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DETROIT MICH., SATURDAY, MAY 14, 1910.

FARM NOTES.

'eeding Affalfa in Corn. I wish to inquire through your columns whether it would be a good plan to sow hast cultivation? Would the cultivator put the seed in too deep? Is August a better to sow Canada field peas this pring on this ground—light, sandy loam recently cleared, had corn last year for first crop? If the peas were allowed to pan and then plowed under about Aug. and might be a good nurse crop to shell the specially have plenty of snow. Would the peas have a tendency the provide the sowing? Would the peas for the sowing? Would the peas for the alfalfa? Would it be better to harvest the peas and depend the solution the sour with alfalfa divide a soon as the peas are taken of the tendency to harvest the peas and depend the tendency the sowing? Would the peas for the alfalfa? Would it be provided the peas nave a tendency to solution the sowing? Would the peas for the alfalfa? Would the peas for the alfalfa? Would the peas for the alfalfa? Would the peas for the tendency the peas and depend to harvest the peas are taken of the tendency the tendency to the tendency the source the tendency to the tendency to solution the sowing? Would the peas for the tendency to harvest the peas are taken of the tendency the tendency to the tendency to solution the tendency to the tendency to solution the tendency to snow. Would the peas the peas and depend to harvest the peas are taken to the tendency the tendency to the tendency to solution the tendency to the tendency to solution the tendency to the tendency to solution the tendency to snow. More the tendency to the tendency to the tendency to solution the tendency to the tendency to solution the tendency to the tendency to solution the tendency to snow. More tendency to tendency to tendency to snow. Mor 'eeding Alfalfa in Corn.

which to seed land to this crop. Experience in seeding land to clover in corn has season is a normal one, with sufficient rainfall so well distributed that the seed rapidly from the time the seed is sown, plants get a sufficient size before winter from the field the first season. to endure the winter and make a good

crop the following year, but only in an exceptional season will this favorable combination of circumstances prevail. If the weather is dry in mid-summer, as it is very apt to be, with the corn plants drawing on the soil heavily for moisture through their extensive root system, there is little chance for a small weak plant to develop and make a good growth. Alfalfa is naturally a weak plant when it first starts and needs the best of conditions to make a thick and even stand, which is essential to success with the crop. For this reason, it would not, in the writer's opinion, be good practice to attempt to seed it in corn unless the weather conditions appear to be exceptionally favorable for this method when the time for such seeding arrives.

So far as August being a good time to sow alfalfa is concerned, it might ell to state that in some sections where alfalfa is grown extensively late seeding is considered preferable to early seeding, and on land that has grown alfalfa successfully

best time.

in the spring or in June on a well pre- the alfalfa little chance, as it grows pared seed bed and without a nurse crop, slowly at first. although some have had success in seeding the crop in barley and cutting the alfalfa plant, without which it will not barley for a grain crop the same as make a good crop or an enduring stand, half of June, when all conditions seem clover is ordinarily seeded with this crop. Some of the best authorities on alfalfa it is a different species than the bacteria Some of the best authorities on alfalfa it is a different species than the bacteria growing who have had the largest expe-rience and the widest opportunity for ob-servation believe that the best way to servation believe that the best way to different, for the reason that the nodules sow it is with a nurse crop of beardless the rence to allowing it to mature. The erence to allowing it to mature. The writer favors a_i thorough preparation of apparently because of a lack of perfect in May or June at such time as the able for its rapid development. Some claim that the best possible preparation claim that the best possible preparation claim that the best possible preparation content of the source of the preparation claim that the best possible preparation content of the preparation claim that the best possible preparation content of the preparation claim that the best possible preparation content of the preparation of the preparation claim that the preparation of the preparation content of the preparation of the preparation of the preparation claim that the preparation of the prepa claim that the best possible preparation of the soil may be secured by planting an While some growers have reported suc- early variety of potatoes and fertilizing alfalfa in Michigan, is not so large as we yet there are a good many farmers who cess with alfalfa seeded in standing corn, them liberally, then working up the sur- might wish, but experiments conducted plant their corn in this way and appear it can not be considered an ideal way in face to prepare a good seed bed and sow- in different localities with a variety of ing the alfalfa in August after the potatoes are harvested. This plan has the taught those who have tried it that if the advantage to be derived from mid-sum- results. There is no question about the than for the grain erop this is probably season is a normal one, with sufficient mer sowing, in that the weeds would be desirability of the general introduction of as good a method as any, but where one killed and the soil well fertilized in prepmay be depended upon to germinate aration for the potato crop, which crop lieve it will be generally introduced in the it is the writer's opinion that it would quickly and the young plants to develop would pay the expense of preparing and quite near future, and to that end every pay better to fit and mark the ground an even stand can be secured and the the writer follows will bring no return

to the season of the year. Successful plowing the crop down would probably teria through the soil and make inocu-

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Regarding the bacteria peculiar to the scientists are not wholly agreed whether to be most favorable. Our fund of information upon the cul-

tural methods necessary to success with a job of planting corn as a horse planter, methods can not but prove helpful, provided publicity is given regarding the or where it is grown more for fodder alfalfa upon Michigan farms, and we besucceeds or not at the first trial, will be depend upon the more or less uneven dis-

growers in Michigan seed ordinarily early make such a vigorous growth as to give lation more rapid and general when alfalfa is again sown on this land this year. This land was in potatoes last year and will be prepared without plowing and the seed sown the latter part of May or first

75 CENTS A YEAR \$1.50 THREE YEARS

Planting Corn with a Grain Drill.

While a grain drill will not do as good to like the method. Where the corn is being planted thick for silage purposes is planting it for a maximum grain crop

one way. This will not only insure a more even distribution and accurate dropping of the seed, but will also be an advantage in cultivation, as corn planted in checks can be kept much more free from weeds than that drilled in. In this case a larger application of fertilizer sown broadcast or drilled in when the ground is being fitted will give good results in the average season. One hundred pounds per acre is a rather light application, but where planted with a horse planter with fertilizer attachment little more than this is gotten on, and yet it appears to make quite a difference in the early growth of the corn. However, if the corn is planted with a grain drill as suggested, and the fertilizer distributed through three drill hoes, an application of say 200 lbs. per acre would not injure the seed, and would doubtless be profitable.

There is just as wide a difference of opinion regarding the right quantity of seed to use per acre for a maximum crop of corn, as there is regard-

ing the best method of it would probably be a safe proposition to gested in this inquiry, would appear to tried to grow alfalfa without much suc- planting. However, for a maximum crop field both grain and roughage being con-



A Neat Cottage with Concrete Foundation on a West Michigan Fruit Farm, Home of Theodore J. Smith.

seed in August on a well prepared seed be a good preparation for the alfalfa crop, cess for a number of years, and will again of grain about four quarts per acre of bed. In experiments conducted some but we believe it would be more profit- sow eight acres this year on ground where average corn is generally considered about years ago at the Michigan station to de- able to utilize the pea crop by pasturing a partial stand was plowed down last right. However, where the object is to termine the best time to sow alfalfa, it it with hogs, or hogging it down, as it is year. Lime will be applied liberally to produce a maximum of feed from the was found that there appeared to be no commonly expressed where this practice determine the benefit to be derived from With plats of seed sown each is followed, and sow to alfalfa the follow- liming for this crop on our soil. We ex- sidered, it is ne at all certain that more month during the season, early seeding ing season, since it would be difficult to pect a much better inoculation of the seed than this cannot be profitably used. was found to be preferable in some sea, plow down this crop of peas and make plants because of the fact that the scat- In other words, if one kernel is dropped sons and late seeding in others. So the the proper seed bed for the alfalfa and tering plants plowed down were plants each foot in the row the stand will be question of when to sow alfalfa seed re- get the latter in sufficiently early to make that had been inoculated in a natural plenty thick for a maximum crop of grain. solves itself into one relating to the con- a proper growth before the winter. Then way, and the cultivation of the land last But it will be difficult to get such nice dition of the soil and weather more than the peas which would come up after season will, we believe, scatter the bac- distribution as this with a grain drill,

fertilizing the land, while the plan which man who tries to grow it, whether he and plant with hand planters than to rom the field the first season. doing good missionary work. As before tribution that can be secured with the The growing of a crop of peas as sugnoted in these columns, the writer has grain drill where the corn is rowed only

hence the above opinion regarding its use rake them before the leaves become toe you plant a field with a horse check row for planting corn.

When to Plant Beans. I would like advise through the col-umns of The Farmer in regard to plant-ing early beans. I have a field of low, sandy land which the frost hits early. I was thinking of planting the middle of May, but some say the frost will kill them in June. Would it be advisable to plant at that time or wait until the first of June? Joseo Co. R. H. S. Of course, only one accurated with the When to Plant Beans.

Of course, only one acquainted with the local conditions could advise intelligently seed, wait before cutting, until the pods deal to do with the manner in which the as to when would be the best time to plant beans on this low land. It is, however, much preferable to take a chance take is the best machine to cut the plants put into beans, which has been badly run, on an early frost than to plant so late with, but an ordinary mower may be I should certainly use fertilizer, and I that there is a prospect that the frost 1sed. Always mow them while the dew would want to plow the ground some will catch the crop before it matures in the fall. It is, of course, not pleasant to anticipate having a crop frosted in the the dew is still on. Let them lie in wind early, long before you want to plant the spring when it first starts, but in that rows or small shocks until the grain is beans, and get it mixed with the soil. case there is the alternative of re-plant-ing it or of growing some other crop on required before threshing depends upon tilizer broadcast and work it into the this ground, while if it is not planted until late and the frost catches the crop may be several weeks. For threshing, before it matures in the fall there is no a regular bean thresher is best, but an remedy, and the season's work will be almost a total loss. For this reason, it would be better to take a chance upon as early planting as is at all safe on this kind of land.

THE CULTURE OF SOY BEANS.

Please advise me regarding the cul-tural methods best to employ in growing soy beans in Michigan. Calhoun Co. SUBSCRIBER.

Soy beans require conditions and cultivation similar to those required by corn. Good preparation of the soil is necessary. This should consist of deep plowing and working with disk and harrow until a good seed bed is secured, having the upper two or three inches of soil loose and mellow.

Soy beans should be grown in rows and given sufficient cultivation to keep down weeds. Sometimes they are sown broadcast, but we do not recommend this We plant durs with a corn method. planter, using bean plates, and setting wheels and hoxes 30 inches apart. Some growers report good results from the use of a grain drill with all holes excepting those desired, stopped up. The rows should be from 30 to 36 inches apart, with one seed every two inches. Cover not less than an inch and a half and not more than two inches deep. Too deep planting often results in poor stands.

If soil is full of weeds, cultivation may begin as soon as the seed is planted. If it is desired to run a weeder or harrow over the field, it must we done before the plants sprout much, as the young cotyledons or seed leaves are very tender and easily broken, and the entire crop may be ruined by harrowing after the plants have started to grow. After they come up, cultivate as you would corn.

Soy beans may be planted from early spring until mid-summer. If wanted for grain, plant at corn-planting time. For hay, they may be planted later, and if a catch crop is desired, they may be planted still later.

Good seed is of great importance. Sov beans are apt to be low in germination unless the seed is fresh and has been properly stored. It is well to germinate all seed before planting.

Inoculation Necessary.

It is important and necessary to inoculate the soil. This may be done by using soil from an old soy bean field, or by using the pure cultures furnished by the Department of Agriculture. If soil is used, apply from 200 to 300 lbs. per acre. This soil should be applied late in the afternoon or on a cloudy day, as bright sunlight will destroy the inoculation bacteria. The soil may be mixed with several times its weight of ordinary soil, and either drilled or broadcasted, harrowing in if the latter method be employed.

or poor clay, black or sand, limestone or freestone, dry soils or well drained soils. They will stand wetter soils than most crops, and will do well on poorer soil than corn, provided the soil has been inoculated.

is desired, the plants must be cut when half or more of the pods are fully grown. but before the beans begin to harden. In a bulletin on this subject issued by the Department of Agriculture, it is stated that cutting should begin after the dew is off the plants in the morning; that the plants should be allowed to lie in the hill. swath until the leaves are well wilted, but that great care should be excreised to

dry and brittle. The hay should be left planter or with hand planters. If you in with a grass or canvas cover.

THE MICHIGAN FARMER.

turn rather brown, but do not let them job is done. get too ripe, or they will shatter. A self On this 25 acres which you intend to is on, working two or three hours in the time before I intended to plant and get it forenoon. Next morning rake them while well worked up, and apply the fertilizer the weather, and may be one week or ordinary thresher with the concaves re-moved does fairly well. When growing beans for seed a regular bean thresher should be used, as the common thresher splits many of the beans, making them worthless for seed, although they may be used for feed.

One of our correspondents reports good results from ricking the beans, allowing them to go through a sweat, and then threshing them.

Soy beans heat easily, so if they are grown for seed, they must be allowed to get as ripe as is possible, consistent with avoidance of waste, and must be carefully guarded against heating. After threshing, as not pile the grain up nor place it in bins, but let it stand in the bags for a few weeks and do not allow it to become damp.

CHAS. B. WING. Ohio.

SOME CORN QUESTIONS.

Fertilizer for Corn. I have one field of 18 acres, fall plowed, it was a June grass sod and I want to put it into con. It base not been plowed before in four years. The soil is black sand and gravel loam, some stony. Would you advise using fertilizer? Would it pay? Would you plant with horse or hand planter? Then I have about 25 acres of gravel and sand loam which has been run for years and never anything; put back. It is covered with a tough wire grass and some places, where quite gravely, is bare, with moss on top of ground. I was thinking of putting it to beans to try and kill the grass, so as to get it seeded to clover. Then I have a field of 40 acres on which I sowed three pecks of rye and onc peck of mammoth clover per acre last fall with 300 pounds of fertilizer. I am afraid I put it in too deep, as the clover seems quite thin. Is there any-thing I could do to help it? What do you think of soy beans and how do they plant them, in hills and cultivate, or drill twant to make a sheep farm of it. Osceola Co. W. C. M. My experience with fertilizer on com

My experience with fertilizer on corn warrants me in advising you to use fertilizer on this field of timothy sod. Of course, no one can assure profitable re-I have faith enough in fertilizer turns. so that I shall use it myself on an old timothy sod and I shall be very disappointed if I do not get profitable returns. My opinion is that, with a favorable sea. you would be well satisfied. There lizer. son, are two different methods of using fertilizer on corn. One is to fertilize in the hill and the other is to fertilize broadcast and harrow it into the soil before the corn of good fertilizer to the acre, broadcast. Then if you plant with a check row corn 100 lbs. of fertilizer to the acre in the

Horse Planter or Hand Planter. It makes but little difference whether

in windrows for a day or two, and then have a good check row planter, one man put into small cocks. Three to five days with a pair of horses will plant ten acres of good weather should be sufficient to of corn a day, while it takes more men make good soy bean hay. When the hay and longer to plant with hand planters. is dry, it should be put into a shed or If the hand planters work good, and the made into good-sized stacks. Soy bean men take a little pains in planting, I think hay does not shed rain well, and if left that you will get a little better job done the open field, it should be provided with a hand planter than you will with a check row planter, although here again If soy beans are grown for grain or the man who runs the planter has a great

soil. When a fertilizer is sown broadcast and worked into the soil, you get a better distribution, and distribution amounts to a great deal in getting results with commercial fertilizer. I do not see how you can do very much to increase the stand of mammoth clover in the rye. Possibly it is thick enough if the clover all lives and will make a good stand later on. You can tell better after you harvest the rye. If, then, you find you have a fairly even stand, you can encourage its growth very much by top dressing with barnyard manure. If, however, after you have harvested the rye, you find that you haven't a very good stand of clover, I think the best plan would be to disk the ground with a disk harrow thoroughly and harrow it with a spike-tooth harrow, use a roller if necessary to prepare a fine seed bed, and seed to clover alone without any nurse crop, using 200 to 300 lbs. of commercial fertilizer to the acre. You will then have a chance to get a good crop of clover for next year.

Soy Beans or Canada Field Peas.

Soy beans are an uncertain crop in this climate. In a hot, dry summer and on a warm, dry soil one may get a good crop of soy beans, but they are not reliable. Canada field peas are perfectly reliable in this climate. We are practically sure of getting a crop. They really ought to be sown early in the spring. It is getting pretty late now to be assured of a good crop. But even at this late date for sowing Canada peas, I think the crop would be much more reliable than soy beans. To be sure, I don't know so very much personally about soy beans because I never tried to raise them but twice in my life. Both times were failures. It is a pretty safe plan, always, to raise new crops in an experimental way. Put the major portion of this field in Canada peas, and put a small portion of it into soy Then if they are not a success, beans. you don't lose very much.

It is a pretty safe proposition to experiment with all new things. If you are not confident that you will get money back by using fertilizer on the corn, and on your beans, I would leave at least a strip through the field where I didn't put any fertilizer as a check so that I could have an idea of just how much benefit I did get out of the ferti-COLON C. LILLIE.

FITTING CORN GROUND.

I have carefully read the articles on is planted. A combination of the two the corn crop, and I notice that most evmethods gives the very best results, but ery one advocates thoroughly working I have quit fertilizing in the hill for my- the ground before planting. A good deal self and apply the fertilizer broadcast depends on the kind of soil that is to be with a fertilizer distributor or with a planted. On sandy soil I think the best grain drill, harrow it in, and then plant way is to not plow until time to plant, the corn. There is no doubt but what a and plant as soon as fitted. And on melgreat majority of the fertilizer used on low land, in general, all that is necessary corn is used in the hill. This largely is to roll after plowing. All the time comes from the fact that it is easily ap- spent in harrowing and cultivating before plied because the most of the corn is planting is time wasted, which, in these As stated in a previous article, soy planted with a check row corn planter times of scarcity of help, should be carewith a fertilizer attachment, and the fer- fully avoided. The crop needs cultivat-tilizer can be applied at the same time ing, and the weeds can be destroyed at the corn is planted without any extra ex- that time. I have read that, if it were pense. However, if you would use a good not for weeds to be destroyed, very many disk drill in distributing the fertilizer be- times the corn would be neglected. Fifty for you plant the corn, you have wasted years ago I lived neighbor to a farmer no time because the disk drill helps to who never dragged his corn ground, simgrain begins to ripen, therefore, when hay prepare the land for the corn by helping ply rolled it, then marked and planted. to make a good seed bed, and no time is He always had good corn. I think his lost. I should use not less than 300 lbs. crops were as good as any we have now. My method of saving seed corn is to

leave husks on the best ears when huskplanter with a fertilizer attachment it ing, braid 12 to 16 ears together, and tie would be a good thing to put on about ends of the braids, then hang them on wires in the barn. In this way I have never failed to have good seed when the crop got ripe.

Shiawassee Co.



B. S. FOSKET.

HEIDER MFG. CO. Dept 27

CARROLL - IOWA

ASK YOUR

The Tenderfoot Farmer



It was one of these experimental farmers, who put green spectacles on his cow and fed her shavings. His theory was that it didn't matter what the cow ate so long as she was fed. The questions of diges-tion and nourishment had not entered into his calculations.

It's only a "tenderfoot" farmer that would try such an experiment with a cow. But many a farmer feeds himself regardless of dig stion and nutrition. He might almost as well eat shavings for all the good he gets out of his food. The result is that the stomach grows "weak," the action of the organs of digestion and nutrition are impaired and the man suf-fers the miseries of dyspepsia and the agonies of nervousness.

To strengthen the stomach, restore the activity of the organs of digestion and nutrition and brace up the nerves, use Dr. Pierce's Golden Medical Dis-covery. It is an unfailing remedy, and has the confidence of physicians as well as the praise of thousands healed by its use.

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THE MICHIGAN FARMER.

SUBDUING QUACK GRASS.

I read with much interest in your colviz., furrow, making furrow 14 inches deep: then one furrow of subsoil until done. side to accommodate the cattle. This gets the roots out of the way of the harrow and cultivator, and buries them, thus keeping them from spreading. 1 planted the field to corn not expecting to get much of a crop on ground doubleplowed. Imagine my surprise to find shocks 8x8 yielding from 21/2 to 3 bu. of ing an alleyway on the cattle side to give corn. The quack failed to show up by access to the sheep stable in the new husking time and I think the job is fin- addition, and providing a chute for throwished. I worked the ground with thistle ing down hay directly into the latter from sweeps to make sure business. Do not the mow above. think there is any prospect of the quack on a large area, but I very much prefer are finally decided upon. dealing with the stuff this way, as the roots are where they can do no harm from working the ground. JACOB BRUDI. Kent Co.

