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\$2.75 FIVE YEARS.

FARM NOTES.

Late Summer or Fall Seeding of Alfalfa.

Last fall we fall plowed eight acres for alfalfa. In the spring we weakened and sowed four acres to oats, the other four to alfalfa on June 22. The alfalfa is growing well. Have just plowed oat ground, a rolling gravelly soil. Would it be advisable to sow alfalfa now, or leave until spring, or would clover and timothy be better?

Livingston Co.

G. B.

In the writer's opinion the success of an August or early September seeding of alfalfa would depend very largely upon the proper preparation of the seed bed and the available moisture in the soil for the quick germination of the seed and the rapid growth of the young plants. The ground, if plowed after oat harvest, should be repeatedly rolled and harrowed to get a good firm seed bed before the seed is sown. Then if there is sufficient moisture the seed will germinate quickly and the young plants will make a good growth before winter. If, however, the seed bed is not properly prepared and if the moisture conditions are not right, it would doubtless be better to let the field lie until spring before sowing the seed.

The writer tried August sowing last year on land that had been cultivated since early spring to get it as free as possible from weeds. We waited for rain until it was getting so late that it seemed necessary to sow the seed without further delay or wait until the following spring. On the advice of the director of the Michigan Experiment Station the seed was drilled in an inch or more deep, instead of sowing broadcast as we had intended. This put it down where there was plenty of moisture to insure germination, and the result would probably have been satisfactory, had it not been for a shower which crusted over the surface of the ground a few days after the seed was sown. The stand secured, however, was not satisfactory, owing to the fact that the tender plants could not penetrate the crust, and were so far advanced in germination that we thought it unsafe to harrow the field. On the ends where the land had been packed quite hard by turning the team in the earlier cultivation, however, the stand was good, and there was a thin scattering of plants over the entire field. These plants made a good growth before winter, and practically all of them seemed to live through the winter, which demonstrated that, under favorable conditions, alfalfa sown late in August will come through the winter without killing out.

The writer has known of a number of successful stands of alfalfa secured by

fall seeding, but the majority of Michigan growers who have experimented with different methods seem to favor spring or early summer seeding. In some trials made several years ago at the Michigan station, early seeding gave better results in some seasons and late seeding in others. One advantage in late seeding is

pests is likely to prove more satisfactory. It cannot be used in sufficient quantities to kill out noxious weeds without destroying the productivity of the soil for a considerable time, which would be unprofitable. Lime, on the other hand, is a valuable soil corrective. It will sweeten the soil if it is in an acid condition

the soil moisture through capillary attraction. An application of lime, which would be profitable on many if not most worn soils, would correct any tendency toward acidity in any event.

Seeding Low Land.

Will you kindly advise me as to the right time of year to sow alsike clover and timothy on low creek ground? Would it be advisable to sow the same in August or early September?

Tuscola Co.

R. S.

This seed should be sown as soon after the middle of August as the seed bed is in proper condition and the moisture conditions are right for the quick germination of the seed and the rapid growth of the young plants. The earlier the seed is sown the better will be the growth of the young plants and the stronger their root development to survive the winter.

RECLAIMING WASTE LAND.

The great increase in the value of farm land, has set men to work improving the soil's fertility on land long cultivated, and reclaiming thousands of acres that have hitherto been considered unproductive and worthless for agricultural purposes.

On many farms there are acres of wet, boggy land, covered with hummocks and over which cattle cannot roam without sinking into the mire. It cannot be plowed or cultivated nor converted into meadow land, because the soil is sour, and only wild grass, rushes, and a few straggling weeds will grow. For pasture it is valueless as it is under water in the wet seasons.

Farmers are beginning to find out that these frequently submerged lands can be made the richest and most productive acres of their farms. For years and ages fertility has been leaching away and running into such places until the black, rich soil has become several feet deep and its wealth of plant food practically inexhaustible. These waste places are now being reclaimed by digging deep, open ditches and running tile drains into them. In many instances the returns pay several hundred per cent on the investment. Land that was worthless, by this treatment becomes worth \$100 an acre and more. Forty dollars for tiling often doubles or triples the value of the land.

