambs av 57 at \$6, 31 do av 60 at \$6.25, 61 do av 75 at \$6.50, 63 do av 60 at \$6.10, 19 do av 65 at \$6.50, 15 sheep av 110 at \$4, 27 do av 115 at \$3.75; to Hammond, S. & Co. 5 lambs av 58 at \$6.25, 61 do av 70 at \$6.50, 20 do av 51 at \$5.75, 21 do av 60 at \$6, 59 do av 73 at \$6.65, 26 do av 75 at \$6; to Gordon & B. 25 sheep av 90 at \$3.25, 10 do av 98 at \$4; to Sullivan P. Co. 15 lambs av 65 at \$6.25; to Nagle P. Co. 252 do av 80 at \$6.60, 57 do av 75 at \$6.60, 458 do av 83 at \$6.50, 63 do av 80 at \$6.40; to Hammond, S. & Co. 40 do av 62 at \$6, 42 do av 55 at \$5.75; to Sullivan P. Co. 10 do av 97 at \$5.50; to Fitzpatrick Bros. 48 do av 70 at \$6, 30 do av 60 at \$6.25, 12 sheep av 85 at \$3.25, 12 do av 90 at \$2.50.

Fenton sold Newton B. Co. 7 lambs av 50 at \$5, 80 do av 75 at \$6.25, 6 sheep av 125 at \$3.50.

Johnson sold same 6 do av 130 at \$3, 71 lambs av 75 at \$6.15.

Bennett & S. sold Fitzpatrick Bros. 48 lambs av 75 at \$6.50.

Haddrell & H. sold same 27 sheep av 95 at \$3.50.

Hogs.

Receipts 5,911. Market 15@20c lower than last Thursday; bidding 5c lower than Wednesday; nothing sold at noon.

Range of prices: Light to good butchers, \$8.65@8.75; pigs, \$8.60; light yorkers, \$8.65@8.75; stags one-third off.

Roe Com. Co. sold Sullivan P. Co. 501 av 190 at \$8.75.

Haley & M. sold same 630 av 180 at \$8.75.

Sundry shippers sold same 310 av 195 at \$8.70.

Spicer & R. sold Parker, W. & Co. 240 av 170 at \$8.70, 490 av 200 at \$8.75, 40 av 140 at \$8.60.

Bishop, B. & H. sold Hammond, S. & Co. 2,078 av 180 at \$8.75, 732 av 160 at \$8.70.

Friday's Market.

October 21, 1910.

Cattle.

Receipts this week, 956; last week, 1,144. Market steady at Thursday's prices.

Best steers and heifers, \$5.50@5.75; steers and heifers, 1,000 to 1,200, \$4.75@5; do, 800 to 1,000, \$4.50@4.65; grass steers and heifers that are fat, 800 to 1,000, \$4.50@4.65; do, 500 to 700, \$3.75@4.25; choice fat cows, \$4@4.25; good fat cows, \$3.25@3.75; common cows, \$3@3.25; canners, \$2@2.75; choice heavy bulls, \$3.75@4; fair to good bolognas, bulls, \$3.50; stock bulls, \$3@3.25; choice feeding steers, 800 to 1,000, \$4.50@4.75; fair feeding steers, 800 to 1,000, \$4@4.50; choice stockers, 500 to 700, \$4@4.50; fair stockers, 500 to 700, \$3.50@4; stock heifers, \$3.25@3.50; milkers, large, young, medium age, \$4@4.50; common milkers, \$2.50@3.50.

Veal Calves.

Receipts this week, 764; last week, 581. Market steady at Thursday's prices.

Best, \$9@9.50; others, \$4@8.50. Milch cows and springers steady.

Sheep and Lambs.

Receipts this week, 6,311; last week, 8,872. Market steady at Thursday's prices. Best lambs, \$6.40@6.50; fair lambs, \$6@6.25; light to common lambs, \$5@5.75; fair to good sheep, \$3.50@4; culls and common, \$1.75@3.

Hogs.

Receipts this week, 8,098; last week, 6,881. Market 10@15c lower than on Thursday. Light to good butchers, \$8.75@8.80; pigs, \$8.75@8.80; light yorkers, \$8.75@8.80; stags one-third off.

LIVE STOCK NOTES.

A fine opportunity is offered for filling feed lots with fair to good Shorthorn and Hereford heifers weighing 500 to 600 lbs. at around \$3.85@4.25 per 100 lbs., shortage of feed driving thousands of thin stock to western markets. Good-framed young cows that are thin and weigh at around 850 lbs. can be bought in the Chicago market around \$3.65, and such cattle can be placed on pasture and later given rough feed, and the heifers also can be

pastured and later given grain. These cattle can be finished for the middle January market and should render good returns.

The rush of sheep and lambs from the ranges of the west to Chicago, Omaha and other western markets is phenomenal, nothing like it having been seen in former years. For three consecutive Mondays new high records of receipts at the Chicago stock yards have been established, the receipts on the third Monday aggregating 70,373 head. Prior to this year Chicago's largest receipts for any one day were 59,362 sheep on Sept. 29, 1902. Fully 75 per cent of recent receipts at Chicago were feeders, but there has been a wonderful demand for such flocks, and enormous numbers have been going constantly to feeding districts in Michigan, Ohio, Indiana, Illinois, Iowa and other states. The explanation for the way sheepmen have been buying these thin lambs and sheep furnished by Montana, Wyoming and other range states is found in the remarkable revival in the demand for mutton, due to the extreme dearth of pork and beef. Farmers in many sections are for their first time embarking in the sheep industry, and many of them are going to breed sheep, having this season made substantial purchases of high-grade breeding ewes from the ranges. Some of them have bought the cheaper breeders, but this is bad business judgment, for well-bred range yearling ewes are worth the difference in price between them and common breed ewes. Regarding the reason for the enormous marketings of range flocks, the answer is found in the absolute necessity for selling off range holdings on account of the lack of feed. Dry weather ruined the pasturage earlier in the season, and with a lack of hay, owners had no other recourse but to sell their flocks, their idea being to stock up again when feed conditions become normal. Then, many sections have additional incentive for selling owing to the invasion of settlers. Thus old customs are changing, and the sheep industry is passing more into the hands of farmers than heretofore. Western ranges will enter the winter season with the smallest numbers of sheep and lambs in years. On the other hand, the farmers of the middle west and east have a record corn crop and good fall pastures, and their plan is to have plenty of live stock to utilize their feed.