USING THE ROLLLER.

likely to get careless about the prepara- ing contract beans last year might be of tion of the seed bed. About that time we begin to think that the harrow will do the work well enough without the roller, this state, that were very badly affected Sometimes it will; at other times it will with bean anthracnose according to Dr. not, because the seed bed often needs a Beal, of M. A. C., and officials of the

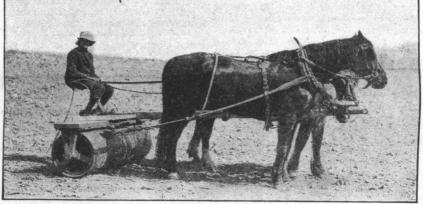
part 30x30 feet for sheep, which would accommodate a flock of 60 average sized sheep. If the sheep are of a large breel umns recently in regard to subduing they would be crowded a little too closely quack grass so will give a plan I followed and not too much room would be allowed last year. I double-plowed the ground, for the horses and cow stables and an start on one side of patch, haw alley in the 30 feet of width. This proaround and plow a furrow on the other vides no room for the storage of grain side, taking care to keep away from the which would seem to be a mistake, but quack; then let wheet run in bottom of if room were not required for as many cattle as above mentioned, a grain bin Then plow alternately one round of quack could be placed next the barn floor on the

> Possibly a better arrangement could be secured by leaving the floor in the old barn where it now is, using it as a feeding floor as well as a driveway, and arranging the horse and cow stables crosswise of the barn on each side of it, leav-

The cost of remodeling such a barn decoming on this season. I intend to sow pends so much upon local conditions, cost to oats, followed by wheat and seed to of labor as well as materials, etc., that it clover, cut the clover one year then give would be impossible to give an intelligent it another cultivated crop. I have tried estimate. This will be more easily figdigging out roots before but made no ured by getting a mechanic to make out headway. My plan may not be practical a bill of materials as soon as the plans

SEED BEANS AFFECTED WITH AN-THRACNOSE.

As it is getting pretty near time to begin preparations for bean planting I thought that a word of warning from one In rush seasons we generally are a little that had some sad experience in growsome use to my fellow farmers. I grew a field last year from seed furnished in



The illustration shows the smooth roller in use on an oat field, one in which the helps when you have the time to do it. Ohio. CLYDE A. WAUGH.

REMODELING A BARN.

Will you kindly advise me through the columns of the Michigan Farmer about the remodeling of my barn. The barn is now 30x40 ft., and I want to put 30 ft. on the end, also put a hip roof on and side it over. I thought the old siding would do for roof boards. Will have to buy ev-erything as it is too late to get material from the woods. Want a horse stable for six horses to run lengthwise of the barn and cattle stable on the other side run-ning the same way as horse stable, with an alley between to feed from the drive-way. Then I want a sheep shed on the other end of barn and a mow between the sheep shed and driveway. Will want to sheep shed and driveway. Will want to keep about 60 sheep. Would like to know how large to have stables, mow and driveway. What is your estimate of build-ing or remodeling such a barn? Oakland Co. W. D. L.

In remodeling a barn of this kind, the worked out are rather more difficult than where one is building a new barn which can be planned accord probably be better to put the barn floor in the end of the old part next to which the new addition is to be built. If a 40-foot barn, 28 feet would be left to accommodate the six horses on one side and about eight cattle upon the other. This would allow stalls about four feet wide in the clear, which is pretty narrow for large horses, but if one box stall is used will provide for the horses that must be not vary much, if any. accommodated. This would leave the new

little firming, aside from having the clods Bureau of Plant Industry at Washington. broken up. As a clod crusher, we like I sent each of them a sample of the the T-bar better than a smooth roller, growing beans and also of the matured crop. I never had a better showing for a bumper crop until the pods were about corn had been hogged down the year be- half grown, when the disease developed fore and we were a bit afraid of the oats to a very great extent so that I only hargoing down. Rolling small grains usually vested seven and one-half bushels to the acre, which were threshed and sent to the firm as per contract. Now, who will get these beans this year? Is there a state law making seedsmen liable for sending out diseased or imperfect seed or have we farmers got to take our own chances? Ingham Co. H. WILSON.

LEVELING A TILE DRAIN.

In reply to C. S., in the issue of March 12, page 261, in regard to leveling a tile drain through a bank or ridge, let C. S. try the following plan: Cut a number of stakes to come on a level with your eyes, standing erect, next find the depth you wish to put your tile at the opening or outlet, and drive your first stake to that depth. Next find the depth at farthest end of tile and drive a stake to that depth. A few feet beyond that point, tack a piece of white paper four inches square, at the top of stake, on side toward open end of trench. Take a board six inches wide and a foot longer than ing to one's needs. In remodeling this stake and drive it 10 feet beyond last barn after the plan suggested it would stake, letting it project one foot above both stakes. Paint a black spot at top end of board two feet long, on side toward open end of tile. This gives a back-12-foot floor is taken off the end of the ground to sight against. Next cut a light lath, or strip, the same length of stakes to put in bottom of trench to sight over. Then fill out the space between the two stakes with as many stakes as needed, get top of stakes all on same level. Now commence digging at open end and use next the barn floor room would be left strip, held at arm's length, to sight for four good-sized stalls and this would across. In this way one should be able probably be a better arrangement, if it to get a level bottom for many rods and Clinton Co.

S. W. STROUSE.



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A lways mention the Michigan Farmer when writing to advertisers.



In the past few years I have tried a great many egg preservatives, both simple home preparations and chemical preparations. Common salt, which is one of the old materials used for this purpose, made a complete failure for me. In fact, in late summer I found ordinary storage packing in salt. When eggs are placed in stated that it is well to breed related make a search for her in the old hive. salt, if the shells touch one another they stick together and break.

I gave waterglass, (sodium silicate), a thorough trial last year and find it much more efficient than any preparation I have ever tried. Government tests have also proved the value of this chemical as an egg preserver. Farmers' Bulletins Nos. 103 and 128, U. S. Department of Agriculture, are devoted to this subject. Experiments conducted in Scotland, proved that eggs preserved in sodium silicate one year undergo practically no change at all. Those kept two, three or more years did undergo a change, the white taking on a slightly pinkinsh color and having a slight soda smell, though upon eating it is said they had no disa-greeable taste. Repeated tests have proven that eggs preserved in sodium silicate for less than a year are of far superior to ordinary cold storage eggs.

We must not expect sodium silicate to make bad eggs good, however. We must select fresh eggs. Then when we sell them we can guarantee them fresh, so far as quality is concerned. I experimented on a small scale last fall by putting down 18 or 20 dozen at 20c per dozen. That is, they were then worth to 36c per dozen in late December, and the cost of packing did not exceed 2c per dozen.

If the dealer can store eggs at a profit, why can't the farmer and poultryman? This will keep the eggs off the market in the rush season, and prevent such low prices. Then when high prices prevail the farmer can enjoy the benefits as well as the packer.

For short periods of preservation I recpart, to 20 parts of boiled and cooled among the Wyandottes. It might be said, water. Prepare this mixture and pour it further, that the Wyandotte is commonly over the eggs, which should be placed in stone or earthen jars or wood tubs. When the are to be kept for a year or more the eggs should be placed points down, but I do not think it necessary to thus place them for as short periods as four to eight poultry in paying quantities. months.

Remember that only fresh eggs should be put down, and care should be taken also originated the White Wyandotte. The that none are cracked. If the eggs are idea of developing a new variety came to to be cooked by boiling after taken from the preparation, a small hole should be pricked through the shell. Otherwise the expansion of the egg will crack the shell, mage was similar to that of the Light The preparation seals every pore in the shell, thus practically "canning" the egg.

The cost of sodium silicate depends upon where you purchase, 25c per quart being a very reasonable price. I find a barrel sawed in two makes two tubs that are just about right for packing. I wouldn't However, it seems to be generally underfill a barrel full of eggs for fear the bot- stood among breeders that while the Coltom ones would be broken by the weight. umbian Wyandotte has the plumage of the consumer, should study this method of egg packing, for at a cost of less than 2c per dozen eggs can be held from the judiciously intermingled with that of the 12@15c per dozen price of summer to the 35@40c per dozen price in winter. Where have you a better chance for investment? O. R. ABRAHAM. Indiana.

COST OF A START IN PURE-BRED POULTRY.

I desire to say a few words on a quesin pure-bred poultry and also the one who does not but who feels that he can-\$2.35 per 100 for the eggs from pure-bred which, briefly, is as follows: stock, and that is all the man or woman who makes a specialty of pure-bred poul-

dinte.

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THE MICHIGAN FARMER.

find that my eggs sort about half. fowls for three or four generations and then bring in some new blood; also that in the new hive the old box hive should the practice of introducing new blood be turned right side up and allowed to every year, which the farmer often en- remain a few feet back of the new one deavors to do by getting a new rooster, practically prevents improvement of the our practical poultrymen on this question. A SUBSCRIBER. Barry Co.

IN ANSWER TO INQUIRIES.

The Columbian Wyandotte. Please describe the Columbian Wyan-dotte breed of chickens. Are they good layers, and how do they dress? Where and by whom were they originated and from what crosses? How heavy should they be? Kent Co. FARMER.

In the typical specimen of this variety we have a fowl of the Wyandotte size and conformation but possessing the plumage of the Light Brahma, with the exception that the legs and feet are clean. The admirers of this comparatively new variety emphasize strongly its general utility, claiming that it has few if any superiors in this regard. As layers these fowls rank with the best in the Wyandotte family, while the Wyandotte size and shape, with 20c per dozen. These eggs sold readily at the yellow legs and skin, make them very attractive as market fowls. The variety appears to be rapidly coming to the front among Wyandotte breeders, the peculiar beauty of the fowl making it a favorite with fanciers, for it must be admitted that there are few handsomer fowls. Some exceedingly fine Columbians were seen at the last state poultry show in Detroit where they commanded fully as much attention as any other class.

As to their laying and market qualities ommend waterglass (sodium silicate) 1 we have said that they rank well up classed as a general-purpose breed, along with the Rocks, Reds and Orpingtons. In other words, they are classed among those breeds best suited to the general farmer who desires both eggs and market

Credit for originating this variety has been given to a Rhode Island breeder who him when, from an accidental cross of a White Wyandotte and a Barred Plymouth Rock, he secured two pullets whose plu-Brahma. He mated these pullets with a White Wyandotte cockerel, but from this point we have been unable to find a record of the long series of matings and crossings which were undoubtedly necessary to the perfection of this variety. Every farmer, every poultryman, even the Light Brahma it carries no Brahma blood. Wyandotte blood, principally that of the White and Silver Laced varieties, Barred Rock, is believed to have resulted in the development of the Columbian Wvandotte.

This variety was admitted to the Standard of Perfection only a few years ago and we are not informed as to the weight requirements but presume they are the same as for other Wyandotte varieties, which are: Cock, 81/2 lbs.; hen, the man who deals 6½ lbs.; cockerel, 7½ lbs.; pullet 5½ lbs. Transferring Bees.

not afford to buy eggs at the rate of 75c ple method of transferring bees. In their to \$1.00 per sitting or \$4.00 per 100. Now present quarters the combs are crooked there are 8% dozen eggs in 100. If this and criss-crossed and he wants to get man sets his own eggs, at the present them into modern hives. Probably the price of 20c per dozen they will cost him simplest way of making such transfers is \$1.65 per 100. He would, then, be paying by what is known as the Heddon method,

First, prepare the new hive, putting in a liberal supply of frames of wired fountry gets for the care and pains required dation. Then get ready to handle the in improving the flock each year. Not bees and light the smoker. Move the old only are extra care and feed necessary, hive back a few feet and set the new one but the eggs must be sorted, for the in its place, spreading a sheet or pieces breeder cannot sell eggs of all sizes, of paper in front of it as for hiving a shapes and colors for hatching. If he did swarm. Then you will need a box about he would get few return orders. From 10 or 12 inches deep with one side open.

the eggs produced are suitable for filling open side will fit the bottom of the old orders. From experience I know that in box hive from which the bees are to be order to give satisfaction when selling taken. Quickly invert the hive, first driveggs for hatching it is necessary to take ing the bees upward by puffing in a little great pains in selecting eggs of uniform smoke, and fit over the open bottom the size and color. The very large and very box described above. Then pound the small, and all ill-shaped eggs, are either sides of the hive until something more consumed at home or sold to the grocer. than half of the bees pass up into the I couldn't guarantee a big egg, that is, an box. Gently remove the box of bees and uncommonly large egg, to hatch, nor pour them upon the sheet in front of the could I guarantee an ill-shaped egg to new hive. As they begin to enter the be fertile or to hatch a robust chicken. I hive you must watch for the queen as the success of the job depends upon get-I recently read an article on inbreeding ting her into the new hive. If you fail in a cool, dark room quite as efficient as in which an experiment station expert to discover her it will be necessary to

When satisfied that the queen is safe with its entrance facing at right angles to its former position. The remnant of flock. I would like to hear from some of the colony remaining in this hive will go on and hatch out the brood which it contains, for which purpose they must be allowed to remain at least three weeks. At the end of that time invert the old hive again and drive the bees into the hiving box as before except that this time it is desirable to get all of them. How ever, before pouring these bees in front of the new hive it will be necessary to smoke them and also to blow smoke into the new hive; otherwise there will be serious fighting when the late comers enter the hive.

This completes the operation except the cleaning up of the old hive. It will probably contain a little honey and some drone brood. The honey can be extracted or used as chunk honey if fit for use. The rest can be converted into wax and the hive will probably do for kindling. Modern hives and fixtures are not very expensive, and every bee owner should rea lize that his bees will not be able to give him satisfactory returns until he gets them into quarters in which they can be handled to advantage.

WHY HONEY VARIES IN COLOR AND FLAVOR.

One cause of the idea, which still pre vails to a great extent in the city, that much of the comb honey is adulterated, is the fact that there are perhaps hundreds of different flowers which produce honey, no two of which are of exactly the same

flavor, and varying also in color. Among the white honey-producing plants are the following: Willow herb, basswood or linden, clover, raspberry quajilla, mountain sage, alfalfa, Canada thistle, orange, horsemint, catclaw, cot-ton, Rocky Mt. bee plant, sour wood, gallberry, bellflower, logwood, milkweed, apple blossom and many others, all of which are classed as white although they vary slightly in color. Willow herb, qua-jilla and catclaw honey, for instance, has a water-white color, while apple blossom is light golden. Southwestern alfalfa is slightly amber, and some of the clover honeys have a very slight pinkish tinge. Generally speaking the southern honeys are darker in color than those pro-

duced farther north. Some of the amber honeys are made from the aster, goldenrod, boneset, queen of the meadow, heartsease, wild sunflower, Spanish needle, sumac, magnolia and marigold.

Buckwheat is the most widely known source of the dark honeys, and perhaps the only one which has ever become popular as a table honey. It has a very strong flavor, displeasing to the taste of most people who are used to the lighter grades of honey. But it is much in demand in the east where that is the principal honey produced in many places. Poplar and whitewood produce a dark honey of very inferior taste.

Considering the great variety of flavor and color, (I have named only a small proportion of them), is there room for wonder that people uneducated as to the sources of honey should come to the con-An Isabella Co. reader asks for a sim- clusion that much of it is adulterated? Mecosta Co. L. C. WHEELER.

A Poultry Advertiser Says:

TRAINED FOX HOUNDSiand Hound Pups for hunting fox and coond. Also Collies. Inclose 2-cent stamp. W. E. LECKY, Holmesville, Ohio Louis T. Oppenlander, Lansing, Mich., who has been advertising S. C. Brown Leghorns, writes: "My ad. in your paper has been very satisfactory and has brought me a nice lot of business." Collie Puppies sable with white markings thirty to-day for prices. W. I. BOSS, Bochester, Mich.



tions, Foundation, Bee Veils, Smokers, a complete line of supplies for bee keepers, ready immediate shipment. 40-page catalog, free. Bees Wax Wanted. A. G. WOODMAN CO., Grand Rapids, Mich Sections, Foundation, Be for immediate shipment

7.55 Bays Best

140-Egg Incubator Double case all over; best copper tank, nursery self-regulator. Best 140 chick brooder, 84.50. Both or-paid, No machines at any price are bettor. Write for both oday or send price and are waiting. Satisfaction quesented We ship quick from St. Paul, Buffalo BELLE CITY INCUBATOR CO., Box 14 Racine. Wis **KEEPERS' SUPPLIES. B**E Hives, Sections, Foundation, etc. Everything for the bees. Beeswax wanted. Send for catalog. BERRY BASKETS. Order your bee supplies and berry baskets at same time and save treight expense. Prices given in catalog M. H. HUNT & SON, 110 Condit St., Lansing, Mich. BEEKEEPING its pleasure and profits, is the somely illustrated magazine, GLEANINGS IN BEE CULTURE. We send it for six months on trial for twenty-five cents, and glso send free a 64-page book on bees and our bee supply catalog to all who name this paper. THE A. I. ROUT Co., Box 54, Medina,O. Lay or Bust-SEND FOR OUR Teils how to make your heus "Lay or Bust," also about our wonderful "Lullaby" Brooders, costing only \$1.50 delivered to you. This book is worth one collar, and costs you nothing but a postal card. The Park & Pollard Co., 46 B, Canal St., Boston, Mass.

ECGS FROM ANY OF OUR PENS \$1 per 15 or \$4 per 100 on orders to be delivered after June 1. H. H. KING, Willis, Mich. EGGS from pure Toulouse Geese 10 for \$1.75 Pekin Duck Eggs 11 for \$1.25 Mrs. Amy Southworth, R. D. No. 13, Allen, Mich. EGGS FOR HATCHING-Light Brahma, White Wyandotte and B. P. Rock, \$1 a setting; \$1 50 for 2 settings. E. D. Bishop, Route 38, Lake Odessa, Mich.

BARRED PLYMOUTH ROCK eggs for hatching from selected breeding pens; 15 for \$1.00, 26 for \$1.50, 50 for \$2.50, 100 for \$4.50 COLON C. LILLIE, Coopersville, Michigan. C. W. LEGHORNS-Eggs 15, \$1; 100, \$4.50. • Buy of the man that perfects one breed only. GILMAN A. GREEN, Clarkston, Michigan. S.

My S. C. Brown Leghorns Lay Eggs. '96 cts per 15 dred. W.M. J. COOPER, Mt. Pleasant, Michigan. WHITE PLYMOTH BOCK EGGS \$1 for 15, \$1.50 for 30, \$2.50 for 50. From birds of best quality. BRUCE W. BROWN, Mayville, Michigan.

S. C. BROWN LEGHORN EGGS \$1 per 15; \$5 per S. 100. Order from this "ad." LEWIS T. OPPEN-LANDER, successor to Fred Mott, Lansing, Mich.

WHITE WYANDOTTES-The unsurpassed business hen. Eggs \$1.50 per 15 or \$2.50 per 30. A. FRANKLIN SMITH, Ann Arbor, Mich.

SINGLE COMB WHITE LEGHORN eggs for hatching at following prices: 15 for \$1.00, 26 for \$1.50, 50 for \$2.50, 100 for \$4.50, COLON C. LILLIE, Coopersville, Michigan. KEITH makes a specialty of S. C. Brown Leghorns, Barred Plymouth Rocks and Pit Games, Eggs \$1,00 per 15. Albert Keith, Wyandotte, Mich. THE best in S. C. White Leghorns, White & Buff Rocks and Columbian Wyandottes. Eggs \$1,25 per 15; \$5 per 100. C. W. Hurd & Sons, Davison, Mich. R. C. WHITE LEGHORN EGGS, from hens bred to lay. \$1 per 15; \$5 per 100, Also Collie pups. A. B. GRAHAM, Flint, Michigan. R. C. and S. C. Rhode Island Red Eggs \$5.00 per 100, BUELL BROS., Ann Arbor, Mich.

STANDARD BRED R. I. REDS both combs. Eggs \$1 per 15, from selected winter layers; \$3 per 50, or \$5 per 100. Satisfaction, and safe arrival guaranteed. W. T. FRENCH. Ludington, Michigan. C. R. I. Reds-Stock selected from the best layers N. for years. Great egg record, Farm range. Eggs 15 \$1; 100 \$5. F. M. Knapp, Berlin Heights, R. 1, O. Rhode Island Reds and White P. Rocks Eggs For guaranteed. HOWARD COLBY, Dentons, Mich.