Professor A. Marston of the Iowa college of engineering, an expert on tile drainage, shows how and why tile drains are indispensable in low and swampy lands. Discussing the purpose of net-working our fields with these miniature tunnels he concludes as follows:



Laying Tile Drains in Swamp Land. (See Reclaiming Waste Land.)

that the weeds will be less troublesome, which fact has made fall seeding popular in the western and southwestern states where alfalfa is extensively grown. However, it is more a question of suitable conditions for seeding than of the time of year, and unless the seed bed is in proper condition and the moisture conditions are right the success of the crop will undoubtedly be handicapped by late sowing.

Salt Versus Lime for the Soil.

Have a piece of sandy land, on which I am thinking of using salt. Please tell me how much I ought to put on per acre, and would the results be sufficient to pay for putting it on? Also how much would it take to kill milk weeds and how long would it be before the land would be fit for use? In using lime how much ought to be used per acre?

Otsego Co.

H. K. B.

Salt is not in any sense a fertilizer, nor even a soil corrective. While some farmers claim to derive a benefit from its use in the getting of a stand of clover, its only profitable use in the writer's opinion is on land badly infested with cutworms or wireworms, and even in such cases some other method of combating the

Rye As a Crop for Green Manure.

Please advise in your columns if rye plowed under green, will sour the land. Have been told it would.

Barry Co.

D. V. H.

Large quantities of green vegetable matter have a tendency to cause an acid condition of the soil when plowed down. However, rye will contain a large proportion of fiber when plowed down in the spring for late planted crops and on an open soil will not produce a noticeable degree of sourness. The writer has used rye as a green manure without any bad results, other than the risk of dry weather when it is plowed down, in which case it interferes with the free rising of



Curing Hay Under Hay Caps at Lillie Farmstead, Ottawa County, Mich.

1. Tile drainage by making the soil firm, enables earlier cultivation in the spring. Low ground drained can be cultivated earlier than high ground not drained.

2. Careful observations have shown that the tile drainage makes the soil several degrees warmer in the spring. Scientific tests have shown this increased warmth to be of the utmost importance in promoting the germination of crops.

3. Tile drainage removes from the pores of the soil surplus and stagnant water, which would drown and destroy the roots of plants.

4. The drainage makes certain proper "breathing" of the soil, or free circulation of air in its pores which is essential to healthy plants.

5. Tile drainage establishes in the soil the proper conditions required for the satisfactory carrying on of the chemical processes necessary to prepare the plant food for its use by vegetation.

6. Tile drainage fits the soil for the vigorous life and action of the soil bacteria which are essential to preserve and increase its fertility and promote the growth of the crops.

7. Tile drainage increases the depth of the soil which can be reached by the roots of plants and drawn upon for plant life.

8. Because in them the roots of plants can penetrate deeper, where they are protected from the heat and drought and can reach the deep seated moisture, the drained soils stand drouth better than undrained soils.

9. By putting the top three-foot or four-foot layer of soil into a porous condition, tile drainage enables soils to absorb rain water instead of discharging it over the surface and so helps to prevent water wash and constant loss of fertility.

10. By causing this porous condition, the drainage makes the upper three or four feet of soil into an enormous reservoir to catch the rain water and discharges it slowly into the streams. Thus tile drainage prevents floods instead of making them.

11. Tile drainage does away with irregular shaped fields, cut up by sloughs and so cheapens cultivation.

All of which reasons go to show that tile drainage is a paying proposition.

ILLINOIS. EUGENE J. HALL.

LILLIE FARMSTEAD NOTES.

Summer Silage.

This is the first year we ever had silage enough to carry us through the summer. Last year the silage gave out on the first day of August. Today, the 7th day of August, we still have four or five feet in depth in the bottom of the 50-ft. silo, which is 15 feet in diameter. There is certainly enough to last us all of this month and without doubt part of next month; certainly until we get rains which will green up the pasture. The cows are now getting, and have been for several weeks, a scoop shovel full of corn silage every night and morning with a little grain and then a light feed of hay. The fact is it is necessary because there isn't anything for them to eat; that is practically nothing, although they pick a little. Our pastures are in as good shape this year as they ever were at this time of the year, owing to the fact that we did not turn them into the pasture quite so early in the spring and they were not grazed so short early. That makes a great difference in the pastures lasting.

Cows on Vacation.

At the present time we have several cows taking vacation. We have them in the back pasture. There is plenty of dry feed there because we didn't turn a hoof in until June and we could have cut a good crop of hay on a portion of it. While of course this is not so palatable as it ought to be, yet there is plenty of it such as it is and the cows are doing well, seemingly. They are off out of the way and it will save the corn silage for those that are giving milk.