The Cincinnati Price Current points out that an illustration of the changes in cost of live animals in the comparison between 1897 and 1910 can be found in the records of prices for hogs at Chicago paid by the packers for the four winter months ending March 1, 1897, and for the four winter months ending March 1, 1910, the former period showing \$3.25 per cwt. as the record, the later period \$8.42 as the record—an advance of 151 per cent in such cost. Comparisons for cattle for the periods stated show an advance of about 50 per cent in the averages.

A special train similar to the seed corn train, with lecturers preaching the doctrine of increasing the supply of swine in Iowa and other corn belt states, is the plan recently adopted by officials of the Iowa State Agricultural College and the Rock Island Railway Company. The growing scarcity of hogs throughout the corn growing states has aroused a desire to restore the supply to proper proportions, and it is a startling fact that the supply in 1909 was four million head less than a year earlier, while all the time the population of the United States is growing at a rapid rate. Seven lecturers accompany the train, and there are exhibits of model pens, yards and feeding appliances for the rearing of hogs. Two expert cooks accompany the train, and they show how pork can be made most tempting as food. The train traverses 130 towns

CROP AND MARKET NOTES.

(Continued from page 357).

ket owing to the cholera which has entirely cleaned out some localities. Corn has all matured in good shape, which has brought prices down and will turn out a larger yield than for several years past. Apples, potatoes and pears are coming in here by the car load. Apples selling from 25c@1.25; pears, 1.15; potatoes, 60@80c; dealers pay for corn, 12c; oats, 27c; wheat, 85c; chickens, 94c; old roosters, 5c; butter, cash, 28c; trade, 30c; eggs, cash, 22c; trade, 24c; baled oat straw 77.

New York. St. Lawrence Co., Oct. 17.—Corn harvesting finished with satisfactory results. Many new silos were built this year. The building of many new barns this season has given work to many carpenters and masons. The close inspection of the barns by the New York City Board of Health has caused many old barns to be condemned. Dairy cows are selling from \$40@55; calves from 4½@5c; eggs, 25c; hay, \$14 per ton; potatoes, 45c bu; butter, 29½c; cheese, 15c. Apples are reported short. Plowing is the order of the day.

Ohio. Carroll Co., Oct. 21.—Corn is about all cut, some started to husk; potatoes are nearly all dug; are not very big this year because we had very dry weather just when they began to grow. Farmers are picking apples now for winter and market. Clover seed is being hulled. We have very fine and warm weather. Wheat came up nicely. All live stock looks good. Buckwheat was a fair crop this year.

Remarkable Feed Tests

The Barrow Laboratory of public chemists report the following tests made this month on samples from three different cars of Michigan Farmer Brand Cotton Seed Meal:

Sample	No. 20	Shows	45.12% Protein
"	No. 22	"	45.94%
"	No. 28	"	44.51%

This is the highest testing Cotton Seed Meal ever shipped into this market. The highest claim of other good brands is only 45% protein.

The above public test shows that the Michigan Farmer Brand contains 3 to 5% or from 60 to 120 pounds more protein to the ton than any other brand. Feeding experts and Experiment Stations show protein to be worth about 5¢ per pound to the feeder.

On this basis of value Michigan Farmer Brand Choice Meal is actually worth \$2 to \$4 per ton more than any other brand you can buy.

See adv. on page 350.

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Woman and Her Needs

At Home and Elsewhere

Merely a Question of Vision When Parents Think Their Own Perfect.

IS there anything more amusing to the impartial observer than the claim of most ordinary parents that their children are extraordinary? Just what there is about a little fat, freckled, pug-nosed, lowbrowed youngster to make his mother and father think he is a genius is a matter of speculation to everyone but the parents, and the funniest thing about it all is, that while we deny our friends the palm for intellectual and beautiful children, we still insist our own are prodigies.

We may admit we are numskulls ourselves, that we are homely, down in the heel, unsuccessful and never likely to be any farther ahead than we are now. But our children, never! They are of a bit better blood than other people's, though where the blue blood comes from since our own is just ordinary red, might be a matter for thought. They are by far the brightest, handsomest and best children in the community and bound to be a success no matter what adverse circumstances they may be called upon to face. They may inherit a weak will and an inbred distaste for work from both sides of the house, but we can excuse these as the eccentricities of genius and still insist that they will come out all right in the end.

Such an attitude is only natural to parents I suppose, and in some ways it is very amusing, even with the underlying pathos. But unfortunately it is all too often carried to extremes as the children grow up, and makes no end of bother. Often, indeed, it hinders the boy or girl from becoming the real success he otherwise might be.

Here is John Smith, for instance. Just plain John Smith, not Jack Smythe or Jean de Smythe, but just honest John Smith, an honest American lad, the son of an American farmer. John's grandfather was also a farmer and his great grandfather, and his great, great grandfather and it might be supposed, naturally, that John would have leanings that way himself. He does. John wants to be a farmer. It is bred in the bone and born in the flesh, he enjoys the work, he knows no other, and besides he is keen enough to see that there is more money for him in this year of grace in farming than in going to town and starting into a work he knows nothing about and for which he cares less than he knows.