"RINGLET" Barred Rocks. The Famous Winning Strain Eggs \$1.50 per 15 from Select Matings. Stock for sale. Plainview Stock Farm, J. W. Saliard, Prop. Romeo, Mich 40, \$2; 15, \$1-Smith select eggs, good measure from world's white, R, & S. C. Br. Legh's; FK DEs; bred to win lay & pay. Strong baby chit life ench. Years of experience. Poultry my busi-ness & study. Circ. W. J. CRAWFORD, R. 4, Frazeysburg, Ohio

HUPP FARM EGGS. Barred Rocks, Pekin Ducks, \$1.50 per setting, select strains. Drawer A. Birmingham, Michigan,

"MONEY IN EGGS" C. Brown Leghorns-My method and farm range as developed layers with vigor. My eggs produce yers, one-third fancier's pilce and better layers. 50 per 30; 39 per 60; 34 per 100; 46 per 200. Promus has developed in fancier's pire and a prompt layers, one-third fancier's pire 200. Prompt \$1.50 per 30; \$3 per 60; \$4 per 100; \$6 per 200. Prompt shipment. J. E. McARTHY, Enfield, Illinois, shipment. J. E. McARTHY, Enfield, Barred Rocks, Barred

White, Golden, Silver Wyandoites, Rhode Islar Reds, S. C. and R. C. Buff, White and Brow Leghorns, Silver Spangled and Penciled Hamburg Eggs \$1.50 per 15. Pure bred, free range floci \$5 per 100. All varieties Duck and Geess Egg Turkey Eggs. E. J. HASKINS, Fittsford, Mich. Island mburgs e flocks e Eggs, S. C. BLACK MINORCAS-Some choice cock-erets and a few yearling hens to spare. Eggs 22 per setting of 15. R. W. MILLS, Saline, Mich.

White Wyandotte eggs for hatching from select breeding pens; \$1.00 for 15, \$1.50 for 25, \$2.50 for 50 and \$4.50 per 100 COLON C. LILLIE, Coopersville, Michigan. Y. B. BRAND-S. C. W. Leghorns. Bred to lay. \$1. per 15; \$5 per 100. C. W. YEITER, Alto, Michigan.

DCGS.



SOME THOUGHTS ABOUT GROWING THE LAMB CROP.

A writer in The Farmer of April 30 says upon the subject of growing the lambs well, that the proper time to begin growing the lambs for the early market is as soon as they are dropped. The early feeding of the lamb largely determines its future growth and development, etc

Now this is very good practice surely; but if we are to go in to attain best results and success in this work, let us begin farther down the line and omit nothing that may make success more certain. Let us, rather, begin back a few months previous to this time when the lambs first take on individuality, beginning their short career on earth-mapped out for them by designing minds for making morsels of tender mutton to tempt the palates of people and coax them to part with the price, that pleases and profits the producer.

Let us go back to the ram, isolated and alone; confined in some orchard, small pen or pasture many months of the year through no fault of his own, but compelled by conditions that he finds himself up against upon the average farm. Some may say, "go back still farther to the proper selection of the male and females whose blood we seek to gain the best results." but we assume that this part has been taken care of, and take conditions as we find them on the average farm.

Given the breeding stock to start with, begin here to grow the lamb crop by preparing the material to make them with, and laving the foundation to make conditions most favorable for them to do their best when born. Begin by feeding the ram a little grain regularly each day two weeks or more previous to turning him with the ewes; a light feed of bran and oats, increasing the amount to the limit only of what he will lick up clean, to tone up and fortify his system with sound vigor and vitalize his body with ture imposes in the process of reproducshepherds, supply the ewe flock with increased feed and fresh pasture for the same purpose that increased vitality may be imparted to their progeny from the beginning.

Succulent feed for the ewes during the winter, clean, dry, ventilated quarters with pure water; all these essentials we have no need to mention here, but which common sense beseeches us to observe. and not to disregard, all combine to insure success when the lambs come into being, ready to respond to forced feeding for the early markets, or any intelligent care to suit the desired purpose. Oakland Co. C. B. ATKIN.

BREEDING PURE-BRED SWINE.

The Business Side of Breeding.

The story is told of a certain city man of wealth who had a home out in the country. On one occasion as he was giving a dinner to a party of his city friends, he said: "Gentlemen, which will you have, a glass of champagne or a glass of milk, the cost is the same." This man was evidently not paying off a farm mortgage from the proceeds of his dairy. Sooner or later, in all business enter-

prises, this question must be settleddoes it pay? breeding and management of a The

herd of pure-bred swine is no exception to this rule and, first of all, the man who contemplates going into the business must consider how he can conduct his breeding operations to place his herd on a money making basis.

System must be introduced into the management of the herd. The stock and farm they will form a favorable impres- and states that a neighbor advised him sion of the stock and methods of handling not to feed skim-milk to sows before they them. First impressions are what count farrow. and every effort should be made to create a favorable first impression of the stock lots as uniform as possible in size and the middlings being a well-balanced feed ter whether you are selling to experienced ing this combination so long as the sow buyers of breeding stock or to farmers. has plenty of exercise and feed just suffi-A few runts and inferior pigs will invar- cient to keep her in a thrifty condition fably attract the buyer's eyes and create Potatoes are a rather bulky feed and bulk a bad impression of the better individu- is an important factor in a satisfactory als. Uniformity of appearance is a great ration for brood sows.

factor in creating a favorable impression to buyers of all kinds of pure-bred stock. Have the breeding herd and sale stock comfortably housed in neat and sanitary houses and yards. Keep away the breed. ing boars confined in good strong pens and yards away from the rest of the herd. Nothing will create a more unfavorable impression of your herd than to see young and old boars and a heterogeneous bunch of sows of all ages and sizes running in the same yards and pastures. Buyers wonder, as they have a perfect right to, how accurate breeding records of the herd can be kept when such lax and slipshod methods are practiced in the management of the breeding herd. Have separate quarters on some part of the farm for the poorly conditioned, inferior animals and keep them there, or better still, dispose of them at some price to farmers who are feeding for pork. The Utility of Accurate Records of

Breeding.

A private record should be kept that will show the name and the registered number of every sow, as well as the name and number of her sire and dam, date of service, name and number of the breeding boar that she was mated with, date litter was farrowed, the number in the litter and the number of each sex, how they were marked and a record of the disposition of each pig. In fact, you must have a well-defined system of keeping a record of everything connected with the business and refer to it for information at all times. Keep every animal that is used for breeding purposes registered. If keeping a number of breeding boars keep a record showing the date that the sows are bred to certain boars and make a note of how the sows are to be bred after. Keep accurate records and have the business in shape, so that if you are called away or sickness overtakes you, the man who has charge of the herd can handle the business intelligently. It is a mistake to depend upon your memory for everything and especially to try and identify pigs without having them marked. You may have faith in your ability to know every pig farrowed, but with one hundred or more pigs it is quite apt to be a case of guess work.

A record of all correspondence should be kept, for here is where most of the disputes arise simply because the owner forgot what he wrote, the animal he priced and the way he described it in his first letter. If you keep a copy of your letter and have it to refer to in case of further correspondence or in case of dispute, you know just where you stand in the whole matter and can act accordingly. File each letter received and your reply with it and then attach all of the further correspondence with this buyer or inquirer to the first letter and you have the whole thing in a nut-shell. These records of correspondence are of great value. Many times a breeder can make a more judicious selection of breeding animals for an old customer by consulting his old records. This will enable him to tell at a glance the breeding and type of the animals he sold the enquirer years ago and enable him to form an idea of about the kind of stock that will prove the most beneficial and satisfactory to him at the present time.

A record of the sales that he has made through the various farm and live stock journals that carry his advertising will enable him to secure the best results from the money he invests in advertising his herd. In this way he can save himself many dollars by concentrating his advertising in papers that will bring him the largest returns. The business of handling a fair-sized herd of breeding swine is no very small matter and it requires the best of executive and business ability to put the herd on a sound, money-making basis.

New York. W. MILTON KELLY.

A RATION FOR THE BROOD SOW

subscriber asks if cooked potatoes, their surroundings must be kept in good middlings and skim-milk makes a good shape, so that when buyers visit the ration for brood sows before farrowing,

This is a very good ration for a brood sow. The protein in the skim-milk will and methods of handling them. Make the balance up the starch in the potatoes and characteristics. They will sell much bet- no trouble need be anticipated from feed-



522 (6)

ONE OF NATURE'S SECRETS.

It is pretty well known among stock breeders that in-breeding is apt to weak-, that these uniformly bred European caren the constitution of stock, and yet many riage horses can not produce foals that times it produces the best of results. Just why results should be so contradictory is a question that few, if any, can explain fully, but many are taking a course that results well in most cases although they than that of style. Yet our trotters have can not refer to any law of nature to been bred from a variety of sources and show why they get the good results.

illustrate: A short time ago the pure-bred Brown Leghorn chickens, when experience and observation shows that the breeder remarked that he was not high grade, or cross-bred animals are ofthen breeding to get show ring fowls, but that breeders who did breed for show fowls took males that were darker than standard and mated them with fethe males that were lighter than the standard, producing the finest kind of results. That poultry breeders should select fowls that were off color in preference to those that were up to the standard was a surprise to me, so I asked him to tell why But all the reason he could give was ers. that they did not get as good results with perfectly colored birds as they got by using those that were more opposite in color.

In one of my sheep papers I noticed a remark by one of the most successful Shropshire breeders in New York, to the effect that "many fail with pure-bred sheep because they try to breed both males and females to the same type," and he insisted that the males should have as strong masculine type as could be found, while the dams should be of as distinctly feminine type. Others have taught the same doctrine directly or indirectly.

I recently read of certain running horses used on American mares. These horses were very finely bred, typical race horses, but when bred to the same type of mares they did not get anything remarkable. But when mated with the coarser class of American mares the number of record breakers that were produced was something remarkable.

Many breeders are willing now to admit that the finest bred stock are apt to otherwise. lack some in constitution and that an

lations of her laws by loss of vigor. Men who are furnishing breeding stock to im-prove other stock with, can stand some loss of vitality for the sake of fixing more strongly the good points they are breed-ing for, knowing that the outcross will restore lost vigor. But when it comes to raising stock for the general market we cannot afford to lose much vitality for the sake of getting fancy points. To illustrate: The Southdown and Leicester sheep are the product of the world's noted breeders, and are very uniform and strong blooded, yet they are not as popular as the Shropshires and Oxfords, the product of the common people, though far less uniform and not as strong blooded, yet more vigorous and better able to adapt themselves to popular conditions.

In the American trotter we have another example of a breed that is second to none in quality and vigor. Experts of the United States government are selecting them to start a breed of light harness horses suitable for cavalry use, in spite of the fact that there are several European breeds of carriage horses that are

more uniform and stronger blooded, in the sense of reproducing themselves according to type. Yet the experts state equal those of our trotting bred horses, either in speed or endurance, and the certainty of reproducing speed and stamina was regarded as a more valuable asset in a variety of forms and colors.

illustrate: A short time ago the Now I am not advocating either the was talking with a breeder of "scrub" or the "cross-breed," though my ten better as individuals than some of the pure-bred animals. Yet they cannot be depended upon for breeding purposes, so we must have the pure-breds to produce the high grades, and the influence of a well bred sire is not likely to be over valued. But I believe that the breeder of pure-bred stock should not sacrifice vigor for a fad, or trade valuable qualities for fancy points; and that men that mate they did not use perfect birds for breed- the extremes of their breeds will have more vigorous animals than those who mate animals nearly alike. I would mate coarse, large animals with compact, smooth, muscular animals of the same breed, preferring the large, roomy dam with a compact, smooth sire to a cross the other way. But I would not think of crossing breeds where there was a violent cross, such as draft and road horses or even coach and standard bred trotters or their grades, because I think nothing would be gained in vigor and there would be a loss of speed and other valuable characteristics. There is variety enough among the trotters to keep up their vitality if proper selections are made. Perhaps in crossing the draft horses there that were imported from England and might be gain enough in vitality to make up the loss in uniformity for home use but they would be harder to mate, less reliable as breeders and not quite as saleable as pure-bred or high grades of one breed.

> In short, I think we can have variety enough in most breeds to keep up vigor without breaking up the breed, provided the fancy points are let alone, but not

Isabella Co. F. G. SMITH.

mit that the finest bred stock are dpt to lack some in constitution and that an efficience system is to invigorate the stock, but this they lay to inbreeding, pointing to the number of times the pedigrees 29.
Isabella Co. F. G. SMITH.
Isabella Co. F. F. G. SMITH.

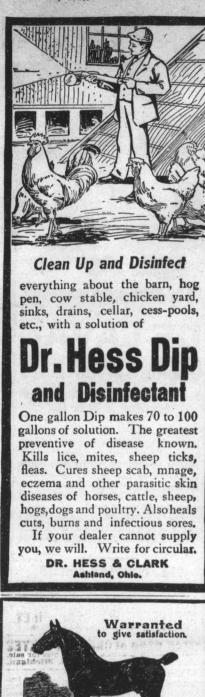
have been selling at \$70@85 per head. Horses have been marketed this year much less freely here than a year ago, many horses having been purchased by dealers in the country direct from farm-ers, while no small number was diverted to other markets. With a good average local and shipping demand, much figher prices have been paid than a year ago, and high figures still prevail, but last week saw sales of inferior animals at a decline of about \$5 per head. Otherwise, prevailing conditions were mainly satis-factory, with good sales of drafters at \$175@275, while wagon horses were pur-chased at \$160@200 and heavy feeders mainly at \$175@225. Farm mares for shipment to Michigan were taken at \$140 @175, breeders being generally wanted. Drivers had a fair outlet at \$150@300. In various quarters there is a disposition to resume breeding, and a more favorable time could not be selected. F.



Michigan Farmer.

MAY 14, 1910.

FOR SALE--10 Reg. Shorthorn Bulls. All goot, reds and roans, from 12 to 24 months old, from the best of breeding at \$75 to \$125 each. Some of them Scotch and Scotch-topped, of the herd heading type. Also, young cows and helfers, all ages. Fifty head in herd. Farm-Two blocks from Lake Shore Station, L, I. BIDWELL, Tecumseh, Michigan.



GOMBAULT'S CAUSTIC BALSAM

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THE MICHIGAN FARMER.

LIVE STOCK NOTES.

A short time ago a Ludington, Mich., firm showed up in the Chicago horse mar-ket at the stock yards with an order for a car load of farm chunks to supply their customers, who are short of horses for breeding purposes and farm work. They stated that farmers who are dependent on purchasing their horses are generally buying mares, with a view of starting in raising their own horses, as prices are now so high that it requires a large amount of farm products to buy a team of desirable farm chunks. About the same time a dealer from Bowling Green, Kentucky, was on the Chicago market with a choice mixed car load of big draft-ers and combination drivers and scd-dlers. A Detroit, Mich., dealer purchased the entire consignment, the lot including an extremely handsome well-matched pair of black Percheron geldings that the entire consignment, the lot including an extremely handsome well-matched pair of black Percheron geldings that weighed 3,400 bs., at \$750. The Michigan farmers have been buying a great many horses this spring, and of late the prin-cipal orders in the Chicago market for farm chunks has been for distribution in northern Michigan and New England states, prices ranging at \$140 to \$175 per head and upward to \$200 for a limited number. number. Colorado lamb feeders are highly fortu-

head and upward to \$200 for a limited number. Colorado lamb feeders are highly fortu-nate this season, and they have been sup-plying the markets of the country with the great bulk of the offerings. Fat stock in the southwest has been reduced to very small numbers by the drought, and as a result of the protracted and severe winter, the "crop" of spring lambs in Missouri, Illinois, Indiana, Ohio and other states had a serious set-back. Michigan, Wisconsin, Illinois, Indiana and Iowa have been keeping western markets bountifully supplied with calves for several weeks, it being the time of the year when dairymen dispose of the "bawlers" to save their milk. There is a good market for them, but the big sup-ply has caused a great fall from the time, weeks ago, when prime vealers sold up to \$10.50 per 100 lbs., the highest figure on record. Many of the calves are mar-keted too soon, not having attained de-sirable size. Eastern buyers of wool are bearish, scoured wools having declined 10 to 12 cents this season, but growers are in no hurry to part with their clip, and at Pendleton, Oregon, the season opened with a sale at 20 cents per pound, fully as high as a year ago. At Boston lately, fine scoured territory wool sold at 65 cents per pound and unscoured terri-tory wool as high as 26 cents. Shearing has been general recently in Utah, Ne-vada, Idaho, Oregon and Washington, but very little contracting has been done thus far, whereas a year ago about 50 per cent of the clip had changed ownership. Own-ers think they should get as high prices as were paid last year, owing to the re-duced clip. There was a drop of three cents a nound several days ago on the Elgin

far, whereas a year ago about 50 per cent of the clip had changed ownership. Own-ers think they should get as high prices as were paid last year, owing to the re-duced clip. There was a drop of three cents a pound several days ago on the Elgin Board of Trade, the quotation falling from 32 to 29 cents, but even that prices was three cents higher than a year ago. The remarkable improvement of the pasturage of the country was given as the reason for the fall in the price of butter. Cows are now pastured, and from now on there will be very little of feeding of cows by farmers. Milk will be cheaper, and hence butter will sell at lower prices in the markets of the country. The butter dealers of Illinois, including the Elgin and Chicago men, are united to fight the pro-posed cold storage bill now before the national house of representatives, and among the interests especially hostile to the measure are the big packers, who assert that the dating requirement of the measure is unnecessary and unjust. The Lodge bill in congress provides that no butter shall be kept in cold storage more than a year and that all goods put into storage shall be plainly marked with the date of their entrance. Sheepmen are disposed to store their spring clip of wool, instead of allowing buyers to fix the price. "Growers should carefully consider foreign market condi-tions before accepting lower prices for their wool clip," says a grower. "Foreign markets are active at the highest prices of the year and home market conditions are not warranted except through causes entirely due to domestic influences. Cer-tainly the new clip will not exceed con-sumptive demands as we will be com-pelled to import wool for a number of years to come. Strike threats and ru-mors of tariff revision may have been de-pressing influences and there are doubt-less many who are honest in the belief that prices of woolen goods in this coun-try are too high to the consumer. My advice is to store wool and not make con-ressions to the dealer that are of a sac-rif ducer this year and dealers show a de-cided disposition to clean up old stocks day. before starting out."

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 allments. 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.

Lumbago.—I have a heifer that has been down and unable to get up for the past 30 days. She is well and hearty. W. J. V., Holland, Mich.—Sell her for beef. Hernia.—My three-year-old colt has a bunch the size of a hen's egg at navel that has always been on her and never done any harm. Would you advise me to have her operated on? C. P., Traverse City, Mich.—You had better leave the colt alone, unless a competent person per-forms the operation for it is not always successful. Mule Has Sore Neck.—I have a mule

successful. Mule Has Sore Neck.—I have a mule that is troubled with a sore neck. He has small boils which appear under the collar and I have been unable to keep him well, although he wears a good col-lar with zinc pad. E. R., Holland, Mich. Clip the hair off and apply peroxide hy-drogen; ten minutes later apply the fol-lowing lotion which is made by dissolving 34 lb. sugar of lead and three ozs. sul-phate of zinc in a gallon of water. Clean the collar every time it is used. Indigestion—Fever.—Every time my

f phate of zinc in a gallon of water. Clean the collar every time it is used. Indigestion—Fever.—Every time my cow comes fresh she has a sick spell which lasts three or four days. She is inclined to eat rubbish as though she did not know what she was doing, and the sick spell leaves her with a cough. J. C. S., Yuma, Mich.—When she freshens give her 15 drops fluid extract aconite at a dose four times a day to keep her from becoming feverish; besides, feed her lightly and keep her bowels open. Surfeit.—I have a horse that is covered with scabs; a few days after the scab loosens the hair drops out. He eats and drinks well, but when working pants; I am told he has water farcy. F. K., Wayne, Mich.—Give a dessertspoonful of Donovan's solution of arsenic at a dose in feed three times a day. Also 1 oz. cook-ing soda and a tablespoonful of ground ginger at a dose in feed three times a day. He should be washed thoroughly with soap and water once or twice a week, adding 1 oz. kerosene to each quart of suds. Sprained Hock.—My six-year-old mare went lame early last fall and hes payer Sprained Hock .- My six-year-old mare

Sprained Hock.—My stx-year-old mare went lame early last fall and has never fully recovered from it since. There is no tenderness in the leg or hip, but the hock is swollen. Will it hurt her to do light work and would you advise breeding her in this condition? R. C., Howell, Mich.—It is always a mistake to work a horse when there is much lameness, es-pecially if it is caused by a sprain. If it is a sprain the animal usually grows worse when at work than if allowed to rest. Clip the hair off hock and apply cerate of cantharides; this ointment will blister lightly and an application should be made every week or so.

blister lightly and an application should be made every week or so.
Sharp, Irregular Grinder Teeth.—Horse Bobs Head Up and Down.—I have been having a great deal of trouble with one of my horses for the past year on account of his throwing his head up and down. He contracted this habit about a great age without any apparent cause. On the advice of a Vet. I had him bled last August. He does not throw the head continually; since the warm weather set in he is worse. G. F. B., Kibbie, Mich.— First of all, have his teeth floated. Be sure your bridle, collar and saddle fits him properly. If you find a sore spot apply the following lotion: Dissolve one oz. sugar of lead in a quart of water and add four ozs. fluid extract opium, apply it three times a day.
Distemper—Shoulder Slip.—I bought a colt on the 17th of March; shortly after I had him he took distemper; have not hitched him to mill; the following day I put him to plowing. The field is about 60 rods across and after going three rounds he stepped into a hole and acted peculiar. I then started him for the barn, but thought he had perhaps dislocated his shoulder. E. D., Sunfield, Mich.—The colt became weak when sick and no doubt wrenched his shoulder badly when it stepped into the hole. Give it rest and apply equal parts aqua ammonia, turpentine and sweet oil three times a day.

rest and apply equal parts aqua ammonia, turpentine and sweet oil three times a

ducer this year and dealers show a de-cided disposition to clean up old stocks before starting out." The greatly needed rains that have fal-len in parts of Texas have made first-class pasturage, and for this reason fewer cattle will be moved to Oklahoma and Kansas pastures this season than had been at first expected. For a considerable period the country has been short of cattle, hogs and sheep. Farmers are trying their best to bring about a normal production of hogs, but it will require a longer period to increase the cattle and sheep supplies. Great in-terest is everywhere manifested in the spring pig "erop," and it is variously re-ported in different sections as large, mod-erate and small. According to the large pro-portions that are required to restore the swestern packing points could not be asked for. Farmers have certainly taken the best of care of their hogs, and bar-rows fat as butter and unusually heav-rows fat as butter and unusually heav-rows fat as butter and unusually heav-twestern markets. How shall I treat these two horses? G. (Continued on page 531).