Potato Prospects.

Potato prospects in this locality and on my own farm in particular are not very promising. I have a poor stand. The seed was poor, it didn't come up. What the trouble is I do not know. The most of the seed, seemingly, was in fair condition, yet some of it was affected with dry rot when we planted it. I think I could have improved the seed by taking it out of the pit a little bit earlier and spreading it on the barn floor or granary floor, and perhaps spreading it a little thinner, and yet the poorest

stand that I have is on one side of the field where I planted three barrels of Green Mountain potatoes which I purchased from the Maine Experiment station. These were lovely looking potatoes. I spread them out on the upper floor of the hog pen so that there was only one potato in a place. Large, healthy looking, green sprouts started out on them and I expected a good stand from these potatoes, but they are about the poorest on the field. This is something I cannot understand. It may be that it was not so much the seed as it was the extremely hot weather. We didn't plant until well towards the latter part of June and the ground was simply hot. After we planted a portion of the field we had quite a nice shower and I thought perhaps those that were planted before this shower would come up better. They did not. One reason I think it was the hot ground that had something to do with the sprouting of the seed is because after this shower I planted garden beans in the garden. The ground was moist and nice and only two seeds germinated and came up. Now I know this was good seed because the same seed was planted earlier in the season and seemingly every seed germinated and I am of the opinion that the extreme heat had something to do in destroying the germinating power of the bean seed and also of the potatoes.

Second Crop of Alfalfa and Clover.

When we were about half through haying we had a fairly good shower of rain and I was in hopes that it was sufficient so that we would have a second cutting of alfalfa and possibly red clover, but the weather conditions since then have been such that very little growth has been made. It was so hot, and there has been no rain since to speak of, that this shower did not seem to have the effect that one would think. The consequence is that there is not a very healthy growth of either red clover or alfalfa. I don't think either one of them will pay to cut. In some portions of the field there is quite a little growth but on other portions there is scarcely anything and consequently I do not believe it will pay. The alfalfa I think I will clip and leave on the ground, setting the cutter bar quite high, as I understand that it ought not to grow too long without clipping. With a good rain now on the red clover meadow I possibly could get a second crop later on. I remember one year when this occurred. A rain in the middle of August or the latter portion of August gave us a nice cutting of clover hay in September, but there is one thing I am surprised in and that is the red clover has made fully as good a second growth as the alfalfa. Of course, we all expected that the alfalfa was a plant which would come right up after it was cut and we could get three or four crops a year. Perhaps we can after it once gets well established. Perhaps the roots are not down to permanent moisture yet, so that it can grow during hot, dry weather. It has been no more a success for a second or a third cutting than the common red clover has. I am in hopes, however, that by next year, possibly, it will be well enough established so that we will get a second crop. There is one lesson you learn when you sow a field of alfalfa and that is that it wants to be thoroughly tilled. On one field a portion of it is a fairly good stand, on another portion where the ground is a little bit flat and yet it is not seemingly wet land, the stand is not so good. Twenty years ago when I tilled this field I didn't consider that it was necessary to till that portion of it all, but here is where we have the poorest stand of alfalfa, due almost entirely, I think, to the fact that it was not properly drained and I shall go to work and till it at once. A portion of this field I will leave to alfalfa and see what it will amount to; the rest I will have to plow up next spring and plant to corn.

Poor Oat Crop.

We have a poor oat crop in the entire section of the country. The ground was too wet when we sowed the oats and then it came off very hot and dry. Oats made a poor growth and owing to the extreme hot weather they did not properly fill and are light. This has been a poor oat year and nobody is to blame for it. Some fields of oats are hardly worth cutting. I am pleased to think that I plowed mine up and planted to corn, because I have a good crop of corn on one field it is going to make a nice tonnage of corn silage, and on the other piece that I put into beets I have a good stand of sugar beets

and with a timely rain I will have a good tonnage.

Everybody is complaining about short pastures. The extremely hot dry weather has used up the pasture. Even where people depended upon the second growth of clover to get pasture at this time of the year they are disappointed, owing to the poor second growth, and the permanent pastures of June grass are seemingly dead. Of course, a good soaking rain would revive them, but when will it come? We have had a couple of light showers and I thought perhaps the drouth was broken but it did not rain enough. Corn, however, has stood the drouth well and I look forward to a good crop.