But John's mother has other ideas. When Johnnie was a tiny little baby playing with his toes in the cradle his mother discovered that he was not an ordinary child and was meant for higher things than "grubbing his life out on a farm." She decided that it would be infinitely more genteel and elevating for Johnnie to wear a white collar and patent leather shoes (bought at a sample sale for \$2.98), and to sit up on a stool in an office and add a column of figures. For this work John, if he is lucky, may draw \$8.00 a week, and he must pay at least \$6.00 of that for his board. John doesn't take to "figgers." In fact, it is a nuisance to him to figure anything except how much his crops will bring, but he can do that all right.

Mother insists on John's going to town to school. John grumbles but probably goes. He does fairly well with his studies, but is unhappy all the while. School over, John wants to come home. Mother insists that he go to work in a store or office. John insists on farming. Then follows a session of fireworks around the home, mother scolding and sniffing, John growling and sulking. John knows he is just an ordinary boy with an ordinary education and no liking whatever for the work his mother has picked out for him. His mother is sure he is most extraordinary and can do anything he sets his hand to do. The contention ends with one or the other in agony. Perhaps John gives in and stays inside to work. He gets poorer pay and poorer board than he could on a farm and does only mediocre

work. All the time he is conscious of the fact that he is out of his sphere. If he insists on the country, mother goes around with the look of a martyr talking of the ingratitude of children and calling John's attention to all the successful captains of industry, with the remark, "That is what you might have been."

The dickens is to pay though when matrimony is in question. There never was a girl born good enough for any mother's son, and, of course, no man is good enough for any mother's darling daughter. John falls in love with Mary. Instantly John's mother has a conniption fit and Mary's mother would rather see her daughter dead than married to that

awkward lout. As a matter of fact, outsiders think the couple are very well mated. John has his faults, but then Mary isn't perfect. Mary's mother insists that her daughter could go into any circle of society and take her pick and is amazed that she should choose a common, ordinary man like John. John's mother can't see what a regular Beau Brummel like John wants to do with a dowdy little frump like Mary. And so these two fond, but exceedingly foolish, mothers make the days which should be the happiest to the young couple, one long drawn out nightmare of misery. Usually the young people have sense enough to see things as they are and marry in spite of the mothers. Sometimes, however, the pressure is too strong and one or the other gives in. Two lives are then wrecked because two mothers could not see their own offspring as others see them.

DEBORAH.

Country Women As Money Earners—No. 16. Cellar Grown Rhubarb Makes Good Sale.

AS you eat your first rhubarb pie each season does it ever occur to you that there might be money in the plant for you, more money than in eggs and chickens, for instance? Probably it never has because you do not think of nice, tender, fresh rhubarb as a luxury. You have always had a few hills in your garden and in the spring you used it and thought nothing about it. But if you lived in a city and paid from five to ten cents for three stalks of it, according to the time of the season you went to buy it, it would be brought to your mind that there must be money for some one in rhubarb raising.

One woman got the idea and tried it. She reports \$400 to her credit for one season from only one acre of ground. And the initial expense was not so great as it would have been had she turned her attention to fowls, neither was the work so hard nor so continuous.

The plants should be set out as early in April as possible, though you will get results if they are set out as late as June. The soil should be a well drained, preferably sandy, loam, though the plant will grow in any good loam. It should be well supplied with plant food, either naturally or by means of a good fertilizer. Choose a good, early winter variety, as the earlier you can get your crop into market the better will be the price you will get. The plants should be well watered and kept from seeding by closely cutting the flower stems when they appear. Set the plants a foot and a half apart with from five to six feet between the rows so it can be cultivated easily three or four times a year.

To secure top notch prices, of course you must make up your mind to produce cellar-grown rhubarb. This is ready for market early in February, and last season brought 40 cents a dozen bunches of rhubarb in this way, dig up the roots before the ground freezes in the fall, throw the roots loosely on the ground and leave them outside until they are frozen solid. It would be well to put them under a porch, if you have one, lest they get snowed under. If you have no such place a temporary shelter where they will remain frozen solid might be erected.

The first of January bring your roots in and plant them in four or five inches of sand in the cellar. Water well and in six weeks your rhubarb should be ready for market. It will have dwarfed leaves and the stalks will be tender, pink and succulent and not at all stringy like that grown in the garden. In fact, it is superior in many ways to the rhubarb grown out of doors.

In getting a good price for your rhubarb, as much depends upon the care with which you put it up as upon the quality of the plant. Too many women living at a distance from the city markets bundle the stalks up any old way, long stems with short ones, and ship it to a commission man. He then must sort it out and arrange in bundles before he

can dispose of it, and, of course, he will not pay the best price for it.

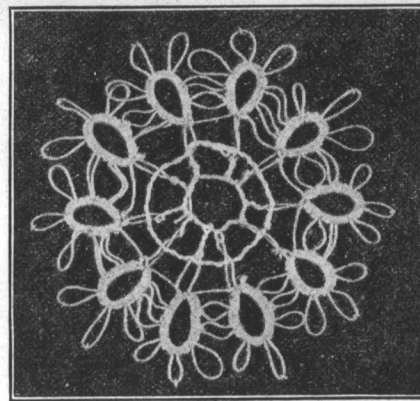
The stalks should be selected according to length and made into bunches of three or four stalks, according to the thickness of the stalk. These are carefully tied at top and bottom, and then bundles of a dozen bunches made which are also tied stoutly at both ends. At the beginning of the season the rhubarb may be either expressed or freighted, but later, when hot weather sets in it should be expressed to get it to its destination as quickly as possible.

Of course, the question of a market crops up first in the mind of every woman who would like to make money in this way. There may be no market near you, but rhubarb that is perfectly fresh and well cared for may be shipped as far as 1,000 miles to market. Then, do not be too sure you haven't a market at home. If you are blessed with tact and stick-to-it-iveness you may be able to work up a market for your stuff in your nearest town or city.

TATTED WHEEL.

BY GENEVA M. SEWELL.