THE MICHIGAN FARMER.

CONDUCTED BY COLON C. LILLIE.

A GOOD SILO.

they will be less liable to crack, but I do not think it would be necessary.

If a cement block silo is plastered on the inside with cement mortar made in the proportion of two parts fine sharp sand with one of cement, there isn't any question but what the ensilage will keep. I know of a great many silos plastered in the same way and the ensilage does keen. No further proof is necessary when it has been demonstrated again and again by actual experience there is no theory about it. It is practically impossible for one to estimate very accurately the cost of building such a silo. If you have your own cement block machine and work at this work at odd times so that it does not interfere with your other work, and then again, if you have your own gravel near at hand so that it costs but little for hauling, it makes a great deal of difference in the cost. I should say that a sile built in this way, if you figure your own time as you ought to, and the cost of building would stand you in somewhere near \$300 when complete.

A silo 14 feet in diameter is plenty large enough for 14 cows, but you can get along with this size. The probability is that after you get a silo built, you will keep more cows because you will have more feed to feed them. I really think, In so far as this plan of W. G. B.'s however, that a silo 12 feet in diameter making a good, first-class silo, there is and 40 feet high would be a better proportioned one for a small dairy than one 14 feet in diameter and not so tall.

A continuous doorway will certainly there is any necessity for. So far as I weaken the silo unless you have a concan see, it will be no better for this extra tinuous doorway frame. You can get a cost. I do not see the philosophy of plas- continuous doorway frame of any of the people who manufacture stave silos, and then on that also with cement mortar. build your wall up to that, and the wires Why not put the cement mortar right which you use to reinforce your cement onto the lath? All you want is an air- blocks can be attached to this rigid door blocks can be attached to this rigid door frame. This will make you a strong silo with a continuous doorway. Otherwise pose the idea is to build a silo that won't 1 do not believe you would make a sucfreeze. Now, I think that this is all cess out of it. If you will make good nonsense, because I don't believe, no mat- door frames and put them in every three ter how many air spaces you have, your feet as you build the silo up, and then doors are going to be open and you have build the wall continuous between the got to have some ventilation in the top. door frames, using perhaps a little more and in cold weather you can't keep it wire between the doors to reinforce it, warm. The cold weather don't bother you can get a silo that will be perfectly

> BUILDS DAIRY HOUSE FOR PRIVATE BUTTER BUSINESS.

It

I see in The Farmer for April 23, that J. P., of Tuscola, asks some questions in regard to building a dairy house. This interests me for I am now ready to build one myself. Last winter I got logs to mill and now it's all cut out. I shall build a house 18x10 ft. inside, with 8-ft. ceiling. The roof will be one inch to foot pitch, studding running above roof so it will look level at top. There will be a partition so as to make an engine room 10x6 ft. I shall use about a 3 h. p engine. This house will set on one side of dwelling and well is on the other side about 30 feet away from the dairy house. I am thinking of laying pipe from well to dairy, below frost line, using a pressure tank pump. In this house I shall put a cement floor, lath and plaster walls, sheet it outside, and over the sheeting put clap boards. In this house we intend to do all the butter work. We shall have a separator, churn, worker, a hot-air wood heater with water pipe coil connected to range boiler for hot water. One corner will have a washing sink connected with sewage drain. I cut all the material on my farm, am a carpenter and can build it myself.

For four years we have been delivering butter to city customers. Last year it averaged 29c per lb. This year it will do better than 30c. This is a good business. We have a very satisfactory lot of customers. It took about one year to pick up good ones, and they are satisfied to stay by us. Every once in a while one E. L. K. asks, "Can we take on some friend?"

We have a small farm of 60 acres. I every course of cement blocks. This prob- have been running it on a three-year roably is not necessary but it costs very tation for some few years. When we got little to put it in and it will help hold the place it was not the best but now the blocks in place so that there will be it is improving. I am increasing the numno cracking of the silo afterward. I ber of cows-will soon have 10, besides think a No. 7 or No. 9 wire would be all young stock. We had to build some kind right, or smaller wires twisted together of a building to make butter in in order to in the form of a cable would be proper make it right. Besides, it is too much to use. So far as the lateral pressure is work to do it all by hand. Here is where concerned, it would be all right to just the gasoline engine will be a saving in-use a re-inforced wire in the courses be- vestment. We have a storage tank for tween the door frames. Then I would water so will be pretty well equipped. If use a No. 7 wire. Then you will not have anyone can better this I would like to to use the wire in the course continuous hear from them that I may improve on with the door unless you wish to. The my own plans. This is why I write and wire used in these latter courses will, why I take farm papers. F. C. C.





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SIZE OF WINDOWS FOR A COW STABLE.

What are the best kind of windows for dairy barn, and how close would you ut them. I am putting up a new barn. Warne Co. J. M. a dairy barn put them. I Wayne Co.

It is immaterial about the size of the window and also about the kind of windows for a cow stable. One can use the kind that best suits his fancy. The important thing is to get sufficient light in the stable. I like a window three feet high and two feet wide. It is best to have these windows so that they can be opened and shut easily because in the warm weather you want them open. Many times if a warm spell comes during the cold months, some of the windows ought to be opened and for this reason it is a good thing to have them with a hinge on the bottom so that you can pull the top in and get a circulation of air, though it is not a good plan to depend upon the windows for ventilation entirely because it creates drafts and does not remove the air as it should and furnish a proper circulation. Now, as to how often to put in the windows and the number of windows in a stable. It is hardly possible for me to say how thick they should be. There is practically only one rule to go by and that is to furnish sufficient windows so that you will have four square feet of lighting surface for every animal in the barn. You can easily figure from the number of cows your barn is arranged for and determine how many windows you want and then arrange them even than Canada field peas, but it is at equal distances apart so the barn will look well.

WEIGHT OF CREAM.

Cream, on the average, will weigh about eight pounds to the gallon, but it varies, according to the per cent of butter fat which it contains. It is well known that butter-fat is lighter than milk. In other words, the thinner the cream, the more it will weigh to the gal-lon, and the thicker, or richer the cream, be less it will weigh to the gallon. Hence you'see that it would be impossible to have a legal weight of cream per gallon. There is, however, a standard for the per cent of butter-fat in cream. The government of the United States In the food and drug act fixes the standard for cream at 18 per cent butter-fat. This standard has been adopted by the Michigan Dairy and Food Department. The only way to buy cream is to buy the butter-fat which it contains. All cream should be tested by the Babcock tester, for the percent of butter-fat which it contains. A gallon of and really means nothing definite.

THE OLD BRINDLE COW.

The cow testing associations throughcow, than many people seem to suppose. These cow testing records show us that there are many of these cows that are good investments. A farmer doesn't have to have a pure-bred herd in order to have a profitable herd. By careful selection that will bring him in profitable returns for his feed and labor. The greatest reason why these cows have not been considbecause the farmer hasn't had faith enough in them to give them proper feed and proper care, and consequently they pense?" have never had a chance. If they are given a chance with the pure-breds, they is necessary to public health. The supply difficulty with this kind of a herd comes The town people are slowly but surely petuate your herd. You have native will soon learn the economy of the ad-cows, and cows of miscellaneous breeds ditional cost. that are selected for their profitableness. When you attempt to breed them to a native, or grade bull, you are not sure of getting any particular per cent of your heifers as profitable cows. There is where the pure-bred animal is very much superior to the grade, or native cow. By using a pure-bred sire of any of the apmuch greater impression in one or two be the case. generations than when bred to stronger,

THE MICHIGAN FARMER.

or pure-bred females. The common, ordinary cow, old brindle, is not to be despised. She is yet the hope of the great mass of dairymen.

PEAS AND OATS.

I would like to inquire if those oats and peas mentioned in a recent issue of The Farmer are meant for grain for the cows, and if such is the case please give your reasons for using them. I have been growing barley for that purpose as I have figured that there is more protein in 50 bu. of barley per acre than in 50 bu. of oats; and we generally get as many bushels of barley, and occasionally more, per acre than we do of oats. We have slage, with which we feed the barley and cottonseed meal for the grain ration. But there is perhaps something about oats and peas that your experience has ataught you that I do not know and would like to learn. Rains may injure the crops already sown, in which event I could re-seed with peas and oats. Oats grow large and often lodge on this heavy soil; would the peas make them worse in this ad you sow per acre? Huron Co. H. S. TILT. Yes, the oats and peas of which you

Yes, the oats and peas of which you speak were intended to be grown for feed to be ground and fed to the cows as a grain ration to help balance up the basic roughage ration of corn silage and clover The reason for growing Canada hay. field peas for cow feed is because they are richer in protein than any other food which we can grow in this climate; that is, any other concentrated food that I know of that is practical to grow. Soy beans and cowpeas are richer in protein not practical to grow them here. There would be no objection to growing peas and barley instead of peas and oats. The reason we mix oats with peas is because the peas have a weak stem and are prone Will you kindly tell me through The Farmer what the weight of cream per gal-lon is? There is some question between the dealers and farmers on this matter. Isn't there a legal standard weight for a gallon of cream and milk? Oakland Co. G. E. F. oats lodge more readily than barley, then I should sow barley instead of oats, but it is a mistake in assuming that barley is richer in protein than oats. The chemical analysis of barley shows that it contains 8.7 per cent of protein while the analysis of oats shows a protein content of 9.2, so practically there is very little difference, and if barley would have a stiffer straw it would save the pea plant better than oats and I would use the barley in place of oats. My experience is, however, that barley is quite as apt to lodge as oats. Canada field peas contain nearly 20 per cent of protein and consequently make a most excellent concentrate to grow on the farm to feed with the roughage to balance up the ration.

Send

Cat

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all

COST OF CLEAN MILK.

We hear much about milk inspection cream is, in a sense, an ambiguous phrase laws. This is as it should be. Only clean milk is fit for human consumption. The farmer prefers to use clean milk. If there is any dirt, it goes to the city market. The society ladies of New York and other cities spend much time discussing out the state are teaching us that the old the dirt in milk. In their ignorance they brindle cow, that is, the common, native are at the same time condemning its high cow, is a better cow, a more profitable price as one reason for the high cost of living. If they do ever cause any reduction in price, it, like the meat boycott, will react with lower production and ultimately higher price.

The farmer can produce clean milk but it means added expense. He can not alone he can get together a herd of na- sweep down the cobwebs each morning, tive cows with no particular breeding spend more time currying the cows than it has previously taken to milk, buy a boiler and sterilize all the milking utensils, invest in a milk cooler, etc., unless ered as profitable investments before is he has some assurance that the price will be higher. He naturally asks, "Will the town people stand the additional ex-

The demand will continue. Clean milk will make a good showing. Of course the will probably never exceed the demand. when you want to raise calves to per- being educated to use the best milk. They

> Iowa. FLOYD LAUGHLIN.

FEEDS POTATOES TO COWS.

I finished our churning in one-half hour. We are feeding potatoes with a little wheat bran in place of corn meal and bran which we feed during the winproved dairy breeds, one is nearly certain ter. I give the time required to churn to get satisfactory results. The sire be- in, to show that potatoes properly fed ing pure-bred makes a strong impression under proper conditions do not retard on a herd of no particular breeding, a churning operations, as is often held to Kent Co.

T. LAMBERTSON.



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DETROIT, MAY 14, 1910.

CURRENT COMMENT.

As the season pro-The Wool Market. gresses, there is a

the wool market which is not re-assuring popular slogan for the development of the to the grower who had hoped to turn his sparsely settled sections of Michigan has new clip of wool into cash before this come to be "A farmer for every forty." date, at prices approximating those re- Missouri now comes forward to "show" ceived a year ago. At a meeting of us that it should be "A farm for every Michigan wool buyers held in Detroit last man." A scheme was launched in that week, a statement was issued to the state last week which merits more than effect that the lack of activity in the mar- a passing notice, both because of its ket is due, in a measure, at least, to the character and the prominence of the men high cost of living, since the demand for who are behind it. Through the initiative woolen goods has not been as good as was expected or sufficient to cause liberal ference of prominent men consisting of buying of wool by manufacturers. A re- well-known capitalists, labor leaders, philview of the situation in the east as evidenced by the activity of woolen manu- cause of agriculture and the rural up-lift facturers and the trend of the Boston movement, met in St. Louis, Mo., during wool market indicates that there is some foundation in fact for this statement, although the depression in the market is apparently due in some measure to concerted action on the part of wool dealers and manufacturers to bear the market this scheme is one for the colonization of until such time as they can get possession of the major portion of the season's the cheaper lands of Missouri and other clip. The reported sales of wood in the states, which will be purchased by the Boston market since January 1 have ag- association for the purpose. These corgregated a total of 39,464,700 lbs., as against 90,260,000 lbs. for the correspond- sist of a central farm of 160 acres suring period to May 1 of last year. Move- rounded by 32 farms of 40 acres each, ments for the last week in April amounted to 3.527,000 lbs. as compared with No payment is to be required from them 5,511,320 lbs. for the corresponding week of last year. Regarding the slow demand centage of the principal must be paid for woolen goods, it is but fair to state each year, the colonists ultimately owning that the slump in the demand is con- the land. Upon the central farm it is nined almost entirely to worsteds. Woo'- planned to place an agricultural expert ens are in good demands and it is predicted by those who are well informed tory, or such other industries as may aid The English Suc- startled last week by that the mill for the manufacture of woolens will not be operative selling through the medium of the sudden and un-able to supply the demand. Should this the central farm, which is to be owned timely death of King Edward VII, of be the case, worsteds would have to be and operated by the association, is also taken to supply the demand and the manufacturers who have altered their equipment for the manufacturing of this class of goods when they were in vogue, and who now are obliged to run on short time or remain idle in many cases, will be able to increase their output to an extent which will consume a large quantity of the raw material.

The present series of London sales show a firm tone in the market with slight ad- Gifford Pinchot and Prof. F. D. Tucker a general appreciation of the bond which vances on the better medium coarse

THE MICHIGAN FARMER.

country, but this movement has not been not be reached this season, yet there is every encouragement for the man who is not obliged to sell his new clip at once, tions prevail. American manufacturers are buying moderately at the London sales and ultimately the prices paid at these sales must fix the price of wool throughout the world, and recent reports from London are to the effect that many consignments would be carried over to the next series of sales, provided values suffered a further decline, and it is generally acknowledged that the London market has touched its bottom point for the season, the finer grades of wool having suffered a 5 per cent decline last

week. The season's market thus far has apparently been entirely devoid of the speculative feature which sometimes gives it activity, neither dealers nor manufacturers having shown any anxiety to purchase, while growers fortunately have exhibited a similar degree of conservatism. The point at which these three conflicting interests or factors in the wool market will finally get together for the transaction of the season's business is yet problematical, but an attitude of continued conservatism on the part of growers will have its influence in the final making of the market upon which the bulk of the

season's transactions will be made. This is peculiarly the A New Utopia. age of great philan-

thropies, beneficent public policies and appealing popular slogans.

The high cost of living, which has been an ever present topic of discussion, was recently solved by a local farmers' club which declared that the problem was better stated as the cost-of high living, continued dullness in rather than the high cost of living. The A scheme was launched in that of Governor Hadley, of Missouri, a conanthropists, and others interested in the the sessions of the Farmers' Union Congress and organized what is called, "The National Farm Homes Association," with a capital stock of \$1,000,000, \$100,000 of which has been pledged. Briefly stated. city people, who desire to own land, on onies will, under the plan advanced, conupon which the colonists will be placed. the first year, after which a certain perwith creamery, saw mill, canning facthe development of the section contemplated as a feature of the scheme. In fact, it is a true "Back to the farm" movement in its conception, which seems lish subjects, for a knowledge of the deto have taken form simultaneously in the tails of his illness and death and of the fertile brain of Prof. F. D. Tucker, formerly connected with the Minnesota Agricultural College, and State Immigration Commissioner Curran, of Missouri.

vice-presidents, while the board of direcgrades. Market experts are now admit- tors contains the names of many promi- promotion of the general welfare of the

ting that the Boston market will prob- nent and well-known men. The details civilized world. This unexpected change The Michigan Farmer ably not go any lower this season and of their scheme as announced would ap- could scarcely have come at a more unany renewed activity in the trade will be pear to a practical farmer to be some- propitious time, since the differences very likely to cause an advance. An en- what visionary, but the outcome will be which are finding expression through the couraging feature of the situation is the watched with interest, since it is a new English parliament are of a grave and fact that growers have not been free to experiment for this country and one ap- serious nature in comparison with any part with their holdings at the prices parently having the backing of a suffi- problems which have confronted our own offered by dealers. At some western cient number of influential men to make country since the civil war. So serious points the wool is being handled in a it more than a passing scheme. The fact are these problems that it is generally co-operative way, giving the growers a that this large extension of credit will be conceded that a crisis is impending in the better opportunity to consign their pro- given to men without capital for the pur- English Government and while the King duct to warehouses, receiving a sufficient chase of land is one which will appeal to in a constitutional monarchy, is not popuadvance on same to satisfy their present a large class, without doubt, yet the larly supposed to devote much attention to needs for money. Some wool is, of course, selection of suitable candidates from the the details of state affairs, yet in the immoving to market in all sections of the applicants and the direction of a company pending differences between the two of 32 colonists, who know little or nothing houses of the English Parliament, in his large and while there is a prospect that about the business of farming, is not a position as acknowledged leader of sothe range of prices secured last year will task the path of which would be strewn ciety, the official head of the church and with roses, nor is the ultimate successful the practical arbitrator between the govworking out of the financial end of such erument and the people through the powa scheme as easy in practice as upon pa- ers of dissolution vested in him, the King to hold the same until better trade condi- per, and when it is considered that few has need of sound judgment and keen cheap lands yet remain which are valu- diplomacy to keep peace between the warable for agricultural purposes and in a ring factions and avert a serious crisis in condition to be quickly utilized, the prob- English affairs. While speculation is rife lem is not simplified. However, as above tduching the manner in which the new noted, the country and the world at large King of England will discharge the deliwill doubtless learn a valuable lesson cate responsibilities which will be imfrom this attempt to stem the tide of posed upon him, it is generally admitted movement from the farm to the city; to by those who have an appreciation of the turn a large proportion of the people back situation that he has no easy task before to the land; to add to the available supply him, and the bond which unites the of food-stuffs and thus help to solve the angio-saxon race prompts Americans genproblem of the high cost of living, and to erally to echo the slogan of the loyal the establishment of a new type of citi- British subject, "God Save the King." zenship which, in the words used in their prospectus, "will be the best crop which these farms will afford."

Prospectus, "will be the best crop which these farms will afford."
For prospectus, "will be the best crop which these farms will afford."
For prospectus, "will be the best crop which the best for the fact that the crop was affected by an thracnose, due to infected seed, and whip pretinently asks. "Who will get these beans this year?" While it is probable that the firm for whom the beans were broken the smaller buildings of the smaller building the smaller buildings of the s concerned, yet the trouble may be kept down to the minimum by exercising care not to cultivate the beans where the vines are wet with dew or rain, as the fungus spores are spread much more readily under these conditions. Michigan has no seed inspection law, and it is doubtful if it could reach this case if we had such a law. But it would be a wise precaution to require a guarantee that the seed purchased is free from this dis. ease, which would make the seller responsible. However, where one is suspicious of the source of the supply, it would be still better policy to get seed from the most reliable source possible, if seed of which the grower has no knowledge must be purchased. But the prevalence of this disease is a matter of too great importance to Michigan bean growers to be overlooked, and the wise course would be to secure healthy seed this year for next year's planting.