COLON C. LILLIE.

LIME FOR ALFALFA.

I have a field which I wish to seed to alfalfa next spring. The soil runs from clay to a very light loam and is in a fair state of fertility. The field at present is growing a crop of beans which have received very thorough cultivation and bid fair to yield a good crop. I expect to lime the soil, also inoculate by soil taken from an alfalfa field and treat seed by culture method also. In the use of lime would it be advisable to apply the lime this fall, after the beans are harvested, thoroughly harrowing it into the soil, also scattering the inoculated soil and working it into the ground at the same time? Would there be danger of loss in the lime by leaching and washing during the winter and early spring months? As to the lime to buy. I can buy the limestone screenings at 35c per ton, the ground limestone at \$5.00 per ton f. o. b. quarry. The screenings run from pieces the size of a kernel of corn to a fine dust, probably 10 per cent of the bulk is dust. If the screenings were applied this fall at the rate of two tons per acre, the action of the frost on the small lumps, together with what fine dust there was would afford enough available lime for the use of the young plants. Am I right or not? I understand the finely ground limestone would become soluble much sooner than the screenings, but would not the screenings applied in the above way at a much less cost, and at a time when the pressure of work was not so great as in the spring, answer the purpose fully as well and remain in the soil longer than the finer lime? Would raw rock phosphate (not acidulated rock) contain enough lime for the use in liming soil for alfalfa and would it not have some fertilizer value in stimulating the growth of the young plants also? Would it not be advisable to sow rye on this field this fall as a cover crop and turn it under in the spring about 4 in., with a gang plow?

Barry Co.

SUBSCRIBER.

I think without any question that whatever kind of lime you use the best time to apply it is this fall after you harvest the beans and work it into the surface soil. There isn't any danger of lime leaching out of the soil. It is fixed in the soil by nature so that there is little or no danger of lime being lost. One need not hesitate a particle on this point. Now as to the kind of lime to use. Lime screenings, of course, is quite an indefinite article. One scarcely knows what to advise. I should think that lime screenings would be just about as valuable as the lime-stone, except, of course, the coarser portions of them which are as large as kernels of corn and it would take a long time for this to become available, but the finer part and that which is as fine as dust would become available very soon. At the price named of 35c per ton at the quarry, if you live within hauling distance, could not, of course, be duplicated, nor this opportunity to get lime for your soil providing your soil needs it. The ground limestone is not too fine. They haven't got a machine yet, I understand, which will grind it as fine as it ought to be ground. The only advantage I think you would have would be that the ground limestone would be more uniform in size. Part of your screenings will run coarser than the ground limestone and much of it runs finer, but it would average, I think, fully as fine as the limestone you want. Of course, if your soil is acid the ground limestone and the screenings will not correct the acidity as quickly as caustic lime or burned lime. Pulverized burned lime is the most effective from any standpoint. Of course, when you take into consideration that in burning the lime you drive off all the moisture and all of the carbonic acid, reducing the weight about 40%, the price of pulverized burned lime is not so excessive, compared to lime screenings or ground limestone, as one would at first think. Especially is this true where the freight bill is quite a considerable item of the expense. If the lime has to be shipped for a considerable distance this ought to be taken into consideration and the product which is materially reduced in bulk and heft is worth much more ton for ton than the one which is bulky or one which contains material which is of no value, as ground limestone and lime dust does.

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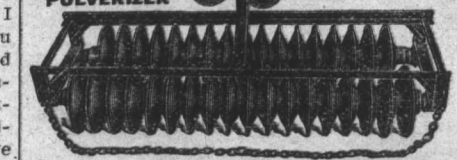
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Of course, some argue that in using caustic lime or ground burned limestone there is some danger of destroying humus of the soil and undoubtedly there is if excessive quantities of it are used. If one did not use over a ton or a ton and a half and perhaps two tons of burned pulverized lime to the acre there is no doubt in my mind that one would never know the difference with its effect upon the humus of the soil. Should one put on in one application several tons of caustic lime per acre there might be danger of destroying the humus, but where an application of 1,000 lbs. to one ton or even more is used I do not think that we need hesitate very much about using it.

Ground Limestone at \$5.00 per ton f. o. b. the quarry is a pretty good price. It can be purchased for less than that. That is about the price of pulverized burned lime, but the lime dust, it seems to me, is a very reasonable price.