Make a ring of two double-seven picots, each separated by two double and draw up. Make all the picots extra long. Leave a space of thread a little longer than the picots and make another ring like the first, fastening together by the first two



picots. Continue in this way until you have ten rings, fasten the first and last together and tie; then break off the thread and with a needle fill in the center by running a thread through each of the picots and twisting it back, making a double twisted thread. Then fasten the thread and without breaking it off make a row of buttonhole stitches into the end of each picot, twist the loops and draw into shape, fasten thread and cut off. This wheel makes a pretty inset for shirt waist trimming. Or a row of them may be fastened together for insertion. The needlework with the tatting is very effective. It may be made from all white or ecru thread or the center may be worked in of a different color. There are many ways in which this effective little wheel may be worked out.

Famous "Pint of Cough Syrup" Recipe

No Better Remedy at any Price.
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Make a plain syrup by mixing one pint of granulated sugar and ½ pint of warm water and stir for two minutes. Put 2½ ounces of pure Pinex (fifty cents' worth) in a pint bottle, and fill it up with the Sugar Syrup. This gives you a family supply of the best cough syrup at a saving of \$2. It never spoils. Take a teaspoonful every one, two or three hours.

The effectiveness of this simple remedy is surprising. It seems to take hold instantly, and will usually stop the most obstinate cough in 24 hours. It tones up the jaded appetite and is just laxative enough to be helpful in a cough, and has a pleasing taste. Also excellent for bronchial trouble, throat tickle, sore lungs and asthma, and an unequalled remedy for whooping cough.

This recipe for making cough remedy with Pinex and Sugar Syrup (or strained honey) is a prime favorite in thousands of homes in the United States and Canada. The plan has been imitated, though never successfully. If you try it, use only genuine Pinex, which is the most valuable concentrated compound of Norway white pine extract, and is rich in guaicol and all the natural healing pine elements. Other preparations will not work in this recipe.

A guarantee of absolute satisfaction, or money promptly refunded, goes with this recipe. Your druggist has Pinex or will get it for you. If not, send to The Pinex Co., 232 Main St., Ft. Wayne, Ind.

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UTILIZING OLD FEATHER BEDS.

BY ELLA E. ROCKWOOD.

SINCE the fluffy feather bed of our grandmothers has given place to a bed of different order, the disposal of these relics, left in the home, becomes something of a problem.

The feathers, while perfectly good, are always nice for pillows and the average housewife can make use of quite a number in different ways. Possibly the ones she has been using on her beds are rather small and not up to the regulation size. By purchasing new ticks it is an easy matter to change to those of standard dimensions. Pillows, either 22, 24 or 26 inches in width by 30 or more in length will be better than the smaller ones. Cloth for cases comes in these widths either in tubing or to be closed, as may be selected.

Sofa pillows are always useful and extremely decorative in addition, one of the few articles which may be truly claimed as being both useful and ornamental. For these, grandmother's feather bed of softest goose down will furnish just the material. If these are made quite large, either square or oblong, and covered prettily the result will be eminently pleasing to the eye and something not to be despised in housefurnishing either.

The most elegant comfortables are filled with down, and quilted the same as any bed covering. For this use, down, and not ordinary feathers, must be employed.

The newest use to which old feather beds are placed is to make them into mattresses. There are machines for doing this work, the rows of stitching passing in straight lines sufficiently close together to insure firmness. This makes an ideal bed, from the standpoint of comfort, and is not less hygienic than most other substances employed in mattress making.

Of course, if the feathers are old they should be renovated. Establishments where this process is carried on are to be found in nearly all towns of any size. This makes them light and fluffy and removes all dust which may have been collected during previous periods of servitude. Old feather beds are too valuable to be neglected, but if they are not going to be put to some use they may better be sold or otherwise disposed of and not left to invite mice and moths to the family attic.

WHAT FOODS ARE NEEDED.
No. 27.

BY MRS. ALTA M. LITTELL.

SUCH has been said and more written about "well-balanced menus." Since cooking schools have sprung up all over the land and government experiments, not to mention private laboratories, have attempted to show just how little a man can eat and still keep in good condition, everyone who writes at all of cooking aims to tell just how many ounces of every sort of food are necessary for the day's rations.

Writers prattle prettily of kilograms and calories, without any real conception of what calorie means, and the housewife, not schooled in present-day terms, is in doubt whether a calorie is a new sort of breakfast food or a fireless cooker. I'm sure if I were to be awakened suddenly in the night and ordered to define the word I'd decide in favor of the cooker.

It is not my intention to talk of kilograms or of calories in this article, firstly, because of my dense ignorance on the subject, and secondly, because I never could see how a knowledge of the exact measurements of fuel values was of great working benefit to the average housekeeper. Every family is a law unto itself; each individual has his own needs, and if the cook were to attempt to figure out just what each member of her household needed and to express the result in kilograms and calories, there would be little time left in which to prepare the food.

For ordinary purposes it is enough to know that about 60 per cent of the food should be starch and the remainder pretty equally divided between protein and fats. As to the amount of food each person should eat, what writer or experimenter is to say? The wife and mother who does the cooking is in a better position to judge what will keep her brood in good condition than any outsider could possibly be.

It might be well to say that the commonest error consists in giving too much starch. Meat is expensive, and in farming communities hard to get; so pies, cake, cookies, bread and butter and potatoes have to take the place of the protein of meat, with a resulting detriment to the

body. Too much starchy food is bound to cause indigestion, especially when the food is not properly masticated and the starch thoroughly mixed with saliva in the mouth. If you can not get meat, its lack should be made up in other ways. Eggs you can have in plenty if you take proper care of your poultry, and fowls are yours for the growing. Codfish can be bought and kept indefinitely and made into codfish balls or creamed, with real cream. Salmon and other canned fish may be kept on hand and prepared in tempting ways.