The world cession. the'

England, and the daily press has since been scanned eagerly by a host of citizens of this country, as well as by Engceremonies which attended the proclamation making his eldest son, George V, his successor as King of England and Emperor of English dependencies. The keen Gov. Hadley, of Missouri, was elected interest which the people of America have president of the organization, and Hon. taken in this event shows that there is unites the English speaking races in the

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HAPPENINGS OF THE WEEK.

Foreign.

Cartago. Senor Riano who has been in Spanish dipomatic service for 24 years, has been appointed Minister of Spain to Washing ton and is now on his way to thi been this

appointed Minister of Spain to Washing-ton and is now on his way to this country.
The northern part of Italy is suffering from an influx of criminals who are be-ing driven north from the Neapolitan provinces through the efforts of the police there.
While in Norway, Colonel Roosevelt was attacked by bronchitis and his arrange-ments were necessarily altered to give him rest. The plan of a personal recep-tion by Emperor William, of Germany, has been abandoned. Mr. Roosevelt will be in England in time to attend the fun-eral of King Edward.
Elections were held throughout Spain early this week for the choosing of mem-bers to the chambers of deputies. Early returns indicate that the government will have a working majority.
The Cretan assembly has met and re-affirmed its desire to be annexed to Greece. The public greeted the announce-ment. Following this action the deputies took an oath of allegiance to the King of Greece.
A new cabinet has been formed in Costa

A new cabinet has been formed in Costa was Rica following the inauguration of Ricardo Jiminez as president. k by The geographical society of Italy will t of receive Commander Robert of Italy will society of Italy will Robert E Boon will of receive

receive Commander Robert E. Peary in May when he will lecture before the or-ganization and will be decorated with a medal for his achievements. National. The Lehigh railway company made an advance of six per cent to all of its em-ployes not affected by recent increases in wages: and the coke oven men of Elkins. W. Va., also received a five per cent advance.

In wages, and the term of the per cent advance. Believing that the Chicago board of trade has been instrumental in keeping up prices of grain, the attorneys of the government are investigating, to deter-mine, if possible, whether or not this be true. President Taft has signed the Loud bill appropriating \$100,000 for the raising of the UI-fated battleship Maine from the Havana harbor. Riots have occurred the past few days in the Jewish district of Detroit because

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of the advances in meat prices, the butch-er shops being the center of the disturb-

er snops being the committee has assented to ance. The senate committee has assented to the measure authorizing states bordering O, caused the mayor to issue an order on Lake Michigan to enter into a compact to better enforce the laws on the waters of that lake. The measure has passed the

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CROP AND MARKET NOTES.

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would look for after so much rain. Wheat not doing very well, seems too cold for it, but it is a good season for clover and timothy seeding, which is doing finely. Prices for potatoes warming up a triffe lately. In testing seed corn we find only about 70 per cent all right. The demand for spring pigs exceeds the supply, about three and four dollars per head being the top price. Hay brings \$10@12 per ton; cat-tle as well as hogs are reported by meat market men to be scarce. Yeal calves lower in price. Prices for oats and beans are going up again. Wheat steady. The latest highway laws of Michigan are not like by a majority of the people.

MICHIGAN CROP REPORT.

Wheat.—The condition of wheat shows a slight decrease from the figures given in the April report, the average being 86 in the state, 79 in the southern counties, 93 in the central counties, 97 in the morth-ern counties and 96 in the Upper Penin-sula

and the central counties and 96 in the Upper Peninsula.
The average condition on April 1, in the state was 88, in the southern counties 82, in the central counties and Upper Peninsula 93 and in the northern counties 97.
The per cent of wheat sown that will be plowed up because winter killed is 4 in the southern counties, 1 in the central and northern counties and 3 in the Upper Peninsula and the state. The damage by Hessian fly in per cent is 2 in the state and southern counties and 1 in the central and northern counties and 1 in the central and northern counties. The total number of bushels of wheat marketed by farmers in April at 120 mills is 87,839 and at 84 elevators and to grain dealers 66,492, or a total of 154,331 bushels. Of this amount 112,461 bushels were marketed in the southern four tiers of counties, 33,431 in the central counties and y439 in the northern counties and Upper Peninsula. The estimated total number of bushels of wheat marketed and used by growers in the nine months, August-April, is 11,-000,000. The amount of wheat yet remaining in possession of growers is estimated at 1,000,000 bushels. Ninety-eight mills, elevators and grain dealers report no wheat marketed in April.

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d	Apples	83	82	87	20 85	63
id ss., r- is	Pears	78	74	83	85	60
·.,	Peaches	78	74	87	85	
is	Plums	72	68	75	81	· · ·
e	Cherries Small fruit	76	72	80	84	65
40	Small fruit	85	81	89	92	90



wants men to come and develop the houndless

to grow almost every crop known to the temper-KANSAS at eregion. The mild climate per-mits of cultivation 10 months out



of the year. Plentiful rainfall in-sures bountiful harvests. Come to the new state where you can raise two crops of potatoes or cut your alfalfa five times in a year. Buy good agricultural land which more than likely is underlaid with a vast store of coal, oil and gas. Here indeed is the

of Oklahoma. land of plenty.

farms and what you, your son, or any other man who is willing to work can do. Your copy is waiting for you. Write for it today-NOW, before you forget. Land Commissioner

Missouri, Oklahoma & Gulf Railway



100 Bushels of Corn an Acre is not uncommon in the Southern States and has

is not uncommon in the Southern States and has even been greatly surpassed in some sections. The South will produce as much corn and as good corn as any section of this country and the value of last year's corn crop in the South was eight hundred mill-ion dollars. Why raise corn on land in the North and West valued at \$200 an acre when equally as more computed in the South can be purgood corn-producing land in the South can be pur-chased at from \$15 to \$30 an acre and where the temperature in summer is no hotter than in the Mid-dle West? And with the additional advantages of another crop or two from the same land and with no long, cold winters.

Let me send you our illustrated booklets and learn what can be done in a country where fertile land can be purchased cheaply and where there are 312 working days a year. Low round-trip fares 1st and 6d Tuesdays each month. G. 4. PARE, General Ind. and Imm. Agent, Louisville & Nashville R. R. Room 218, Louisville, Ky.

A LFALFA WORTH \$14.00 TON to KERMAN, A Fresno county, California dairyman, Reason is high prices year round for dairy products. New \$25,000 creamery here at Kerman, This distlict needs dairy and fruit farmers. A small ranch here offers sure, enormous profits, Perfect soil, climate and water. Ask us about our improved and unim-proved fruit and alfaifa lands. Address, **CARMINE & STORGAARD.** Bex, E. Kerman, California.

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Fertile Farms in Tennessee \$5 to \$10 per acre-

Fortunes are being made on fertile Tennes-see farms. They raise big crops of Canta-loupes, Cabbage, Tomatoes, String Beans, Green Corn, etc., also Horses, Cattle, sheep, Swine, Poultry and Eggs. Write me at once for Free Literature. Til tell you how to get one of these splendid farms for \$5 to \$00 per acres. Act quickly! H, F, Smith, Tmf. Mgr., N.C.& St.L.By., Dept?, Nashville, Tean.



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nent. Write for literature and foll information STATE BOARD OF IMMIGRATION, Room 289, State Capitol, St. Paul, Minnesota.

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62 Acres \$3400 \$2,320 Last Year's Income Pieasantiy located in outsithts of one of Penn-sylvania's finest villages (40 stores) in a prosperous articultural section; 48 acres in dark rich loam fields, beiance wood and pasture; fine tot apples, pears, plums, cherries, peaches, and grapes; 6 room house, convenient barn; receipts in 1059 were as follows: dairy \$720, stock \$300, polatoes \$700, pork \$200, grain \$200, hay \$150, fruit \$50, sacrificed to close immediately for \$3,400 with \$500 down and easy terms. Catalogue, 2nd Edition", copy free, Station 101, E. A. STROUT, Union Bank Bidg., Pittsburg, Pa

seys at the St. Louis Exposition during to push easily, as we work the other atthe contest, and the ordinary farmer's tachments, but works easily when pulled, cow is as wide as the gulf between the and may be run over the ground either attention given the street waif and that before or after the plants are up. If extended the children of palatial homes. worked in time and often enough, very But tell me, does it ever occur to the av- little hand weeding or hoeing is necessary erage man that the quality of the fruits in any kind of vegetables, and this saving of the orchard is all the result of selection of labor is a great item. Use it from beof varieties? Is a Snow apple tree with fore the seeds are sown until size of dead wood mingled in disorder among the plants prevents further use; after plants live branches, that is grown in a heavy attain this stage we use the steel garden sod dotted here and there with the rem- rake, or the rake attachments to wheel nants of brush piles of years gone by, in hoe to keep ground free from weeds and a lot surrounded with decaying fences, is maintain dust mulch between rows of an apple from such a tree crisp and plants. Keep teeth of these rakes sharp touched with that delicate quality of fla- by use of file on them. The blades of vor that one of the same variety grown hoes, shovels, spades, cultivator-teeth, under uniquely adapted conditions, is? In etc., should at all times be kept sharp other words, does care affect quality?

of work where these two features are not if used freely on the blades of the above associated. In fattening live stock it is tools. File the blades to a nice bevel, the race track training is acknowledged much easier and faster you can work to be as essential as breeding. The green- If the tools are rusty soak them over his American beauties the neglect that them dry with a woolen cloth, sharpen befalls native plants. The gardener gives them, and unless wanted for immediate

chard he must start with the right varie- for brisk work when wanted. ties; poor kinds limit success. Good varieties have been brought to their perfection by attention. If they are to keep up their good graces in the hearts of consumers that same attention must be 72continued.

Care, of course, means everything outside of the inherent qualities of the tree. It means the location chosen by the planter. It means the fitness of the soil and the skill of putting in the tree. Care includes the after culture, the spraying. It encompasses feeding and protecting the trees and gathering the crop. These, coupled with a variety of quality permits the grower to ask a large price without being daubed "nervy."

GARDEN WORK IN WET WEATHER.

spring keeps the gardeners guessing as varieties are somewhat resistant to the to what to do next. March was so warm attacks of the blight. The remedy used and dry that many commenced outside against the disease is Bordeaux mixture. work which usually comes in April and Beginning with the falling of the blosnow we are drifting back into March weather and our gardens are nearly ularly every two weeks until the first of drowned out. The sturdy peas (First and July, usually about three applications are Best) are looking very well, though growing slowly, radishes and lettuce and onion sets apparently at a standstill, but we nope when the rains are over and the GROWS SQUASHES SUCCESSFULLY. ground sufficiently dried out to cultivate, that they will get a hustle on and be ready for the table in early June.

These rainy days are just the time to get every tool cleaned up and sharpened, never tried any other kind. I plant them and to purchase any new ones we may need to wage war on the crop of weeds which will surely come on by the mil- five hills from the end of row, I plant lions. Help is scarce and prices for labor three squash seeds in the hill and then almost beyond reach of the ordinary skip four or five hills and then plant three farmer and gardener, hence the necessity more squash seeds, and so on. I have for plenty of tools of the best quality, that well.

tools: Hoe, garden rake, four-tined fork, long-handled shovel, spade, dibber, wheelbarrow, garden line, seed-drill, double- Bugs, nor anything else, have ever both-wheel hoe with its attachments and weed- ered our squashes. Try it, and report to wheel hoe with its attachments and weeder; to these we might add plant protectors, trowel, watering-pot and sprayer. or failure. These for the small garden; the large market gardens require a still larger equipment of horse-tools, etc. The garden line is very necessary, a heavy chalkline, such as carpenters use, with two small stakes, pointed, to drive easily into the soil, will answer all purposes. A cent to fruit growers asks the question, smooth, round stick, sharpened at one "Is there a statute prohibiting the sprayend, and nicely rounded at the other, to ing of fruit trees while in bloom %" avoid bruising the hand, will do very well there is a Michigan statute to such effect. for a dibber; or saw off the handle of The purport of the measure is to prevent an old shovel, about 12 or 15 inches, spraying during that particular time sharpen the end to a point and you have when bees and other beneficial insects a first-class tool for use in transplanting; a good companion to it is a solid-steel florist's trowel with spoon-shaped blade.

In our garden operations we make great use of the weeder (a home-made attachment for wheel hoe). This is simply a board 1x4 in., and about 30 in. long. Draw a line one inch in from each edge of the board, drive spikes (40-penny wire) along proper fertilization and thereby preclude these lines, four inches apart; drive these the possibility of a good stand of fruit.

in the second line so they will stand midway between those of the first row; this really brings the teeth of our weeder two inches apart. Bolt this board either squarely or at an angle to under side of wheel hoe and you have a weeder which is sure death to the weeds and which will The difference in the care of the Jer- produce a fine dust mulch. It is too wide and bright; a 10-inch flat file will save The writer does not recall another line time and muscle to a surprising degree, so, and the butcher is quick to get a working always from the upper side and carcass of an animal that was properly never from the lower. File to a sharp cared for during the feeding period. On edge, do not slight the work, and see how house man would not think of allowing night in sour milk, in the morning wipe his specialties an extra hoeing, Why? use grease them with axle grease or any If one is to be successful with the or- oil and put aside. They will be ready use grease them with axle grease or any

THE MICHIGAN FARMER.

Wayne Co. J. E. MORSE.

PEARS ATTACKED BY LEAF BLIGHT.

Can you tell me what I can do for one of my pear trees? Its leaves hang limp and are partly wilted, roll and have red spots about them; fully half of them did not open. Montcalm Co. F. M.

Mr. Magansky's trees are affected with pear leaf blight. The trouble is known to scientists as Entomosporium maculatum. The disease affects the fruit, stems and leaves. The dry days early this spring were favorable for the disease. Small brown spots appear on the leaves, which increase in size until they run together The leaves fall prematurely. On the fruits the spots are red, as described by The unusual weather conditions this Mr. Magansky. The Keiffer and Duchess soms this mixture should be applied regsufficient although many only make two, while some orchardists give four or more.

I noticed in last week's Farmer an in quiry how to raise squash. I will give my way of raising Hubbard squash. I Commencing three with my potatoes. rows from the outside row and four or never missed for more than ten years. we may do our work quickly and If planted late the squash will not get ripe. The squash vines will not begin to Here is a list of the most essential run until cultivation is through with, or should be. Bordeaux mixture used for the potatoes does not hurt the squashes. Michigan Farmer next fall your success

Washtenaw Co. C. F. BATES. LAW AGAINST SPRAYING DURING BLOOMING PERIOD.

A party who owns bees and lives adja-Yes, would be destroyed by the application. Fruit growers ought to respect this measure, not alone for the benefit of those of their neighbors that have bees, but also for their own good, since the killing off of bees and other insects that fertilize the flowers of the apples, plums, cherries and other fruits will lessen the assurance of

Be sure th CIURED ONIN Save Your Fruit and Vegetables A man in Colorado sprayed his orchard with Swift's Arsenate of Lead. Out of 12,000 LEAD

boxes of apples there was found only one box of wormy ones. How does this compare with your experience? Do you spray at all?



Have you ever tried to find out whether it would pay to spray? Will you write for our book on leaf-eating pests and reports of results from using Swift's Arsenate of Lead?

This insecticide kills all leaf-eating pests, never burns or scorches the most delicate foliage, outlasts two to four sprayings with materials that are washed off by rain; mixes readily and stays in suspension, does not clog the pump, increases both quality and quantity of yield. Send for valuable book on leaf-eating insects. Give your dealer's name.

Merrimac Chemical Co., 23 Broad Street, Boston, Mass.

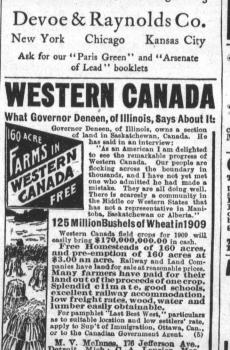


DROTECTING crops from parasites at the beginning is a good way to protect your profits at the end.

If you use Paris Green, be sure you get C. T. Raynolds pure Paris Green; the kind that's net poison; dark, granular, fine.

For any sort of spraying of fruit trees, vines, etc., you want Devoe Arsenate of Lead; in paste form, ready to dissolve in water. Doesn't do harm to the most delicate plants.

Be sure of the right name when you buy. Dealers who know sell these things.



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Nitrate of Soda



AFOR AF TAR

MAY 14, 1910.

GRANGE

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

THE MAY PROGRAMS.

Suggestions for Second Meeting. 'God's in His heaven-All's right in the world."

-Browning. Roll call, responded to by quotations or remarks about the spring season. What progress in legislation has been made for: 1. Parcel post. 2. Postal

banks Recitation the Home-III. Harmful bacteria.

Recitation In the Home—III. Duet. Recitation. How market eggs to best advantage. Songs and recitations, relating to the spring season, in charge of Lady Assistant spring se Steward.

POMONA AIDS SUBORDINATES.

A zealous officer asks, "What can Pomona do for those subordinate Granges that are not doing anything? We cannot go to them and they will not come to us."

Ah, you have asked a question, one that requires a wiser than I to answer with a never-failing remedy! This is the time-worn problem of every Pomona of any age and which possesses a conscience touching the welfare of its local Granges. It is to be supposed that this Pomona worker has tried those means ordinarily used to assist these weaker Granges, such as:

1. Asking that Pomona Grange may hold a session in each of these Granges that needs strengthening; and striving to remove all burden by being self-entertaining, or nearly so.

2. Making this meeting a live, attractive one and fitted to the special needs of the community.

3. Inviting, by personal and perhaps written invitations, outsiders who might make desirable members, to attend the afternoon meeting where they are made to feel thmselves honored guests and are shown the courtesy and resources of entertainment of the Grange.

4. Sending representatives of Pomona to the regular sessions of the weaker subordinates and thus seeking in season and out to make patent the fact that the county organization has a maternal interest in its local bodies.

In addition to the specific suggestions, there are a few general principles that it is well never to lose from thought. One of these is the very practical one that a large and high thought must go before any materialising of it into cold fact. In other words, one must have a good big conception of what the Grange stands for before he can work out much of a real Grange. The higher ideal—held as the spirit of the real that is to be—creates and sustains that actuality when it comes into being. It is in the very order of creation throughout that this is so. It is no less true in the Grange chain of or aganizations than elsewhere. The Pomo-na, then, has a duty to build ideals in the minds of its members and to keep alive there are a few general principles that minds of its members and to keep alive the fires of devotion before them during times of stress and strain. This is no passing fancy or theory. Every one of us knows local Grange after Grange that has been carried over lapses in activity through the efforts of one or two faithful people who, in turn, have been sustained in their sacrificing efforts by association with Pomona or State Grange.

The Pomona, therefore, I reason, that is maintaining a good work is, in the long run, making it easier for its semi-dormant subordinates to regain their vigor and again participate in the county work. Such a Pomona strengthens the prestige of its organizations at large; and, though for a time it seems to fail to reach all of its charges, it may take comfort from the "they also serve who only saving that stand and wait." JENNIE BUELL.

AMONG THE LIVE GRANGES.

Onsted Grange, of Lenawee Co., has its plans all made for a lively membership contest which begins with its next meet-

The service of the sectors and parents. A. V.
 Young gave a practical talk showing the strates of the schools and better co-operation
 between teachers and parents. A. V.
 Young gave a practical talk showing the advantage of uniform textbooks, and Miss
 Simpson made a plea for a more intimate acquaintance between teachers and chll Chen and a schools and better co-operation
 Simpson made a plea for a more intimate acquaintance between teachers and chll Chen and advancement of the neighboring tillers of the soil.
 Coming Events.
 Coming Events.
 Coming Events.
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 Coming Events.
 Commissioner Ford urged greater interset in the schools and better co-operation
 Simpson made a plea for a more intimate acquaintance between teachers and chll Chen and advancement of the neighboring tillers of the soil.
 Coming Events.
 Coming Events.
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 Coming Events.
 Coming Events.
 Commissioner Ford urged greater interset in the schools and better co-operation.
 Coming Events.
 Barlio Co., with Star Grange, Saturday, May 31 and June 1.
 Change Saturday, June 11.
 Change Co., with Hudson Center Grange, Thursday, June 2.

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THE GRANGE IN OTHER STATES.