Now, while I would apply the lime this fall and work it into the soil, I do not believe I would apply the inoculated earth that you get from another alfalfa field until next spring. You want these bacteria to go to work just as soon as the young plants start and I would wait until just before I sowed the alfalfa, then just as soon as the plants begin to grow and the roots reach out the bacteria will be of benefit to them and they certainly could not benefit the soil very much during the winter. The cover crop is always valuable. If this land is left exposed during the winter, if the winter happens to be an open winter, some of the soluble nitrogen in the surface soil which is left from the bean crop will undoubtedly leach, if the soil is in any way leachy, so I think it would be a splendid thing to seed to rye and then plow down the rye in the spring and fit it at once and seed your alfalfa, using inoculated soil.

COLON C. LILLIE.

A SURE METHOD OF ERADICATING CANADA THISTLES.

Not a month passes but some one has a remedy or makes inquiry as to the best method of eradicating thistles. In our forty years of experience on the farm we have found nothing as an implement for this purpose that equals the gang plow. It matters not how badly infested. Plow the field in the fall and as soon as possible in the spring brush it over with a spring tooth to level it. Then as soon as the thistles begin to appear go over it with the gang plow crossing the furrows of the fall plowing. See that the points are new and sharp and set the plow just deep enough to turn a furrow. Wait until the thistles start again, then plow it again crossing the first plowing, setting the plow a little deeper than at first. If the thistles persist in showing, go over the field again, still setting the plow a little deeper than before. You will see that if no balks are made every thistle is cut off below the surface. Finally put in a hoed crop, keep clean and my word for it, it will give the thistles a bad setback.

Genesee Co.

S. C. GOODYEAR.

SEEDING ALFALFA AFTER WHEAT.

I have a field of seven acres that was seeded to red clover and timothy in the wheat last spring. Owing to the drouth the clover is dead. How will it do to plow same, fit well and sow to alfalfa with a few oats? It will fit well and I can sow early in August. Would sow about 15 lbs. alfalfa per acre. I might add that the wheat yielded a little over 50 bu. per acre.

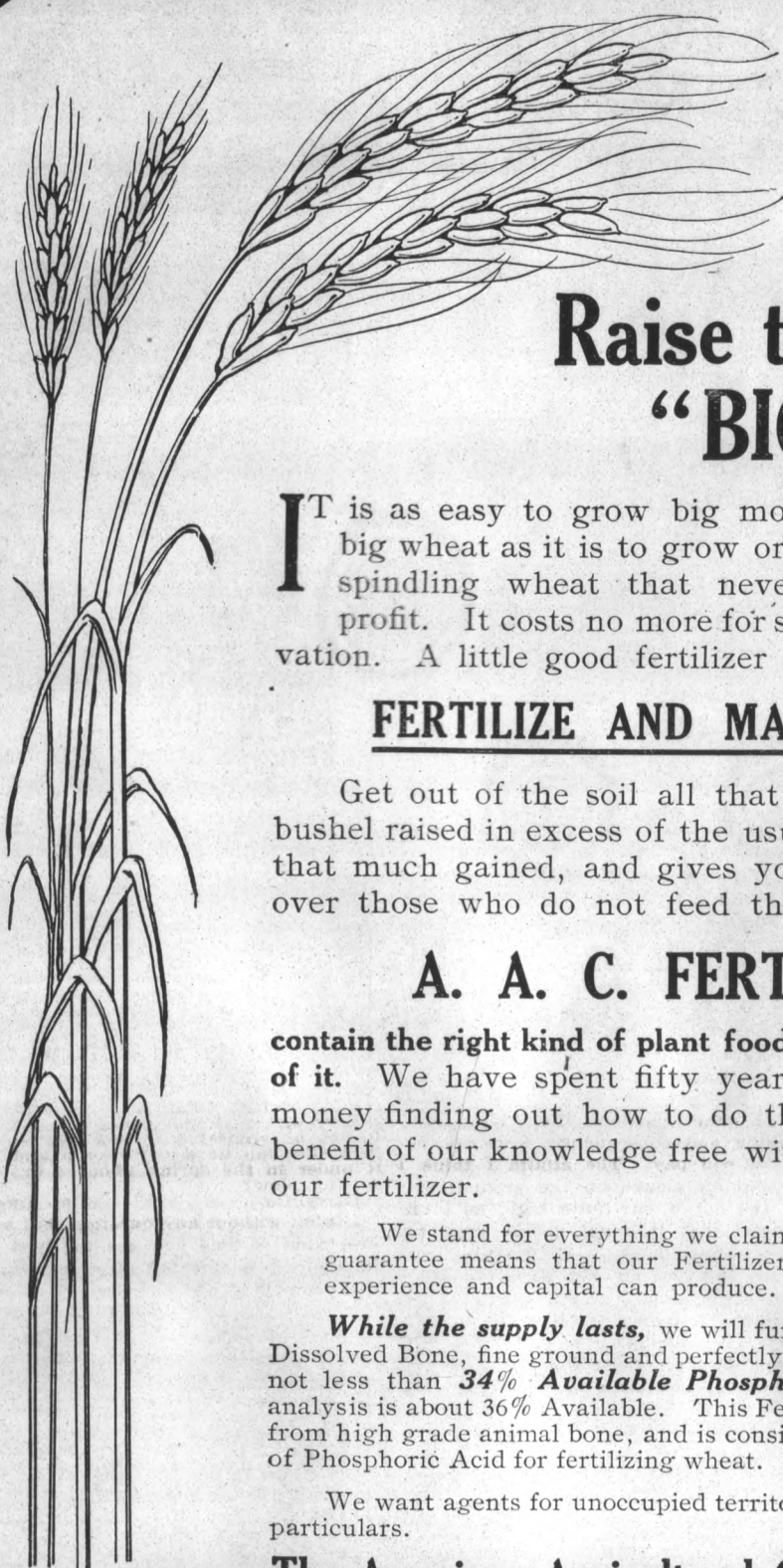
Oakland Co.