Dried beef can be bought in glass jars and a dozen jars may be bought at a time. This is fine if shredded and cooked in butter until the edges curl up, then stirred into a good milk gravy. Or it can be "frazzled" in the butter, and a half dozen eggs broken into the frying pan and scrambled with the beef. Potted meats of all sorts may be bought and kept on hand to replace, in a measure, the lack of fresh meat. All these things will help the cook to answer the eternal question, "What shall I get for dinner?" and will prove much better for the family than the unvarying diet of potatoes, vegetables, pie, cake and cookies.

A liking for vegetables should be encouraged in the members of the family, too. Not only do vegetables make for health, but they are much easier to prepare in hot weather than cakes, cookies and the like.

As for the "well-balanced menu," the following sample meals give a fair idea of what is needed in the days dietary. From them the cook can plan others which fit her needs and suit her family:

BREAKFAST.

Fruit.

Oatmeal, farina or other cereal.

Cream. Sugar.

Eggs, Toast or Gems, Butter.

Coffee with Cream and Sugar.

DINNER.

Beef, braised, roasted, or a steak.

Potatoes, Creamed Cabbage.

Lettuce with Olive Oil or Boiled Dressing.

Corn Starch Blanc Mange.

Tea.

SUPPER.

Baked Potatoes and Salmon Loaf.

Sliced Cucumbers.

Berries and Plain Cake.

Tea.

BEAN WATER IN THE SINK.

When first the odor comes up from the washing of pots and plates from which beans have been taken in the sink drain, there will be a great shock to the housekeeper who does not know what this is. The first thought will be of sewer gas, most vile and deadly. Visions of typhoid fever and diphtheria will flash into the mind. The doctor will be called or the health officer, and the plumber will think his time has come for not fixing the traps so as to keep out that awful deadly smell. It is really quite harmless, nothing more deadly than its offensive odor that can be readily removed by pouring down the sink several pans of strong lye water. This is a good disinfectant, besides being a deodorizer and keeps the grease cut in the pipes as well.

SHORT CUTS FOR HOUSEKEEPERS.

In mending checked or plaid goods try threading several shades of silk into the needle using colors found in the goods. This blending of shades will prevent the darn showing as it would had only one color been used.—L. M.

When straining jelly turn a kitchen chair bottom up on the edge of the table and clean well. Then tie a piece of cheesecloth, double, on each leg. Do not allow too much fullness. Place a dish big enough to hold the juice under the bag, on the chair seat, pour the hot fruit into the bag and cover with a thin cloth, and leave all night.—L. C.

For those who use kerosene to kindle the fires, get a common machine oil can, like those the men use for oiling the machinery and fill it with kerosene. It is much cleaner and more handy than using the large can, or a bottle. (Will the correspondent kindly send name and address?)

A little green parsley or green tips of celery are often needed in winter. In order that they may be always at hand take a good sized fruit can and in the bottom put a half inch layer of salt, add a layer of parsley or celery and repeat, using alternately half-inch layers of salt and two-inch layers of the green foliage. Press down and fill the can as full as possible before screwing on the cover. Parsley and celery preserved in this way will keep all winter.—L. M. T.

Haste and Waste

Stop and think for a moment the next time you are about to buy soda crackers.

Instead of hastily buying soda crackers that go to waste because broken, soiled or soggy, buy

Uneeda Biscuit

in separate five-cent packages. Soda crackers in large packages soon become broken, stale and unpalatable. On the other hand, Uneeda Biscuit in handy, moisture proof packages are *always* fresh, clean, crisp and whole—not one wasted.

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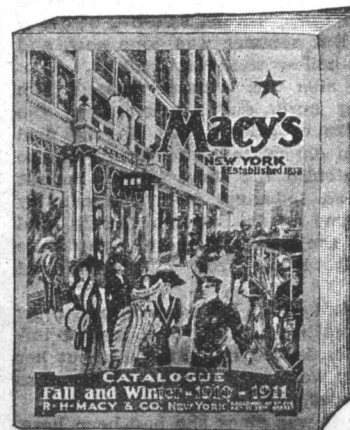
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HOME AND YOUTH

HALLOWE'EN.

BY L. M. THORNTON.

The little folks frolicked on Hallowe'en
And they frightened the timid, I'll own,
For a pumpkin lantern's a sight I ween,
And a tick-tack may sound like a groan.
But the fun they had made the whole
world glad,

And who would envy a lassie or lad
The pranks they played, or would call
them bad
On the night of Hallowe'en.

And the lovers they courted on Hal-
lowe'en,

Way down by the river side I know,
And he called her his sweetheart and his
queen,

And she was content to have it so.
But their love confessed made the whole
world blessed.

Since Love is of all Life's joy the best,
And love is the favored sport and quest
On the night of Hallowe'en.

'Tis a merry old world at Hallowe'en.
And the passing seasons come and go,
But we keep in memory each dear loved
scene

And Life is surely the better so.
For 'tis childhood's truth and the joys of
youth,

The Pumpkin Jack's and the forms un-
couth,
That anchor our world-tossed souls, in
sooth,

And God's is the Hallowe'en.

AN HOUR OF MYSTERY.

BY FRANK H. SWEET.

Tricks of magic and feats more or less
mysterious and uncanny should have a
place in any program prepared for the
entertainment of friends on Hallowe'en.
Explanation of a few feats, comparatively
simple yet fascinating and entertaining,
besides being possessed of no little edu-
cational value, is therefore not out of
place at this time. It will be seen that
by a little thought and ingenuity the pro-
cesses described may easily be adapted to
and utilized in the presentation of almost
any Hallowe'en entertainment.

Phosphorescence.

Nothing in the world is more like "bot-
tled moonshine" than phosphoric oil—a
light without heat. Astonishing! But it
is so. The light emitted by phosphoric
oil is an unearthly, spiritual kind of light.
However near we are to its luminous in-
fluence, it nevertheless always appears to
be at a distance. It is probable that light
from this source will, at some time in the
future, have a practical application in
places where the common artificial light
would be dangerous. Indeed, many of our
readers may perhaps live to see the phos-
phoric lamp used in dangerous mines. For
experiment, take a thin glass vial, about
half fill it with olive oil, then drop into it
a piece of phosphorus the size of a bean.
Now place the bottle in boiling hot water
until the oil is quite hot; shake it now
and then, and the phosphorus will dis-
solve. Keep the vial well corked and let
it get cold. Whenever you want a little
moonshine, take the cork out of the bot-
tle, shake the oil, and there will be light.