THE GRANGE IN OTHER STATES. That Washington state has been mak-ing a wonderful Grange growth is ap-parent to all who noted the figures for the first quarter of 1910, which were pub-lished in this department a few weeks ago. That report, which came from Na-tional Sccretary Freeman and is official, showed that Washington organized 50 new Granges in the three months between Jan. I and April 1. Two years ago there were less than 90 Granges in the state; now there are about 200. Fifty-nine of them own their own halls, which are worth over \$53,000; the rest meet in rent-ed halls mostly, with some meeting in schoolhouses and homes of members. Fifty-nine Granges report that they have co-operated in buying and selling ar-rangements; 108 report social activity; 117 report regular consideration of maiters of public interest. Sccretary Lewis says that it is these Granges which report as above that are growing the fastest and exert the most influence in their locali-ties. C. E. Kegley, of Palouse, the state master, is one of the most energetic and progressive among the State Grange is committed to the reform now being pro-posed by the energetic Grange states to provide for proportional representation of states in the National Grange. At its last meeting Vermont State Grange was composed of more than 300

At its last meeting Vermont State Grange was composed of more than 300 delegates. The financial report showed the permanent fund, including interest to July 1, 1909, to be \$823.51. The treasurer received during the year, including funds on hand at the close of last year's ac-count, \$13,335.16. He had paid out but \$4,635.81. The report of the secretary showed that since the last meeting 26 Granges had been instituted. Granges in good standing number 199, with a total

high school, industrial education in schools and opposing congressional ship subsidy. The story of how the home Grange of State Master Wilson, of Illinois, turned failure into success is interesting. This Grange, known as Magnolia, was organized 37 years ago. It prospered for a time and then declined. A determined teffort was made to revive it and for a schoolhouse. Then as a vacant church was available it was decided to purchase it for a permanent home. After paying several hundred dollars toward the purchase price it was found necessary to make some special effort to complete the payment. The men agreed to rent five a cress of land on which to plant potatoes to be cared for by the membership, and sell said potatoes to cancel the indebtedness. This was done, and a neat little sum was raised in this manner. Then a grange fair was undertaken, first in a very small way with no premiums excepting ribbons to signify the superior quality of exhibits. This work gree wannually and interest was manifested by many outside the Grange until there were fine exhibits of live stock, vegetables, fruits and everything that goes to make up an agricultural fair. No cigars whisky or outside the Grange until there were fine exhibits of live stock, vegetables, fruits and everything that goes to make up an agricultural fair. No cigars, whisky or games of chance were allowed on the grounds. A fine floral house, poultry house, large stables, sheep and hog sheds are now visible as the result of the earnest efforts of a harmonious band of Patrons who were and are interested in the uplift and advancement of the neighboring tillers.

THE MICHIGAN FARMER.

FARMERS' CLUBS

OFFICERS OF THE STATE ASSOCIA-TION OF FARMERS' CLUBS. President-B. A. Holden, Wixom. Vice-president-Mrs. C. A. Mathews,

St. Johns. Secretary-Mrs. C. B. Johnson, Meta-

Treasurer—Henry T. Ross, Brighton. Corresponding Secretary—N. A. Clapp, Directory

Northville. Directors—T. B. Halladay, Norvell; E. C. Hallock, Almont; A. R. Palmer, Jack-son; Wm. H. Marks, Fair Haven; C. L. Wright, Caro; E. W. Woodruff, Blan-chard chard.

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, the farmer's most valuable asset. is

Associational Sentiment .--

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

VEARLY PROGRAMS.

The Essex Farmers' Club.

The latest of the annual programs of local farmers' clubs to come to the editor's desk is that of the Essex Farmers' Club, of Clinton county. The cover, in addition to the name of the club and date of the program, contains the announcement that meetings are held on the second Wednesday of each month and are called to order at 10:30 a. m. The title page is identical with the cover and is followed by the associational sentiment as adopted by the State Association of Farmers' Clubs at the suggestion of Ex-President Daniells, and as it appears at the head of this column in nearly every issue. This is a fitting sentiment in this case, since the Essex Club was led to adopt the yearly program through the solicitation of Mr. Daniells, who is also an ex-president of that organization. The next page is devoted to a list of the expresident and present officers of the club while on the following page appears the list of standing committees of the club. The fiscal year of the club begins with October and the pages of the program are so arranged that the two center pages come between meetings for the old and the new year. On the first one appears "Merry Christmas," and on the second, "Happy New Year" greeting. Another noteworthy feature of this annual program is the fact that the constitution of the club is printed on one of the back pages and it contains on the next page a list of names under the simple, yet ex-pressive head, "In Memoriam," a fitting tribute to faithful club workers whom death has called from their active labor. The farms of members are named, the farm name appearing with that of the host at the head of each monthly program. Programs are quite complete, the as numbers being practically all announced except the music. An unusual feature is the expression of a sentiment for each

Haynes on Thursday, June 9. The Advantages of Farm Life.—The Indianfields Farmers' Club met at the pleasant home of Mr. and Mrs. Charles Pierce. Thursday, April 21, it being the last all-day meeting. The superintendent of refreshments, Mrs. Chas. Smith, served a fine dinner to which the members did ample justice. At 2:30 the meeting was called to order by Vice-President R. Park. After the usual order of business the pro-gram was opened by M. H. Oakly, who read a very interesting paper on "The advantages of home life on a farm," in

at the home of Mr. and Mrs. C. Taggett. -Mrs. J. M. Miller, Cor. Sec. System Applied to Agriculture.—The April meeting of the Ingham County Farmers' Club was entertained by Mr. and Mrs. Watts and Mr. and Mrs. Fel-lows at the M. E. Church in Mason. It was too pleasant a day for a very large attendance of the active farmers, but those that attended heard a fine talk by Dean R. S. Shaw, of the M. A. C., on "System applied to agriculture." He ad-vised all persons to avoid the fads and tangents, to use common sense. There have been three reasons why there has not been more system applied to an im-proved agriculture: Lack of means or financial obligations, lack of labor, and lack of fertility of our soils. Too much surface cultivation, and lack of plowing proved agriculture: Lack of means or financial obligations, lack of labor, and lack of fertility of our soils. Too much surface cultivation, and lack of plowing has made land sour, but one does not want to buy commercial fertilizer until he has used what is in the land. Much is said these days about corn schools, corn tests and improving our seed corn; while this is necessary in a way, do not follow extremes; if it is good to select your seed for wheat, rye and oats, and whatever is grown upon the farm. Good methods are an object lesson, and system will help one to do things in a common sense, practical way. As the membership of this club includes the family, President Ives announced the arrival of a new member, Ludell Ward Cheney, and wished to extend congratulations to Mr. and Mrs. Cheney. Mrs. Cheney will be remembered as the Secretary of the State Association of Farmers' Clubs the past three years and refused an unanimous re-election last December. The May meeting will be held with Mr. and Mrs. Diamond at Maple Lawn. "Success in noultry raising," and "The transfer of property" will be the topics for discussion.—Mrs. Tanswell, Cor, Sec.

a will be the topics for discussion.—Mrs. Tanswell, Cor. Sec. Discuss High Prices.—The Hadley and Elba Farmers' Club, of Lapeer Co., met at Love Spring Haven with Mr. and Mrs. Horace Kelch on April 7. The meeting was called to order by President Robert J. Pierson. Mrs. A. M. Bullock furnished the opening number, a vocal solo. J. W. Tower spoke on "The cause of high prices." He noted the sharp advance in farm products, and the causes of the same. Increased consumption, scarcity of farm labor, etc., and predicted a gen-eral if not constant upward trend of prices. A humorous recitation by Lottie Kelch was much enjoyed by all. The farm garden, as pictured by F. A. Smith, was a thing of beauty and a joy forever. The talk was full of practical hints which it is to be hoped will be put to practical test this summer. Miss Lottie Kelch and Mrs. Fred Ostrum sang Clover Blossoms, as a closing number. A very pleasing feature of the meeting was the roll. as a closing number. A very pleasing feature of the meeting was the roll call, answered by current events. The next meeting will be at the M. E. Parsonage with Rev. C. W. Barnum and family. A good attendance is desired.—Mrs. C. P.

The Seed Bed.—The Hillsdale Lenawce
 Strong near Hudson on April 14. Follow-ing the opening exercises and dimer hour the discussion opened with "Preparing the seed bed for the coming crop," by Mr.
 Frank Lowe. The speaker handled his sub-followed by a discussion with numerous the seed bed is fitted, the better the set at the home. Resolutions of condo thence on the death of Fletcher Parw, who solve at the seed bed is fitted. The reliab ther the set at the home of 0. W. Haynes on Thursday, June 9.
 The Advantages of Farm Life.—The pleasant home of Mr. and Mrs. Charles Fierce, Thursday, April 21, it being there reliabed and solve the rook with draw and section and science done for the the set at the home of 0. W. Haynes on Thursday, April 21, it being the pleasant home of Mr. and Mrs. Charles Fierce, Thursday, April 21, it being the set at the home of 0. W. Haynes on Thursday, June 9.
 The Advantages of Farm Life.—The pleasant home of Mr. and Mrs. Charles

I am sorry I wrote you a card about that razor as I just received it today, and it is fine. Hans Petersen, Trufant, Mich.

I received the safety hitching strap some time ago and thank you very much for it. It is very convenient. I am well pleased with it.—Nelson T. Foster, Van-derbilt, Mich.

THE MICHIGA No. 1 horsehides, \$3.50; No. 2 horsehides, \$2.50; sheepskins, as to wool, 50c@\$2. Dairy and Poultry Products. Butter,—Dairy goods continue steady, but creamery grades are lower, following the decline at Elgin, Chicago and other points. The heavier receipts resulting from the better prestures prevailing throughout the dairy sections of the coun-try. Quotations are: Extra creamery, 27c per 1b; firsts, do., 26c; dairy, 21c; packing stock, 20c. Eggs.—The liberal receipts pushed the frice a full cent below the quotation of last week but a better demand later en-couraged an advance of a quarter of a cent from the low point reached. Fresh eggs, cases included, are exchanged at 19.4c per dozen. The poultry,—Chicgo showed weakness in the poultry deal Tuesday but the trade with last week except for chickens where a decline is reported. Turkeys are higher, Live.—Spring chickens, 17@17%c; hens, 17@17%c; old roosters and stags, 12@18c; ducks, 15@16c; geese, 12c; turkeys, 18 0.19. Cheese.—Michigan, late made, 15@15%c;

ducks, 15@16c; geese, 12c; turkeys, 18
@ 19c.
Cheese.—Michigan, late made, 15@15½c;
Michigan, fall made, 18@18½c; York state, 19@20c; limburger, Wisconsin, 17
@ 18c; New York, 18@19c; bricks, 16@
16½c; Swiss, domestic block, 21c; Swiss loaf, 28c.
Calves.—Steady. Choice to fancy, 11c; ordinary, 9½@10c.
Fruits and Vegetables.
Apples.—Steady and in good deman 1.
Spy, \$4@4.50; Baldwin, \$4@5; Steel red, \$5; Greening, \$4@4.50 per bbl.
Cabbage.—Selling at \$2.75@3 per crate for new.

Cabbage.—Selling at \$2.75@3 per crate for new. Vegetables.—Beets, 60c per bu; brussels sprouts, 25c per qt; carrots, 75c per bu; cauliflower, \$2.25@2.50 per bu; celery, 45 @50c per doz; eggplant, \$2@2.50 doz; green onions, 10@12c per doz; head lettuce, \$3@3.50 per hamper; mint, 25c per doz; parsley, 25@30 per doz; radishes, 20@25c doz; spinach, 90c hamper; turnips, 50c per bu; watercress, 20@25c per doz; wax beans, \$3.50 per bu; pieplant, 25c per doz; asparagus, \$1@1.25 per doz.

OTHER MARKETS.

OTHER MARKETS. Grand Rapids. The egg market is steady, and 19c is the top price paid for eggs delivered here. Dairy butter continues at 22c while creamery is off 2c, dealers paying the pro-ducers 2rc. Farmers are getting 8@9c for veal, thin calves bringing a little under these figures. Dressed hogs are steady at 11½c. The market on live poultry is easier, though quotations for the present are unchanged, as follows: Fowls and chickens, ducks and turkeys, 16c; old roosters, 10c. The potato situation has improved slightly, farmers receiving 10@ 12c at loading stations. While beans are steady at \$1.75@1.85, red kidneys \$2.50@ 2.75. Wheat has advanced 7c since last week, while corn is up 3c. Grain quota-tions are as follows: Wheat \$1.08; corn, 64c; rye, 70c; oats, 45c. Farmers and gardeners are getting 40@50c per bu, for pieplant; \$@10c for green onions; 50c per box for tomato and cabbage plants, rennessee strawberries are selling to the retail trade this week at \$2.75 per case; new potatoes at \$1.75@1.90 per hamper.

to good do., \$25@45. A few extra prime bulls sold for \$6.75 today. Our hog market opened 15c lower than Saturday's best time, and closed strong at the opening, and a good clearance. We quote: Mixed and mediums, \$9.80 @9.85; few choice decks selling as high as \$9.90; best yorkers, \$9.80@9.85; lights and pigs, \$9.85@9.90; stags, \$7.75@8; roughs, \$8.80@8.85. Prospects look fair for the near future. The lamb market opened slow today, with best lambs selling from \$8.90@9. Market closed firm, all best handy weight lambs selling; few coarse and heavy lambs unsold. Look for little bet-ter prices balance of the week. Sheep were strong 35c lower today. Most of the best wethers selling at \$7.25@7.35. We quote: Handy lambs, \$8.90@9; heavy lambs, \$8.35@8.50; wethers, \$7.75@ 8; cull sheep, \$\$@3.50; skip lambs, \$5.00 5.50; veals, choice to extra, \$8@8.25; fair to good do., \$7@7.75; cull to common, \$6 @6.75; light thin calves, \$5@6.

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LIVE STOCK NOTES,

Among the foreign dealers operating in the Chicago horse market recently was Jose Ballina, of Mexico, who filled an order for 28 head of fine carriage horses to take home with him. Mexico is now about the only foreign country that takes any considerable numbers of horses for export, prices having been advanced to a point that has shut off the foreign de-mand.

DETROIT WHOLESALE MARKETS.

May 11, 1910. Grains and Seeds.

Hay 11, 1910. Grains and Seeds. Wheat.—There was a general circula-tion of news during the closing days of ast week to the effect that wheat fields gargegating over 3,000,000 acres were be-ing abandoned. This was distastrous to be bears and prices ran up fully 4c. The overnment report, however, disputed the situation forcefully by stating the crop to be in better condition than on April mediately holders were taken with the selling spirit and the bears were able to secure their wants at lower values. All over the winter wheat section copious rains have supplied all the moisture need-d for a time, but the Hessian fly is now weather failed to do, and should the work of this pest continue it may become an important price-making factor, since there and for a since the insect has no the general good growth reported by the beast week has brought ruinous so want the general good growth reported but the past week has brought ruinous and the general good growth reported but the past week has brought ruinous so be ruine. On 2 red wheat year so be ruine for No. 2 red wheat year so be ruine in a so when the farge and the good growth reported by the beast week has brought ruinous so we may be been discovered. Some apprehension of this pest continue it may become the protect of No. 2 red wheat year so the price for No. 2 red wheat year so be ruine and the barge and and the good growth reported by the beast week has brought ruinous so the price for No. 2 red wheat year so be ruine and the barge and and the good growth reported by the past week has brought ruinous so the price for No. 2 red wheat year so be the price for No. 2 red wheat year so be the price for No. 2 red wheat year so be ruine and the barge and the good growth reported the price for No. 2 red wheat year so be ruine and the barge and the good growth reported the price for No. 2 red wheat year so be ruine and the barge and the good growth reported the price for No. 2 red wheat year so be ruine and the barge and the barge and the good growth reported the price

Wednesday ...1.11½ 1.11½ 1.03% 1.02% Corn.—Corn has advanced. There is a firm tone to the trade, with a good de-mand. The visible supply shows a large increase. The weather conditions are generally favorable for a good preparation of a seed bed. Planting is progressing along the Ohio Valley but promises to be delayed in the northern states till about the usual time. One year ago price for No. 3 corn was 78c per bu. Quotations for the week are: No. 3 No. 3 No. 3 No. 3 Yellow. 63½

Thursday	31/2
Friday63 64	
Saturday63 61	1
Friday	1
Monday	1
Wednesday64 65	
Oats.—There is a feeling of firmness this deal and prices rule better than week ago. The Michigan crop rep gives the condition of the growing er as on a par with the condition at t time for the past five years. One ye ago the price for No. 3 oats was 59c p	a ort op his
bu. Quotations for the week are:	
Thursday 441/2	a.
Thursday 4472	h i
Friday 45	
Saturday 4434	12
Monday 4434	1
Tuesday 40	
Wednesday 45	
Beans This product is not active an	hd
the quotations are only nominal and us	
changed from a week ago. They are:	
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Thursday \$2.05 \$2.	06
Thursday	06
Cotundor 2.05 2	06
Mondon 205 9	06
Monday	00
Tuesday 2.05 2.	19
Cash. Ma Thursday \$2.05 \$2. Friday 2.05 2. Saturday 2.05 2. Monday 2.05 2. Tuesday 2.05 2. Wednesday 2.05 2.	.14
CloverseedThere is nothing doing	in
the cloverseed deal and the following quotations are nominal:	ng
Prime Snot O	et.

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Wheat	1					 				24	, ?	584	4,0	000)	2	6,	21	29,	000)	1
Corn .			1			 				9	.3	:00	0,0	00)					000		
Oats	 Ì.,									8	,1	11	8,0	00)					000		ć
Rye .											5	8	5,0	00)					000		
Barley	Ϊ.				 					2	,1	54	1,0	00)		2,	43	51,	000)	ľ
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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 edi-tion 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. Subscrib-ers may change from one edition to an-other by dropping us a card to that effect.

at \$6.50. Stephens sold same 11 steers av 870 at \$6.60, 1 cow weighing 830 at \$5. Veal Calves.

Veal Calves. Receipts, \$26. Market strong at last week's prices. Best, \$7@7.75; others, \$4@ 7; milch cows and springers steady. Roe Com. Co. sold Mich. B. Co. 5 av 110 at \$6, 49 av 135 at \$7.50; to Goose 19 av 130 at \$6.80; to Parker, W. & Co. 1 weigh-ing 350 at \$4, 9 av 110 at \$6; to Mich. B. Co. 37 av 150 at \$7.65. Haley & M. sold Schlischer 3 av 125 at \$5, 10 av 150 at \$7; to Nagle P. Co. 29 av 135 at \$7.50. Spicer & R. sold Parker, W. & Co. 4

stour sheep, success; eulls and common, will a we Eishop, B. & H. sold Mich. B. Co, 5 to ma sheep av 120 at \$5.75, 32 lambs av 65 at \$7, 10 wer 6 sheep av 118 at \$5.50; to Eschrich 24 It is j lambs av 65 at \$7.25; to Haire 54 do av 60 at \$7.50; to Newton B. Co, 10 do av 60 arrive at \$7.50; to Sullivan P. Co, 5 sheep av 60 Mux rt \$2.50, 6 do av 95 at \$5.50, 8 do av 90 at st; to Parker, W. & Co, 26 do av 90 at selling P. Co, 11 do av 67 at \$8.50; to Fitzpatrick Chica, Pros, 123 do av 75 at \$8.50; to Fitzpatrick Chica, av 77 at \$7. Spicer & R. sold Mich. B. Co, 38 lambs

Spicer & R. sold Mich. B. Co. 38 lambs horse

THE MICHIGAN FARMER.

av 75 at \$8.50, 27 sheep av 85 at \$6.50, pairs of heavy drafters at around \$1,000. 2 do av 95 at \$5.50, 9 lambs av 75 at \$8.10. Few such are offered, nor is there a call Roe Com. Co. sold Mich. B. Co. 20 sheep av 105 at \$6, 8 do av 85 at \$6; to Fitz-patrick Bros. 4 do av 90 at \$1, 12 do av 95 at \$6.50. Sharp sold Newton B. Co. 20 sheep av 95 at \$4.25, 22 lambs av 75 at \$7.50. Jedele sold same 59 lambs av 65 at \$2.25.

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LIVE STOCK NOTES. J. A. Greenless, of Iowa, one of the big stock feeders of that section, believes fewer cattle will be dry-fed the coming summer or grazed in corn belt territory than at any time in years. He says it does not look right that car loads of feed-ing for should be bought by the packers every day in the week, and he regards prices asked for feeders as dangerously high. He says he believes there are more cattle still on feed in the country than are generally thought to be, and he con-siders it time to cash in matured lots. The two Axmear brothers, well-known stock feeders of Iowa, marketed recently in Chicago four car loads of fat cattle and a load of hogs, all of their own feeding. Shorthorns averaging 1,275 bbs. brought \$7.95, while 1,000-lb. Angus yearlings sold for \$8. The feeders had the cattle on feed for half a year, furnishing good clover hay and ear corn, giving them the shelter of a good barm and supplying plenty of puewater. They always feed ear corn, believing the best results are obtained by allowing the cattle to do their own grind-tion.