C. E. H.

Seeding alfalfa in August depends almost entirely upon the moisture. If there is moisture enough so that you get good germination and enough afterwards to keep the plant growing usually it will make growth enough so that it will withstand the winter. That is the only trouble. My first field of alfalfa was seeded in August. We didn't have sufficient amounts of rain to insure germination until along the middle of August. It grew to be 6 to 8 inches high and withstood the winter, although it wasn't an extremely vigorous winter. Plowing this wheat stubble would necessitate a more liberal amount of moisture than as though the field had been worked all summer as I did mine to conserve the moisture.

I think it would be better to fit this land with a cutaway harrow or disc harrow instead of plowing it. If plowed the first of August it is liable to more thoroughly dry out than as though it was fitted with a disc harrow. Then again, I think you can prepare a better seed bed without plowing.

COLON C. LILLIE.



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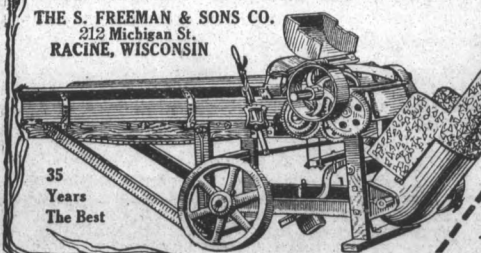
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Send me at once, postage prepaid, full information about Freeman Ensilage Machinery and name of nearest dealer.

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LIVE STOCK

ECONOMIZING WITH THE HAY CROP.

Again there is a shortage in the hay crop which is universal over the country. Already the department of agriculture at Washington has issued a bulletin urging farmers everywhere to supplement this shortage, at least in a measure by planting and sowing catch crops. The long continued drought in many sections still continues. Pastures are short or burned up and with hay now ranging from \$18 to \$24 per ton a serious condition in this line certainly exists.

The writer was fortunate enough to secure a fine crop of hay this season, much of which he expects to handle in the market. On the other hand we have an abundance of No. 1 oat straw. A 10-acre field of oats was cut rather on the green order. These oats had a thick undergrowth of what is commonly known as "pigeon grass." While this hindered the oats from curing rapidly, still, the long continued dry weather finally accomplished the desired results and these oats went into the stack fairly cured and with the straw not in the least yellow as oat straw generally is. Cutting them while yet on the green order conserved much of the juices to remain in the straw which otherwise dries out in a manner from overripened oats. The oats seem well filled, white and heavy. I expect to feed much of this straw this winter to the horses as well as cattle and by feeding somewhat more grain, keep them in good order, the extra grain fed in order to do this I figured being much cheaper than to feed less grain and an all hay diet for roughage, especially when the price of hay is and will rule very high the ensuing winter and spring months.