Magic Pictures.

First sketch a landscape in India ink.
It should represent either a winter scene
or a mountain district—the snowy Alps or
Pyrenees. However, a scene appropriate
to Hallowe'en may be substituted. When
complete, touch the sky and frozen lakes
with a solution of acetate of cobalt. The
thatch of cottages and some of the flowers
must receive an application of a solution
of muriate of copper, and the trees and
sward are treated in a like manner with
muriate of cobalt. All these solutions
should be used in varying strengths, ac-
cording to the depth of color desired, and
applied with care and skill. These liquids
will impart little or no color to the pic-
ture, and, when dry, it will remain as be-
fore, a "white scene." But if at any time
the picture be held to the fire, or slightly
warmed, the scene changes; the sky be-
comes blue, the ice and snow melt away
from the trees and grass, and they as-
sume a foliage of a lively green; the flow-
ers alter in like manner. A little practice
will enable one to bring out almost any
sort of scene desired. When the picture
becomes cold, it passes again to its origi-
nal tint, thus exhibiting strikingly the
changes of matter by the application of
heat, and at the same time affording
much amusement.

Fire Pictures.

You can surprise and amuse your
friends very much by lighting a match,
blowing it out when half-burned, and
touching with the still glowing match-
stick a sheet of blank paper. A spark of
fire will start from the point where you
apply the match and run over the paper
in all sorts of ways, leaving behind it a

burned trace, which, when completed,
will form a name, a picture of an animal,
or any other design you choose. The pa-
per, of course, has been prepared before-
hand, and in a very simple manner. All
you have to do is to trace the design with
a pen, a fine brush or a stick dipped into
a strong solution of saltpeter. The draw-
ing need not be made of one continuous
line, but it must all be connected togeth-
er. There must be no detached parts, as
the spark has to travel from point to
point.

Saltpeter, which is also called niter and
potassium nitrate, contains a large
amount of oxygen, which it gives up
readily to such substances as wood and
paper, burning or charring them. Ordina-
ry burning or charring, indeed, is due
to the action of the oxygen of the air,
hence the parts of the paper under the
saltpeter drawing are very inflammable,
and a spark applied to one point will run
along the whole design. The paper along
the course of the tracing has been con-
verted into a sort of gunpowder by the
addition of the saltpeter, for gunpowder
is nothing but a mixture of saltpeter with
charcoal, and the still more combustible
sulphur. A goodly number of pictures
can be prepared beforehand and "touched
off" for the amusement and entertain-
ment of the guests.

Liquid Layers.

Everybody knows that some liquids are
lighter than others. But there is nothing
like an actual experiment to illustrate
this important principle of physics to
girls and boys, or to grown people either,
for that matter. The experiment here
described may be made by any careful
young person, and it is well worth mak-
ing, if only for the amusement it will af-
ford. Get a tall wine-glass and into it
pour cold, sweetened coffee to the depth
of half an inch. Then make a cone of
writing paper, with a very small opening
at the lower end, and bend that end until
it makes a right angle with the cone. In-
to the cone pour water very gently and
carefully, so that it will pass out of the
small end against the side of the glass,
and thence down onto the surface of the
coffee. Make another cone, and through
it pour a little claret wine; then, through
a fresh cone, a little salad oil, and
through another fresh cone a little alco-
hol, making the depth of each liquid the
same as that of the coffee, and being
careful to let them pour from the small
end of the cone against the side of the
glass, and not directly down on the liquid
already in the glass. Thus you will have
five layers of liquid in the glass—brown,
white, red, yellow and white—and by
pouring them carefully, as has been di-
rected, they will remain separate from
each other, simply because their specific
gravity is different.

THE MOTHER.

BY MAUDE WOODRUFF NEWELL.

The woman came swiftly up the long,
country road. Sometimes she ran, the
little blue scarf on her head blowing back
of her like a breath of summer, in the
gusty November wind; her long coat fly-
ing open and showing her loose house
dress. Her slippers were absurdly thin
and high-heeled, not made for country
walking.

Once she looked back in hasty fear, but
the yellow, dusty, road was quite de-
serted.

At the top of the first small incline she
turned and, taking the path that wound,
like a dingy brown ribbon, into the dying
underbrush that hedged the road, came
at last to the happy little hollow, which
she knew, between the two round hills.

Here, the grass, nourished by some ten-
der hidden spring, was still green. Here,
the violets were always the bluest, the
cowslips the yellowest, and here the birds
came first, in the spring, for the mating,
robins, bluebirds, and the tiny song spar-
rows with their "Sweet, swe-e-t, swe-e-t,
bitter." But summer was gone now, and
the little hollow was very still.

On the hills was crimson sumach, like
a burning bush, and bracken, and the
dead stalks of golden rod. In the field
beyond an old white horse turned out to
pasture nibbled the short grass. Sounds
of life and industry, from the country
below, came to the woman faintly, and
she could see, here and there, blue smoke
curling up, lazily, from a cheerful red
chimney.

She looked about her eagerly, and drew
a long breath. A faint color, almost im-
perceptible, flooded her thin face, but her
young lips were very white, and her eyes
were clouded.

So long it was since she had been here.
She tried to remember how long and
could not; but today, they had forgotten

the long unlocked porch window, and
Emily had been busy with the baby, and
Robert was upstairs. She laughed a lit-
tle, gleefully, like a child.

She could not love the baby, somehow.
He cried, and he was so very little not
a rowdy armful like—like, whom—like—
Billy, of course, Billy. Now, she almost
remembered. Where was Billy?