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udder twice a day. Chickens Are Lousy.—I have a flock of 45 Plymouth Rock chickens that are only laying nine and ten eggs a day and some-times not that many. I have fed them poultry food mixed with wheat and corn; they look nice and are pretty active, but I would like to get more eggs from them. Mrs. W. H. C., Shelby, Mich.—There may be one or several things wrong. Your chickens may be lousy, if so kill the lice, using any one of the lice killers adver-tised in this paper. They may need more exercise and a change of food. You are in a position to figure out the cause bet-ter than I can, perhaps some error is committed in the management of them. They may need more exercise or more green food. How to Feed a Brood Mare before Foal-

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(15) 531
with a slimy substance: I presume it is the result of garget. If her bag is diseased in any way it is not noticeable. She is now running on grass, and being the only one we keep for domestic use I would like to have her made well. Would you advise us to use her milk when in this condition? P. H. H., Six Lakes, Mich.-I imagine that your cow suffers from bacterial udder infection. Give her I dr. Beechwood creosote at a dose in feed twice a day, and apply one part tincture iodine and five parts camphorated oil to udder once a day. I do not believe her milk is dangerous to use and it is possible that the milk becomes contaminated after it is drawn from the udder; therefore I suggest that you be especially particular in cleaning the milking utensils and allowing them to remain out in the barn, clean the stable thoroughly and disinfect it. You understand that milk picks up surrounding infection very readity, hence the necessity of cleanliness about the stable and besides, the person who milks should be dressed with clean clothing and have clean hands. Furthermore, the udder of a cow should be kept clean.

the udder of a cow should be kept clean. Chronic Thickening of Shin and Hock. —I have a colt that got hurt, causing shin and hock to swell. The skin has not broken at any place on the leg and the colt is not lame, but travels a little stiff. I have applied two blisters, but without result. E. A. H., Armada, Mich.—It is almost impossible to reduce a swelling such as your horse has; however, you will obtain fairly good results by applying iodine ointment daily, but understand, the swelling will subside very slowly. Blood Poison.—I would like some infor-

the swelling will subside very slowly. Elood Poison.—I would like some infor-mation regarding my helfer that came fresh only four weeks ago and has not done well since. Her appetite is poor and when she came fresh gave a nice mess of milk, but for the past three weeks her milk flow has been extremely light. I have given her different kinds of feed, but she does not gain. A. H., Temperance, Mich.—Give your cow 8 ozs. of epsom salts daily until her bowels loosen and act fairly free. Also give I dr. ground nux vomica, 1 oz. ground gentian, 1 oz. bicarbonate soda and 1 oz. powdered charcoal at a dose either in feed or as a drench two or three times a day. Grain and grass is the best food for her.

charcoal at a dose either in feed or as a drench two or three times a day. Grain and grass is the best food for her.
Sprain.—I wish you would tell me how to prepare a useful home liniment that is suitable for several purposes. T. G., Cedar, Mich.—A very useful and not expensive liniment is made by mixing equal parts of turpentine, aqua anmonia and sweet oil, or if a milder effect is required add some more sweet oil. This is a very useful home liniment; besides, a good one to keep in the stable.
Barrenness.—I have a cow that fails to several bulls; when in heat she acts with calf, although she has been mated to several bulls; when in heat she acts with calf, although she has been mater and in three days later. W.
C. Montague, Mich.—Your cow suffers from a chronic irritation of the ovaries and I am inclined to believe will remain barren no matter what is done for her; however, you might try dilating the openfing into the womb; also dissolve 2 ozs. bicarbonate soda in three quarts tepid water and wash out vagina daily until she is bred. She should not be mated closer than five or six hours after using the last injection.
Chronic Laryngitis.—We have a horse that is now 18 years old which is in good condition, but coughs occasionally when eating grain, but has no symptoms of cold or catarrh. C. V. Hudsonville, Mich.—Apply equal parts tincture jodash in 4 ozs, of water and gargle throat twice a day.
Retention of Placenta (Afterbirth).—I have a cow that came fresh April 12, and or be did water later of a star water and garge throat twice

in 4 ozs. of water and gargle throat twice a day. Retention of Placenta (Afterbirth).—I have a cow that came fresh April 12, and as she did not clean I was obliged to take it away from her. Since then she has not done badly, but some of my neighbors tell me she will always have similar trou-ble and if so I thought perhaps she had better be fatted instead of my keeping her for dairy purposes. Therefore I should like to have your opinion. I engaged in farming 18 months ago at which time I subscribed for the Michigan Farmer and am well pleased with it. M. E. S. Mel-vin, Mich.—If your cow is a good speci-men and is profitable for dairy purposes you should keep her, for I know of no reason why she should not clean after having her next calf.

reason why sne should not crean arear having her next calf. Impaction.—Three of my cows were taken sick some time ago, showed consid-erable pain, were quite uneasy and ran about, making a great deal of noise, and I imagine they must have been in pain. Our local Vet, thought they suffered from impaction. In 48 hours we succeeded in opening their bowels, but their milk flow almost ceased. Several sores appeared on their nose which finally healed and the scab scaled off. On the back a swelling took place which some time later also formed a scab but the trouble on back may have been the result of an injury. They are now eating all right, but do not give nearly as much milk as they gen-erally do. A farmer living near West Olive says that several dairymen have had cows affected much the same way Leading Chicago live stock commission
 Dislocation of Stifle Joint, - I have a firstly do. A farmer living near West or further that the season is six weeks earlier than the season is six weeks earlier than the genesers' begin to be song three weeks ago, one stifle dist it worked at the season is six weeks are determined by the same state of the season is six weeks are determined by the season is a stop to say just what will happer the are seen the argest on record is good. The argest on record is good first for the argest on record is season are seen allowed to grow up into beef.
 There are a few orders in the Chicago
 There are a few ord

THE MICHIGAN FARMER.



She Is Just Now a Much Sought After Personage.

downtrodden and abused are just now When her work is done she climbs to her having their inning, and rich is the har- room, which, all too often, is the most vest they are reaping.

Within a block of where I write a has been used to a jolly family circle, woman is offering six dollars a week for imagine her loneliness. If she has callers a girl, only three in the family and the she must entertain them in the kitchen washing sent out, and she has no takers or the dining room, and some women are for the offer. A block farther, seven dol- so mean they are mad if the poor girl has lars a week is offered for a nurse girl for a beau. She can not go out and in the two not keep a nurse. Still another woman and is not allowed to forget it. has offered seven dollars a wook, for a This is the dark side of the picture, and flat and gone to boarding.

for domestic help, many offering six dollars a week and nearly all holding forth health and her moral and social welfare the alluring promise, "Wasings sent out." and try to throw all the brightness they Employment agencies are servantless, and can into her life. Then the question of to your cry for help they return but one money is to be considered. A maid even reply, "Girls for housework are as scarce as hen's teeth." The women census tak- cially than the majority of clerks, factory ers are besieged by housewives to come and work for them when the job of census three dollars are all profits, while the taking is over. Women who have girls other girls must count on paying board, are raising wages and doing half the work for fear the girl will leave, and who go out every day to work wear out those who can't get help are openly envious of those who have.

Verily, if the servant girl has suffered in the past, she is now reaping her reward.

yesterday to send her daughter out as a be smartly dressed or lose their jobs. housemaid. The daughter has not enough education to earn a living in any profession nor would she ever have if she was kept in school until she was 30 years old. She must earn her living some way, and are substantial ones, while the girl who for an uneducated girl the kitchen offers proudly refuses to do housework but the best field just now. For years back girls have been shunning domestic serter to them on account of holidays and evenings free, and to these avenues girls ter treated than the shop or store girl. have turned. The result has been a les- If she is indisposed the work is lightened sening of the number who will go into for her and she is given a chance to lie kitchens, until now such girls are at a down. The girl in other employments premium.

Of course, the maid in a city home hasn't always an enviable lot, especially illy afford to do. if she comes from the country and has goes into a family in her own neighborof chatting with her, never under any to maid.

OW is the high tide of the year for circumstances introduces her to friends, the servant girl. Those workers, and never expects her to eat with the whom we have long been told were family or sit with them of an evening. cheerless one in the house, and if she

small children, and the mother can front door, in short, she is an underling

family of three in a flat, and not being so I show it first. For in countless homes able to get the girl she has closed the the girls are contented and well treated, get bees by the pound. There are from in spite of restrictions. There are many Every week the papers in Detroit con- kind mistresses who are not afraid to tain columns of advertisements asking be interested in the girl who does their work, many women who look out for her and try to throw all the brightness they at three dollars a week is better off finangirls, and even many stenographers. Her room rent, and car fare. Besides, girls clothes faster than those who stay in, and they must have a different quality of clothes. A kitchen girl can get along nicely with two or three print dresses and one good suit. The girls who meet That is why I advised a friend of mine the public can not wear print. They must

A look at the question of food shows the servant is better fed, too, than the girl in other vocations. She has her three warm meals every day, and as a rule they spends her hours in store or shop, is all too often underfed because she does not vice. Stores, factories, offices looked bet- know how to order her diet wisely. With a good mistress, the kitchen girl is better treated than the shop or store girl. must keep at work no matter how she feels, or lose her time, which she can

Take it all in all in this particular year no friends she can visit. She is not re- of grace, the housemaids and cooks are garded as a friend, as she is when she prosperous. They do not have to go seeking work, they are well paid, and The mistress, all too often, takes they are treated with a deference once little interest in her welfare, never thinks quite foreign to the attitude of mistress DEBORAH.

Michigan Country Women as Money Earners. No. 4. Bee-Keeping Is a Profitable Employment, and Easy for

the Fearless.

Several Michigan women have taken to The main thing is not to be afraid, and whose She lives on a fine farm of 120 sketch. county.

About four years ago Mrs. Speller, hav-ing been advised by her physician to en- interest, perhaps by the work of some gage in some outdoor work began to be interested in bees and found that, not being afraid of them she could handle them nicely, so she soon came to take the entire care of them. The start was made with four swarms and at present there are seventeen, made strong by removing the queen when a swarm leaves the hive and allowing the bees to go back.

The expense has been very slight since the new hives needed are made at home, and considering the small outlay of money, the enterprise has paid well for the investment and time used. This year, notwithstanding the year was a very poor honey year, she sold \$40 worth, besides having a very liberal amount kept for home use.

But the real gain was found in health and interest. The youngest of her family of five children was old enough to share her interest and help when he was needed. Mrs. Speller says: "It seems as though almost any one could be success-

bee-keeping as a means of money mak- then to find out all one can about them, ing. Among them is Mrs. Luella Speller, by reading, and by watching them." As photograph accompanies this proof that the work does not require so thing of an idea of the returns. much time after all, Mrs. Speller has acres in Palmyra township, Lenawee this last year made about \$250 from her poultry.

Perhaps the first step is to acquire an

ful with bees if they were to set about it. While "Familiarity" Does Not Breed Con tempt," it Engenders Fearless Confidence.

practical bee-keeper or by the display at the fair or by reading. Then the next step is to get all the bee literature you can beg or borrow. Then find some patient bee-keeper and ask questions, and if possible make a long visit and as frequent ones to his place of business as possible and keep your ears and eyes open.

Then decide which branch of bee-keeping you wish to embark in, and choose your location. If you have access to a dealer in bee supplies lay the case before him and he should be able to advise you. If not, send to one and from his catalogue make your selections. You can get nuclei from the one-frame nucleus up to the large colonies in 10 frame hives, and the price varies with the time of the year, and ranges from \$2.00 to \$12.00. These are without the queen and with these as with the bees, the price is modified by the time of the year and the social standing, so to speak, of her royal highness. Her price will range from \$1.00 to \$12.00.

If you should be able to get hives with comb, near at home, you can send and



Mrs. Luella Speller.

4,000 to 5,000 bees in a pound. They are sent in boxes made of very thin basswood and wire net. They will cost without queens, \$1.50 to \$3.00 per full pound, according to time of the year. It is much cheaper to buy them this way as the weight of the hives and comb is many times greater than the bees alone, and the express counts. As to what other supplies one must actually have the taste and inclination of the bee-keeper will be the guide, some liking to afford more; ome more resourceful and able to get along with less, but the outlay need not be large. Of course, if one is fortunate enough to purchase the bees at home it is well to do so, only in buying them away one is sure of pure stock. As to what may be expected in the way of increase, a one-frame nucleus will make, if properly handled, a good strong colony by fall, and it is claimed that the threeframe will, with right management, be increased as many as ten full colonies by fall if purchased in the spring. Regarding the yield of honey one could expect, one well known bee-man has been able to make his bees average 1141/2 lbs. per colony even in a poor year. And a glance of the market reports will give one some-

There are many races or varieties of honey bees, most of them named for the locality from which they came. They have very distinct characteristics.

As a general favorite the Italians hold



A little boy down in N. C. asked his mother to write an account of how Grape-Nuts food had helped their family. She says Grape-Nuts was first brought to her attention in Charlotte, where she visited.

"While I was there I used the food regularly. I gained about 15 pounds and felt so well that when I returned home I began using Grape-Nuts in the family regularly

"My little 18-months-old baby shortly after being weaned was very ill with dyspepsia and teething. She was sick nine weeks and we tried everything. She became so emaciated that it was painful to handle her and we thought we were going to lose her. One day a happy thought urged me to try Grape-Nuts soaked in a little warm milk.

"Well, it worked like a charm and she began taking it regularly and improvement set in at once. She is now getting well and round and fat as fast as possible and on Grape-Nuts.

"Sometime ago several of the family were stricken with La Grippe at the same time, and during the worst stages we could not relish anything in the shape of food but Grape-Nuts and oranges, everything else nauseating us.

"We all appreciate what your famous food has done for our family." Read "The Road to Wellville," found in pkgs. "There's a Reason."

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



For those who would like to have three daily papers a week, we have arranged with the New York Thrice-a-Week World so that we can offer it with the Michigan Farmer a year for only \$1.40; that is, both papers a year each for that price. Send orders to us or THE MICHIGAN FARMER, Detroit.

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an easy lead, being by far the most profitable, since they are very prolific, industrious and good natured. In appearance they are distinguished by golden bands running around the body. They are the most easily handled and the best liked of all bees

Next as a favorite, though perhaps this may not be agreed to by all, are the Carniolans. These resemble the black bees, but are gentle and have no good points to excel the Italians, unless it be the fact that they deposit the least propolis of any of the races. But since-they are inveterate swarmers, a very undesirable trait where the production of honey is aimed at, this quality is of small account.

Then there is found in nearly every locality the black, or German, bee. These are incline to rob, are quite savage, very nervous. The only points in their favor are the whiteness of the comb honey and the fact that they do not cling so tenaciously to the comb as do some of the other varieties.

The Holy Land, or Syrians, are distinguished by the enormously prolific queens, making them desirable to those who specialize in queen rearing.

The Cyprians resemble the Italians but have a way of getting into tremendous tempers, which detracts from their good name, as the same trait does among "humans."

The best bee-hat is a large straw with a curtain of black mosquito netting around the nim. Always use black because it doesn't dazzle or blind the eyes as white does.

People used to make hives of straw, twisted into a large rope and made into a dome shape, and later made boxes to keep them in, then when the bees had gathered the honey they had to be killed with brimstone smoke that the honey could be taken out. Nowdays, hives are made with movable frames so that the honey may be taken without destroying the bees. The size of the frames varies in the different makes of hives. One is called a hangstroth, for Father Hangstroth, who was the inventor of the movable frame hive. The lower part is the brood chamber where the bees raise the young. The worker comb has five cells to the inch. The drone comb has about four cells to the inch.

The comb is made of beeswax, secreted from the body of the bee in tiny scales. Each bee has eight little wax pockets on the under side of her body. A bee must eat from 10 to 20 pounds of honey to secrete a pound of wax, so it is much more economical to have the honey made in large sheets and extracted, and the honey put up in glasses or bottles, or larger pails, for the market and the empty combs returned to the hive to be filled up again.

When the queen is getting old, the bees know it and get another to take her place. They make queen cells, making queen cells larger after the egg is laid so that they take up the space of about three ordinary cells. The worker bees fill up the cell with a milky substance called royal jelly, made like the food of the other larvae, of a mixture of honey and pollen which has been partly digested. The royal jelly, though, is a perfectly digested and highly concentrated food with a very rich, creamy taste, slightly tart, and a strong, rank flavor. There is something very mysterious in this as it seems to be the means of producing a highly organized queen from the very same egg that, hatched in a worker comb, and fed on the common food of the bees. would produce a worker bee. It takes nine days from the time the egg was laid until the cell is ready to be sealed up and in seven days more the queen will emerge. She does this by cutting the thick, heavy wax cap from the inside, in a nice circular lid like the top of a tea pot, and pokes her head out and sizes up her new dominion. Sometimes the worker her to break down.

There are queer things told of bees. trees, basswood, maple and poplar, and does not fall from the skies, as people used to think, and if bees get too much times but think you failed to add enough. of it, it may make them sick.

THE MICHIGAN FARMER.

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SHORT CUTS TO HOUSEKEEPING. This department is opened as means of exchange of new and successful ideas in homemaking. If you have learned something in cooking, sewing, child raising, fancy work economy, anything which is helpful, and new, send it in. Twenty-five cents will be paid for every article used, but none will be returned. Keep your suggestions short.

Zinc put in the fire will clean out the chimney .- M. G. W.

Put a little earth in a jardiniere before putting the plant crock in. It will help the plant .- Mrs. J. W. T.

Dear Editor :-- I have had experience with a panama. I cleaned mine with gasoline but last of all I put it into the tub and washed it. It washed fine, never fad-ing or shrinking. They are supposed to have been shrunken before they were made up.-H. E.

Glycerine and listerine with a few drops of carbolic acid to half a pint of the lotion is the best remedy for chapped hands I have ever found .- Mrs. G. E. G. Try rubbing New Orleans molasses on the grass stains or ink stains on the children's dresses and aprons .- Mrs. G. E. G.

HAVE YOU BOUGHT THE LITTLE ONE'S COAT?

If you have not already bought a spring coat for that four-year-old boy or girl, why do you not buy one of those natty little checked coats which are so popular this spring? The mothers have worn the checked suits for some time and now some fashion-maker has been enterprising enough to see that the check is as good for the little folks as for the grownups.

I hear some one saying, "But check is so hard on the eyes. Will it not be bad for the children?" Not so bad by a good deal as the vivid reds they have been wearing. If you do not believe it, try looking at the two colors and see which one dazzles your eyes quicker.

Black and white checks or blue and white, either are good. And the coats come in two or three styles. There are swagger little box coats, double breasted and just long enough to be really a jack-Or, if you think these not warm et. enough, you can get a coat as long as the The short box coats are most atdress. tractive as they make such a decided change from the winter coat.

If you want to buy one ready-made you can get them for from \$3.50 up to \$5.00. If you are wise, however, you will buy a pattern and make the coat yourself. A yard of cloth will make a coat for a four-year-old child, nine cents will buy the lining and 25 cents the buttons. bone buttons, just like those on daddy's coat. A black velvet collor, or one of dark blue, adds to the smartness of the coat. Or you can have a collar of the cloth with a touch of fancy braid, red brightens it up, and some sort of emblem as an anchor, or the more up-to-date chantecler, on the sleeve. You can buy these emblems ready to go on the coat and buttonhole them on. The patterns do not call for lining, but the coat sets The patterns better if a light lining is used.

If your heart is set on red, however get it, for red is worn a great deal. Tone the coat down with a black collar and fasten with brass buttons. Red is ever dear to the childish heart, and when all is said and done, is there anything prettier for a black-eyed, dark-haired youngster than that same vivid hue?

HOME QUERIES EXCHANGE.

bees tear down the thick wax about the of the exchange column tell me a good bees tear down the thick wax about the of the exchange column tell me a good Dear Editor:-Can any of the reade queen cell leaving only a thin wall for way to fill cracks in a kitchen floor that has been painted?—A Subscriber, Elmer. Dear Editor .-- I saw in the Michigan Think of bees having lice; imagine a Farmer that Mrs. P. J. D. wishes to know skunk watching out in front of a bee-hive how to make hard soap. I think you did to gobble up the bees and eat them for all right. If your soft soap was all right the sake of the honey they have in their you failed to put in enough salt. Just honey sacks! Then, honey-dew is secret- how much salt I use to the gallon I am ed by bark-lice on the leaves of certain not able to tell. That all depends on how much grease your lye took and the quan-tity of soap. I find it varies a great many If it has not divided enough you can cut out and take out the lye in the bottom if

Received the knife you sent me, and there is any, if not, add more water and will say I am more than pleased with it. It is really nicer than I expected. Thank-ing you, I am, yours respectfully, Judson A. Swift, Washington, Mich

From Oven Door to Farm House Door

That sums up the whole story when you buy soda crackers by name-

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As soon as they are baked they are placed in moisture-proof packages. In this way they are kept free from dust, damp and other harmful conditions.