Catch crops, unless sowed now at this date upon very moist soil, are apt to result in part or total failures. Peas (field) and turnips may be sown thickly on moist soil either together or separately up to the 15th or 20th of August and make from one to three tons per acre of cured roughage for young stock as well as cattle, which is greatly relished by them and which is really nutritious. When about 8 to 12 in. in height the crop is mowed and allowed to cure if the weather is suitable, but usually at this time of year the weather is cool to very cold, and the tops may be piled, like sugar beet tops, in very small piles in the open field and fed as desired all through the winter. They will keep splendidly and not heat much if piled as indicated, but in no wise, unless thoroughly dried out, place even a half ton in one heap as they will soon rot down. Sow $1\frac{1}{2}$ to 2 bu. peas and one pint of turnip seed, broadcasted per acre, spiked or floated in. Sow each separately, dragging them in together. Do not roll the ground afterwards if it continues dry and hot.

Gratiot Co. G. A. RANDALL.

This is a new idea for a supplementary forage crop and would appear to be well worthy of at least an experimental trial in a season like the present. If silo room is available this crop could be put into the silo with the same advantage as beet tops.—Ed.

WEAK COLTS AND OVERWORKED STALLIONS.

I am anxious to know more regarding the causes of mares having weak colts, also to know how many mares a stallion should serve during the season. I bought a fine stallion that will not be four years old until next fall and some of my neighbors tell me their young colts come weak. I do not allow my horse to serve more than three mares a day and on account of my refusal to overwork him some of my patrons complain. This is one of my reasons for writing. Neighbors tell me that other owners of stallions allow their horses to serve five, six or seven mares daily. I tell horse breeders that this is one of the causes of mares having weak colts. Some of the mares in this locality are fed straw and little more of anything else. I forgot to say that some of the overworked sires travel many miles a day, going from place to place where the mares are kept. Many of the colts here are troubled with sore navels. I would also like to know if a horse fifteen years old would be as likely to get as good colts at this age as he did when younger. Also tell me how many miles a horse should travel daily during the stud season. If you will answer some or all the questions I have asked it will interest not myself but many more of your readers.

L. W. SPIESS.

Alcona Co. First of all let me say that there are many causes for mares having weak, delicate colts. A mare that is over-worked and under fed, or if she is well fed and not exercised at all, is very likely to have a crooked-legged foal and the foal

is apt to be weak at birth. If she has been mated with a horse that has been serving too many mares the colt is quite likely to come weak and also remain delicate for some time. If she foals in cold weather and the colt chills, it will not thrive for some time, even if it lives; also avoid keeping young colts in dark, damp basement stables. In some localities farmers seldom medicate the navels of young colts and here is where a whole lot of weakness and joint disease could be avoided. The navel of every colt should be treated and this is best done by tying the cord with a clean piece of silk or linen dipped in one part carbolic acid and ten parts olive oil or glycerine. The string should be tied one inch or more from body this stops bleeding and very often the passing of urine. Leave string until it sloughs off with end of cord. If the cord pulls off too close to body and it leaks blood stop it at once for when a young animal loses even a small quantity of blood it is followed by great weakness. Apply either hot or cold water or Monsel's solution of iron and the hemorrhage soon ceases. I frequently apply a lead lotion made by dissolving $\frac{1}{4}$ lb. acetate of lead and two ounces tannic acid in one gallon water. Home healing remedies aid in healing raw navels. I have never thought it a good plan to allow a stallion to serve more than two or three mares a day. Save the stallion and make use of the impregnator. A draft stallion should not travel more than six or eight miles daily during stud season. The colts from old horses sometimes lack vitality and breeders expect the best and strongest foals from young, but fully matured horses. It is a mistake to breed a stallion to six or seven mares daily.

W. C. FAIR, V. S.

LIVE STOCK NOTES.

Percheron horses are growing in favor all the time, not only in this country, but also in Canada and Mexico, and exports of this breed to both countries show large gains in recent years. Many are exported to Ontario, as well as to the provinces of Manitoba, Saskatchewan and Alberta.

Speculators at the Chicago stock yards are responsible for many of the advances that have taken place in prime hogs, as they have operated extensively, buying up the choicer consignments and sorting out the best hogs, which eastern shippers took at a good premium. They have also operated freely in the feeder and stocker cattle market, buying up straight loads and then picking out the best feeders for country buyers.