She looked vacantly about. He was
playing tricks upon her again. He was
always playing tricks. Perhaps he was
hiding behind that stone wall.

She tiptoed over to it stealthily, her
mother eyes full of happy mystery. As
she reached it and peered over she gave
their old familiar call.

"Who, who," she cried gayly.

But no little boy was crouched hiding
there, his roughish face brimming with
love and delight, his fat, cramped, brown
legs, scratched with branches. That was
very strange.

She sat down upon the warm side hill
where the sun shone upon her and tried
to remember this hidden something about
Billy that had now been eluding her so
long, but she could not. He must be
playing somewhere about. He would
come soon when he was tired of vexing
her. He would be glad, then, to come to
rest in her arms. He was a little fellow,
for all his strut, such a braggart strut it
was, too, in those tiny blue overalls.

She carefully untied a small box that
she had brought. In it was a bit of
brown toast, a bunch of white grapes,
some apple butter, the dainties she could
gather up the quickest from her own
lunch table. He would be hungry when
he came. Billy was always hungry. Rob-
ert said he had a limitless stomach.

She dreamed happily, looking around
the pretty, green hollow, the toy lunch
box open upon her knee, her thin hands
lying listlessly in her lap. She loved this
place. Billy and she were always picnic-
ing here. It was the first place to which
they hurried when summer brought them
out to live in Arden. Even Robert had
only been here once. It was just her
place, and Billy's.

A soft lethargy lay over the naked
woods beyond. The tiny brook that had
raced there, singing, through narrow
green banks, now crept sluggish and chill
in its dull pathway. She could not see it
but she could hear its faint rippling. The
shabby weeds beside it shivered with
ghostly rumblings at every wind. In the
distance the faint blue haze of Indian
summer veiled the hills.

She moved a little so that she could
lean against the trunk of the one tree
that grew in the hollow, an old, useless,
twisted apple tree. She looked up at it
curiously, following out the tracery of
its naked branches. This interested her,
and she pondered over each oddly shaped
twig for a long time. A small brown bird
hopped silently about, his eyes upon her
in sullen distrust, and she watched him,
childishly pleased when he ventured near-
er. She grew rested. Once she smiled.

Suddenly, she fancied she heard the
familiar boyish chuckle. Ah, he was com-
ing at last. He was ready now to be for-
given and petted and fed, ready also to
have her tell him stories, and which
should they be? She decided that, today,
she would tell him of the little pigs who
set out to make their fortunes. Then he
could be the little pig, and squeal defi-
antly, "No, no, by the hair on my chin-y,
chin, chin," and she would be the horrid
wolf and growl, "Then I'll puff and I'll
puff till I blow your house in." He would
like that story. But, first, she would
pretend not to hear him. He had been
hiding too long. She would pretend to be
very angry.

She waited, without turning, a faint,
expectant smile upon her thin face. The
deep shadow in her eyes seemed to light-
en a little.

But he did not come. Then, she grew
afraid. Where could he be?

In a sudden panic she put down the
open lunch box and hurried again to the
stone wall. He was not there. He was
not behind the big gray rock in the open
pasture to the left where the white horse
was slowly nibbling. He was not crouch-
ing in that clump of elderberry bushes at
the edge of the wood. He was not hiding
behind any of the trees. He was not any-
where there.

She stood up, unnaturally straight, and
called, her heavy eyes wide and strange,
"Billy, oh, Billy, who-oo, who-oo."

Did he answer? She listened. Perhaps
—where the brook widened out into the
small river, just beyond the wood—per-
haps—

She ran, calling wildly, the blue scarf
blowing free about her head. Once her
dress caught in the brambles and she

WISE WORDS

A Physician on Food.

A physician, of Portland, Oregon, has
views about food. He says:

"I have always believed that the duty
of the physician does not cease with
treating the sick, but that we owe it to
humanity to teach them how to protect
their health, especially by hygienic and
dietetic laws.

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ach, especially at breakfast, to start the
machinery of the human system on the
day's work.

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Grape-Nuts and cream and I think it is
not advisable to overload the stomach
at the morning meal. I also know the
great value of Grape-Nuts when the
stomach is too weak to digest other food.

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tore it away savagely, fluttering and wrecked. Once she fell and the briars tore her thin hands and drew the blood.

She lost the dim path. The wood seemed endless. Ahead of her there was no opening. She forgot how long she had been running, was it weeks, or years, or an eternity?

And then, as she ran, something struggled to life, dimly, within her memory. Suddenly she knew that once before she had run like this through this crazy wood. It grew strangely familiar to her, as when one awakens from a dream, terror-stricken, only to sleep and dream it all again. Once before she had fallen and struggled to her feet, and ran on again, screaming, as she was running now.

"Billy, Billy, who-oo, who-oo," it blubbered on her lips and left her gasping.

The water was before her, not a deep rushing river now as it had been that other time, but a thin, weak, November stream, flowing stilly between narrow brown banks.

Her eyes strained over it. Was he out there, little Billy? Was that his shining yellow head, were those his childish arms reaching out toward her, as he fought for the breath of life? No, no, he was gone—he was gone.

She stood, sick and shuddering, upon the bank. He was not there, now. It was the other time that she was remembering, and he had gone down, and when she had reached him it had been too late.

She screamed shrilly, her arms above her head.

"Billy, Billy, who-oo, who-oo."

God! she remembered now. She had forgotten he was gone. He had been gone ever since that blue spring day when they had come picnicking, he and she, and she had missed him, after a little while, and run, as she had run today, and seen him go down, down into that toy river, and then she had forgotten everything and dropped out of life.

The baby had come since then, but she did not love the baby. She wanted Billy. Oh! her little boy, with his yellow hair, and his scratched, brown legs. She wanted Billy. She had some apple butter in the lunch box, and grapes. Billy loved apple butter and grapes.