This means that you are *always* assured of fresh, clean, crisp, unbroken soda crackers no matter where you buy them or when you eat them.

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the Farm House

THIS big, informing book tells how to paint the farm house, when to paint and what paint to use. It goes into detail as to priming, number of coats needed, the amount of paint required, etc. It is a valuable book, one that every farmer should have, and it is free.

It has been written by an authority on the subject of paint and painting, and covers everything to be painted, varnished or enameled around a farm. With this free book as your guide you can protect and beautify your property and add to its value.

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tells what to get for each purpose **SHERWIN-WILLIAMS**



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THE MICHIGAN FARMER.

ME AND YO A FLASH FROM BLACK EMBERS.

BY HOLMAN F. DAY. (Continued from last week).

Without a word Nicola began his painful and wavering trip to the shore, Murtha's big hand gripped in the slack of his coat for support.

On the way down Telos lake Murtha kept the reflector of his lantern trained on his prisoner in order to make sure of all of his movements. Dawn was breaking when they reached Telos splash dam. In making the short carry Nicola hopped as best he could on his stiffened legs. He welcomed this bit of movement after the last night before I arrested him." long hours of trussed agony in the canoe.

Telos stream leads down to the river and the river is the waterway to the settlements. Murtha, with his ironshod setting-pole, eased the craft down the roar-ing shallows, past the rocks that combed the water into white froth, and paddled the quiet stretches.

The sun was near meridian when they swung in sight of Castonia settlement, a little cluster of houses at the meeting place of Telos stream and the river. It is in the heart of the big woods.

Murtha had not intended to pause there. He proposed to haul up a few miles below on the river, feed his pris-oner and keep on. He knew that the Dionnes, Levesques, Heberts and others of Castonia were poachers themselves, and "I'd advise you to stay quiet in this he did not care to tarry there, even canoe, Injun," he suggested grimly.

the rest of the Canucks," said the manager. "The state gave 'em fifty thousand der. There was apprehension in her dark acres of land there and made their squatter titles good. That ought to be enough for 'em. Bateaux will be along some this afternon. time we'll have their duffel onto the bank here and ready, and those shacks torched.

We're going to burn, Murtha!" "It'll be the only way to clean out the nest," assented the warden.

vides that squatters in possession of land for three years must be paid for improvements to it."

"That Injun thinks he knows a lot of law," remarked Murtha satirically. "He was tellin' me all about the game laws "He

The manager had been starting up the bank, beckoning his party to follow. He looked back over his shoulder. "You needn't worry about the law end of this business, Injun," he said, contemptuously. "That's all been looked after, and we're posted on what we're doing." Turning to the warden, he said: "A few hundred paid to settle damages is better than several thousand acres of our best timber. And when we once get this gang off I'd like to see another squatter spry enough to get a toehold on our property." Murtha stepped back, took a look at the bonds of his prisoner and tightened a few knots. The spectacle on shore was too interesting to be missed.

eyes as she gazed from face to face, but she had self-possession that showed contact with the world outside. She lifted In the meantime back the heavy mass off her forehead and looked at the manager with simple directness when he spoke.

The girl who came was tall and slen-

"This call today, isn't exactly a pleas-ant one, Miss," he said, "but duty is duty and business is business. The pulp "You can't evict those people that company has reclaimed this land-its own way," cried Nicola, a strange tremor in property—through due process of law and his tones. "There's a state law that pro- we've got to put off these squatters."

"But these are our homes, sir." "There's plenty of room back at Ste.

Agathe." "It was why we came here-there were no farms for the younger ones. We are all of the old Acadian stock, sir, and the farms the refugees took up have been divided and divided until they are little more than lanes. And the Acadian stock stays by the farms and does not go away to the cotton mills in the cities. So we have come here. 'Our men have tried to buy this land. We will pay for it."

"But it isn't for sale, it never has been for sale, and it won't be for sale," said the manager. "We don't want settlers having a fire start here that will sweep here. The fires endanger thousands of acres. You'll have to leave.'

"But there is no room on the old farms," protested the girl. "Then Canucks better cut down the size of their families," suggested the manager, brutally. "It isn't our fault if

you are crowding your own selves off the earth." ou to stay quiet in this "At least you can wait until our men he suggested grimly, come back," pleaded Evangeline—this

treat.

to act funny."

son's work in the lumber camps. But as he came in sight of the place he saw a half dozen men landing from canoes on the sandy strip before the set- others. tlement. They had evidently just arrived, coming up the river, and the glint and children an old man advanced toof badges on the breasts of three of them interested the warden. They wait- With the instinct of those close to naed for him and he discovered that the men with badges were deputy sheriffs that he knew. The man in charge of the his grizzly stubble of beard, his face the party was the woods manager of the big mild, appealing countenance of the habipulp company that controlled the dis- tant Canadian. There was a lawyer with them trict. whom he knew and the forestry expert of the company was along.

Murtha drove his canoe ashore and the while they listened to his story.

We're on a house-cleaning trip our selves," explained the pulp magnate. can't you?" "The company has got an order from the court evicting this crowd of squatters I not understand. It's to move-I not from our property and we're here to do understand heem." They started a hundred-acre fire last it. spring, brush burning. If we don't get em off they'll have half this township into farms before we know it."

"It's a good time to tackle the place." observed Murtha in congratulatory tones. "Only the women folks and young ones left here." He surveyed the scattering He surveyed the scattering houses, little cots with stove funnel chim- this news. neys. From the door of each house women had issued and were gazing on the new arrivals with interest. "What ye goin' to do with 'em?"

"Bateau 'em back to Ste. Agathe where they came from and make 'em herd with can understand.

Castonia Settlement Extends Down to the Water's Edge.

though he knew that most of the men of "You've made threats to me. I've got Evangeline of the modern days, beholding the settlement were away for their sea- witnesses here to stand by me if I shoet in real life what had been the pitiful you. And there'll be shootin' if you try tradition of her race-eviction from their

He hurried away in pursuit of the tion under the aegis of law. Out of the gathering huddle of women

ward them, a pathetic outpost of defense. ture he scented disaster of some sort. He blinked up at them meekly, scratching at

"Uncle Johnny Quedaw-or whatever your name may be," said the manager talk with that Injun in my canoe," rebrusquely, "we've come to say you've got marked the warden. "He's been to to move. We'll help you move and do it school, too, and he knows a lot of law party inspected his captive with interest all easy and quiet if your folks will be easy and quiet, too. You go explain to that Nicola fellow, and it might help you understand Yankee talk

"Som' leetle I talk, m'sieu. But I t'ink "Sortez-go off-get out of here-all of

you-be moved back to Ste. Agathe! That's what I mean, Uncle Johnny!" The old man's wrinkled face went

white. There was a look of anguish in his eyes as though he understood-yet was struggling to convince himself that he had not understood-so dreadful was

He turned his head to the group behind him and called plaintively, "Evangeline! ces messieurs! She have ban on de beeg school. She can talk some good. She cupy his eyes in the settlement.

homes-tyrannical, brutal, instant evic-

"Excitable Quedaws are hard folks to deal with," said the chief of the expedition. "We want to do this the easy way So we have come now. Your interests will be taken care of."

"But we have rights," cried the girl passionately. "If law is directing this, then both parties have a right to be heard before the tribunal. I have been to school and I know those things!"

"Say, Miss, you ought to go down and school, too, and he knows a lot of law that ain't so. He's a good-lookin' Injun, pass the time away wh your folks move."

There had been such bitter distress in the girl's face that human emotion could paint little more there. But had those been men of better discernment in matter of emotion they would have wondered at the new and strange wildness of the gaze she bent on the recumbent figure who was lifting an agonized face toward her with desperate effort.

The manager led the sheriffs on toward the houses of the settlement, leaving the girl behind without further thought of Protesting women interposed but her. little obstacle to the business they were Evangeline Hebert; Venez ici et parle a on. Even Murtha paid no attention to her movements. He found plenty to oc-

If anyone had looked he would have



Crisp, fluffy bits of per-fectly ripe white corncooked, rolled and then toasted to an appetizing brown.

Served with cream and sometimes fruit, this dainty food pleases the whole family.

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Children

seen the girl run down to the canoe and throw her arms about the prisoner's neck. If anyone had been near and listened he would have heard her sobbing on his father, and I'll be twenty-three next shoulder and would have known that they were lovers. But one would have needed keen ears to catch the rapid interchange now joining in the laugh. "I just can't of passionate words between their lips. for those lips were so close that they touched at almost every word. Yet it was not all of love. In a moment his jaw muscles ridged tensely and he gave her some swift commands. The warden's pack was in the canoe. She, still on her knees, and moved to town. What's the matter that her movements might not be descried above the river bank, secured a knife and cut the bonds. Nicola rolled in the bank of which the boy knew nothout upon the sand and, when she was in, ing. And he was pondering upon the pushed off and sprang in. They swung letter offering a price for his farm which on with the current, hugging the shore so closely that they could not be seen from the settlement. A few rods below a small logan indented the river bank, and, once abreast of this and screened observation, he stood up and padfrom dled desperately into this eddy. It led little house yonder? Lad, is it having them around behind the houses. (Concluded next week).

FOR THE BOY'S SAKE.

BY JANET THOMAS VAN OSDEL.

Daddy Jake looked across the green meadows to the hill beyond where he could see his son cultivating the corn. The breeze came from that direction and every now and then it bore to him the cheery whistle of the land.

muttered Daddy Jake as he filled his pipe now. You couldn't do it alone and mothfor a smoke. The only time he ever smoked was when he had something on his mind. With this soothing influence upon him, he picked up the letter that had fallen to the floor of the porch and carefully read it again.

me. Marthy, you ain't read the letter accepting his father's supposition, much yet!" he called, raising his voice.

way, a stoop-shouldered little woman with peaceful love light of sacrificing the wifehood and motherhood on her fadel happy?'

"No, Jake," she answered, "I see you was busy studying an' I reckoned you'd Alma, why, it'll be the blessedest spot in tell me when you was ready." Then she the world! Happy! Well, I just guess so." adjusted her steel-rimmed spectacles and slowly read the typewritten words.

"Don't seem noway possible, do it, Jake?" she remarked when she bad finished the letter and put it, methodically folded, back into the envelope.

"It'd be a lot of money. Enough to keep us real comfortable for the rest of our lives without a stroke of work and it'd give Joe such a start in life that he'd could give me!" have an easy row to hoe," said the old man.

The little woman started. "Not a stroke of work! Land, what'd be the use of living, Daddy! The only ones who could be satisfied with not a stroke of money to him now. The farm'll not be work'd be the ones who has their hands folded for the long rest."

to lay on any man," mused Daddy Jake, "and I wanted money-handfuls of ready cash-instead of always trading out for everything. Now, after all these years of take ourselves off. We've worked our working and I've got the chance to have day, we've earned our holiday. We'll take all the ready money I want, I begin to think of some of the young fellows back there who started out when we did with about and we won't stint for money, more money than they knew what to do neither. Then when we are tired we'll with and I wouldn't change places with one of 'em now. And I've begun to think maybe it's one of His ways of giving happiness. He maybe blesses us by giving us work."

There was a long silence-a silence emphasized by the twittering of the sparrows in the eaves of the house and barn, and the contented clucking of hens in the turned the brow of the hill and came into viev

"There's Joe, Marthy! Our course is jaws, whennearly run and it don't so much matter about us. There's him to think of!"

They saw Joe turning toward the house and knew that his afternoon's work was finished. Daddy Jake went down to the barn to meet him and together they did up the chores while Marthy busied herself about the supper. It was while they were milking that Joe told his news, his face transfigured with the wonder of it all.

"Dad, I'm going to be married next fall!" "Married! Oh, no, you're only a little

boy yet," said the father.

laughed. It was a fresh, The boy hearty laugh, good to hear. "I stand six feet in my stockings, month!"

THE MICHIGAN FARMER.

"Well, well!" exclaimed Daddy Jake think of you anyway 'cept a little barefooted tad that has to be looked after.' "And, father, it's Alma! Think of Alma caring for poor me. Dad, how does it come that we stay so poor. Other farmers have gotten rich and sold their farms with our place?'

The old man was thinking of the money even now seemed a big one and a few years back would have been fabulous.

"Ain't we comfortable, Joe?" asked the father. "Ain't we happy here? Do you think you'd find any more content in the big city than you'll find right here in the gold, or is it having health and peace of mind and the power to work for a good living in the fresh outdoors that spells happiness?

"Why, dad, I'm not complaining. Sure we're happy. Come to think of it we're just powerful happy. And yet-and yet--money's nice to have." "Where are you and Alma going to

live?" asked the man. "Why-why, I hadn't thought of any-

thing 'cept that we'll live right along here "Aye, he's right happy now. He is," and I'd take care of the farm same as -why, she just loves Alma!" er-

"But if you'd money, a pretty good pile of it, what'd you do? How'd you live?" questioned Daddy Jake. The boy's eyes glistened.

"I can't exactly tell. But I believe I'd "It's what I've always wanted. And get a lot of city clothes, real swell ones, how I did want it! Now it's come I'm as and then I guess I'd go to town to live-unsettled as if the idea was hull new to anyway, we'd take it easy," said the boy, as he would have if he'd been asked how In answer there appeared in the door- he would like a trip to Mars in an airship.

"And yet, you'd be right contented to live here and work the farm? Real 'Why, Daddy," cried Joe, eagerly, "I

ain't ever complained yet, and now with The old man's face glowed with a beautiful peace. He knew now what was the right thing to do.

"From now on, Joe, you'll get a clean two-thirds of everything from the place. You've served me well and lovingly. Onethird'll be plenty for mother and me." "Talk of being rich," said Joe. "W

"Why that's far and away the best news you

That night after supper when Joe had gone to see Alma, Daddy Jake told Martha of his decision.

"It's my opinion it'd be the spoiling of his happiness outright to turn over that sold while we live, Marthy. We'll let them know the real joy that comes from "I used to think that such grubbing for working for a home. And, Marthy, Al-a living was too much for the Almighty ma'll be coming here in the fall. They'll want a little honeymooning spell to themselves. Don't you mind how it was those first weeks of ours? Let's you and me a nice little chunk out of the bank and we'll see some of those sights we've heard come back home. It'll be our golden honeymoon trip, eh?"

A man was telling about an exciting experience in Russia. His sleigh was pursued over the frozen wastes by a pack of at least a dozen famished wolves. He arose and shot the foremost one, and the others stopped to devour it. But they barnyard. Then the boy in the cornfield soon caught up with him, and he shot another, which was in turn devoured. reneated until the ins This was "But there's Joe," said Daddy Jake. wolf was almost upon him with yearning

"Say, partner," broke in one of the listeners, "according to your reckoning that last famished wolf must have had the other 'leven inside of him."

"Well, come to think it over," said the story teller, "maybe he wasn't so darned famished after all."

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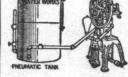
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THE MICHIGAN FARMER, Detroit, Mich.

536 (20)

A PEEP INTO A FISH HATCHERY.

BY BESSIE L. PUTNAM.

The sportsman and epicure alike doff their hats before any movement which tends to increase the number of fish in our lakes and streams, and the general movement of the national government, seconded by every state in the Union, for raising fish to stock the streams meets with general approval.

A visit to a hatchery, further, reveals many curious habits of fish, and to one interested in popular science it is bound to furnish many facts for reflection later. During a recent visit to a Pennsylvania state hatchery, the writer was surprised at the many curious traits observed of the different fish, and is by no means disposed to challenge the statement of an attendant to the effect that "we learn something new every day."

In this hatchery part of the work is done by artificial methods, part in ponds, according to nature's rules. At the time of our visit, early in December, the artificial plant was idle, the water being too low to run it. But we were taken through the building and given an insight into the work. The battery, consisting of several long conduits for water, one above another but the upper flowing into the lower by connection at either end, was so arranged that large glass jars could be at-tached along both sides. Into each of these was thrust a long glass tube, its upper end being connected with a stopcock in the battery. The water thus constantly trickled through the tube into the lower part of the jar, thereby keeping the water in the jar constantly in motion, a necessity to the hatching of the eggs which it contained. The surplus water was driven to the top and flowed out of the spout into a trough below. The joining at the stop-cock must be air tight, for if a bubble of air should gain entrance it would force the water out with a rush, and the embryonic fish would be hurried down into the channel and lost to the hatchery.

When all of the 380 jars for which the battery was adapted are filled, it keeps one attendant constantly employed. A well-trained ear will detect if the flowing of the water into a single jar should cease. Surely here is the "music on the waters" of the poet, where even a single skipped note breaks the harmony. And he who is not alert to connect the broken chain may be sure of a defective hatch. "One night," said our guide, "I was kept so busy that I got no supper, and did not even have time to attend my fire. They were 'eyeing,' at which stage they increase to about double the first size. My jars were filled to overflowing, and I had to empty part out into washtubs or any tank room I could find." This but shows the constant supervision necessary to bring to perfection the millions of lives with which the hatchery is entrusted.

When first hatched, whitefish are "about the size of a mosquito," and in a day they are from one-fourth to one-half inch long, when they are ready to ship. 'Shipments are made in tin cans.

Fishes are cannibals, though at certain stages some species will fight desperately for their young. For this reason only young ones of the same age can be kept together safely, a fish even a third larger being able to prey upon and digest its smaller brothers. Though so many millions are sent out annually, but a small part of them ever reach maturity, birds, mammals, reptiles, and disease decimating their numbers. Yet there are protective instincts and adaptations quite as interesting as those peculiar to higher types of life.

SIGNS OF THE TIMES.

MILDRED M. NORTH. There's a shimmer in the sunshine Like King Midas' hoarded gold, There's a glimpse of skies of azure Thru white clouds looped fold on fold.

There's a tinkle in the raindrops Falling soft from low'ring sky. That the sad-voiced rains of Autumn Cannot mimic if they try.

In the woods, like babes' of fable, Where the moss a carpet weaves, There spring's shyest, sweetest blossoms Peep among the rustling leaves.

And the birds, all unafrighted That the trees are leafless quite, Know in bird lore that sweet blossoms Soon will heap the branches white.

List the chorus in the tree-tops, Vanguard of the feathered throng, Laughing, chatt'ring, scolding, ccoing, In their silvery, warbling song.

Winter is most loath to leave us, See, he frowns and treats us ill, But he'll hasten soon, and Springtime Will the earth with beauty fill.



most favorable circumstances, and it may destroy the profits of a whole year's work. Preparing the soil—planting good seed—at the right time—these are highly important—but they are only the means to an end—only steps that lead to the all important time when you reap your reward. You cannot reap your full reward without the proper machines any more than you can reap reward without proper care in the preliminary steps. To reap all the profit that should be yours you must be prepared with the most efficient harvesting machines. machines

And now is the time to select them—to make sure ou are ready. You are going to be busier every day from now on.

from now on. Start today to look over your equipment. Find out what you will need. Think what it was that would have helped you out most last year. Resolve that this year you will be ready. There are many points to consider in choosing a harvesting machine. You must consider them all carefully. You not only want efficiency, depend-ability, durability-but you want the machine that will meet your particular requirements. You can only be sure of getting all these by taking the proper time to make your selection. And your first consideration should be to find now a line of established reputation that will give you the greatest number to choose from. number to choose from. Your first step therefore should be a visit to an International dealer.

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Now, the only reason for this is because the machines were made right in the first place and no expense has been spared to make them better. Every year finds the experts responsible for the design and construction of these machines in the field making notes—watching to see where any improvement, however slight, can be made to increase their efficiency. The manufacture of these leading machines by one organization means much to you because— — It permits the manufacture to control ore mines,

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lot to you because at harvest time you can't afford to go skirmishing over the country, hunting for an extra part. When the grain is ripe for cutting it has to be cut. It won't wait several days for a repair part from some far away factory. The success of any undertaking depends on care-ful preparation. Insure the full yield of your harvest by preparing for it now. See your dealer at once. Choose the machine that fills your requirements. If you don't know an International dealer, write to us and we'll give you the name of the one nearest you. International dealers also sell the seven most de-pendable brands of binder twine—Champion, Deering, McCormick, Milwaukee, Osborne, Plano and Interna-tional in Sisal, Standard Sisal, Manila or Pure Manila.