She screamed again, her poor tortured memory groping its way out of the fog that had so long held it. She beat the air with her thin, white, hands. He was such a little fellow—and the water so black and deep—and mother so near—just there—upon the bank. She cried out sharply, remembering. Why had she remembered. She did not want to remember. She was afraid to remember.

Then, something touched her, and she turned, choking, her eyes wild, her thin face discolored under the blue scarf.

A child stood beside her, his fat brown hands tugging at her dress, his childish eyes troubled.

"You sick?" he questioned, unafraid.

She gasped and bent down to him, grasping his stubby fingers. He did not shrink.

"Who are you?" she whispered. "Are you Billy?"

He leaned toward her confidently, shaking his curly head in silence. He wore the familiar childish blue overalls, and his eyes were blue, but his hair was brown, not yellow like Billy's.

She studied him, puzzled, trying weakly to understand. He was not quite Billy, and yet—she put out her hungry arms and gathered him in—he was an armful like Billy.

He put one hand, comfortingly, to her thin face.

"Poor lady," he pitied. "Poor lady, so sick."

"You were gone so long, Billy, mother was frightened," she said.

He was heavy. She tried to lift him and could not, so she sat down upon the ground and held him close to her.

"Perhaps you are not Billy," she said doubtfully. "I do not remember. Billy's hair was yellow. Do you like apple butter, and grapes."

He chuckled foolishly, and she caught her breath. Sometimes Billy chuckled like that.

She began to sob a little, softly, feeling the warm childish body close against her, seeing his hair damp in his boyish neck. She tightened her starved arms about him as the sobs tore her. She had not cried for a very long time.

Then she saw Robert. He was running, and behind him, Emily, the nurse, white and shaking.

"Lucia, Lucia."

He knelt beside her, his great arms locking in her and the child also. His anxious eyes tried to read her tears.

"You have frightened us. We have

looked everywhere for you!" His voice shook.

"Why did you come here, Lucia—how could you come here?"

She shook her head, the sobs strangling her.

"Who is the child, Lucia?" he asked, with a little start, after a minute.

"I do not know," she tried to answer. "I do not know. I came here, but Billy was not here."

He looked away silently. She went on with a sudden rush of words. "I looked everywhere, but I could not find him, and then I was afraid, and I ran, and then I remembered. It was here, Robert, in the spring, before the baby came—I remember now."

He tried to lift her up.

"Lucia, sweetheart, come away."

"I remember now, only sometimes, for a minute or two, it goes again. I remember now—Billy—"

"Dear, come, please come. Who is the child?"

"I do not know, Robert. I screamed, and he came. He feels like Billy, but it is not Billy, is it?" wistfully.

The man threw out his arms, and his voice broke.

"No, it is not Billy."

His voice startled her. She looked at him strangely, seeing his face as though for the first time in a very long while. There were lines upon it, deep lines that she could not remember ever having seen before. She stared at his hair. It was very gray over his temples, and his cheeks were thin. His neck was thin, also, wasted, as though from some long continued strain of worry.

"Why, Robert," she whispered, and put her hands to his face. "Why, Robert," and her voice grew frightened. "Poor Robert, I forgot that you loved Billy, too! Ah, Robert—"

The man buried his face on her shoulder for an instant and shuddered.

She mothered him silently, with a strange, weak, surprise that she could ever have forgotten him and left him to bear anything alone, feeling a little rush of new strength thrill her as the new need for it arose. The mother instinct within her, left desolate by the child, reached out and brooded over the man.

"It has been so hard for you, Robert, and I could not remember all the time. All summer I did not remember—how strange it was—" she groped for his hands, finding the child's instead.

"Look, Robert, at the little stubby fingers like Billy's, and his fat little legs, Robert—"

She stopped, hesitating, and struggled for words seeking dimly for some meaning to this mystery and horror that had dulled her reason.

"Perhaps, perhaps, this is what was meant, perhaps this is what is always meant—"

"How do you mean, Lucia?" he asked gently.

"Why—poor mothers weeping for their children because they are not, and yet the world full of children weeping for mothers they have lost or never known."

It seemed to her, suddenly, that the whole universe waited to be mothered. She looked at him wistfully.

"Robert—I wish I could we take him a little while until the baby gets bigger. He just fills my arms, like Billy. Could we, perhaps, Robert, until I get better and remember all the time?"

"Yes. Anything, anything is yours, Lucia."

Robert Austin's tone was grimly final. He leaned over the child. "We will beg him, or borrow him, or steal him. Where do you live, little man?"

"I live with Aunt Prissy, up there," pointing vaguely up the country road where a shabby farmhouse just showed its dirty unpainted eaves. "She says I eat too much. She hugs Frankie and Martha, she never hugs me. I like to be hugged."

He wriggled suddenly and joyously in her lap. "I like apple butter," he said, shyly. "I like grapes, too."

She smiled at him through her tears.

"Come," she said, "let us go to see Aunt Prissy."

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Trade-mark.

In the manufacturing end of the business—the end that counts for you—we are as liberal in expenditures as can be. Not a penny is stinted that will help maintain "Ball-Band" perfection.

But owing to our splendid sales organization our selling expense is but one-fifth of what most manufacturers have to pay.

If you're not one of the "Ball-Band" wearers, get a pair from your dealer at once, and note their superiority for yourself.

Forty-five thousand dealers sell "Ball-Band" goods. Some of them sell other brands, too. But look for the RED "Ball-Band" trade-mark. If by any chance your dealer can't supply you, write us, mentioning his name, and we will see that you are fitted.

"Ball-Band" Arctics

are the same quality as "Ball-Band" Rubber Boots. They give you the same comfort, the same long wear, the same perfect satisfaction. The same thing is true of our

All-Knit Wool Boots and Socks

which are worn by millions of outdoor workers. The "Ball-Band" guarantee of quality is back of them. But be sure to look for the RED "Ball-Band" trade-mark. Now a days, while crude rubber is jumping in price all the time, it's more than ever your only protection.

Mishawaka Woolen Mfg. Co., Mishawaka, Ind.