It is rather early to expect many range cattle on the market, but Chicago has been receiving some trains of cattle from Montana, Wyoming and Nebraska, the greater part grading only fairly, with some fat lots. The receipts have run far behind those for the same time last year in volume, as was expected, for the range country is shrinking materially in extent all the time.

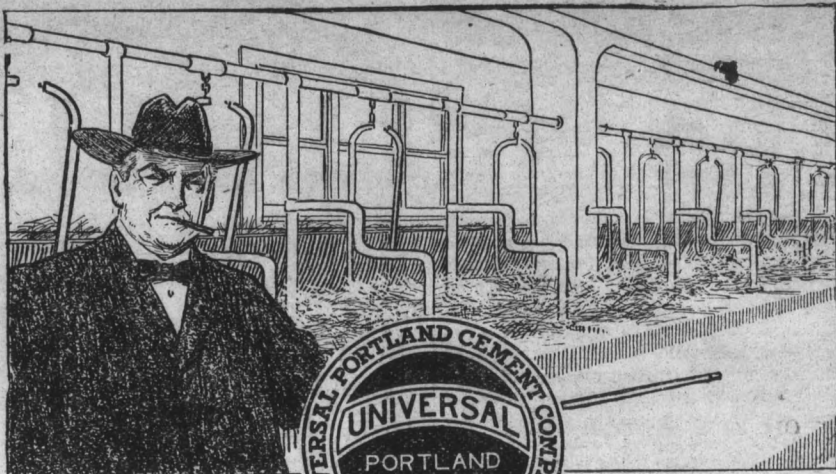
The way handy little fat heifers have sold most of the time this year should be a reminder to stock feeders that the popular prejudice once existing against cows and heifers has wholly ceased. Where farmers are properly fixed it is a good plan to feed a car load of heifers, taking care to buy well-bred ones. There is a wide divergence in prices between grassy female cattle and good corn-fed ones, just as is the case in the steer market. Killers want quality and are willing to pay well to get it when looking the market over for material for beef.

It seems a great pity that farmers will sell so many raw-boned horses that have been overworked and need a rest and time to pick up on good rations. Farmers who have the feed necessary for this building-up process will find that it pays them well, for buyers in the Chicago and other western markets do not want horses that lack flesh and good appearance, and inferior animals have to be sold so low that sellers cannot make much of any profit. The popular demand centers on good business horses that will weigh 1500 lbs. and upward, and such horses bring a premium every time. Farmers should breed big-boned well-bred mares to pure-bred stallions that weigh around a ton. Unusual opportunities have been offered recently to buy good feeding lambs, yearlings, wethers and ewes in the Chicago market at really low prices, and quite a number of farmers have made purchases. Buying low is an important part of the business, and many losses have been suffered in recent years on account of waiting too long and paying fancy prices for feeders. Good feeding lambs selling at \$5 to \$5.25 per 100 pounds in the Chicago stock yards look like bargains. Good breeding ewes, too, are low in price, and a good many have been forwarded to various districts where the sheep industry prevails extensively.

Little pigs weighing around 40 to 50 lbs. have been showing up in the western markets in considerable numbers, with many more in Missouri river markets than at Chicago. They are the result of dry weather conditions, and prices are absurdly low.

A Correction.

Owing to an error in composition, the last line of the advertisement of the American Seeding Machine Co. (Incorporated), of Springfield, O. which appeared on page 71 of our issue of July 22, was omitted. The last clause of the closing sentence should have read, "and then go to your implement dealer and insist on seeing the Buckeye."



The Concrete Dairy Is the Clean Dairy

Real, genuine cleanliness is an absolute necessity in your dairy if you want to get the most money out of your stock.

You can hose out your concrete barn as often as cleanliness demands—and with very little expenditure of time and labor. You save enough in manure to pay for your concrete barn over and over again.

Things made of concrete are fireproof and everlasting improvements. Every farmer should build of concrete wherever possible.

Write for any of the following special plans and instructions:

- (1) Plans for Sidewalks
- (2) Plans for Troughs
- (3) Plans for Porches and Steps

Write us for information on any kind of concrete work. We will write you individually, giving full instructions for getting best results. This service is free. The only expense to you will be the postage used in writing us; address the nearest office of the Company.

UNIVERSAL PORTLAND CEMENT COMPANY

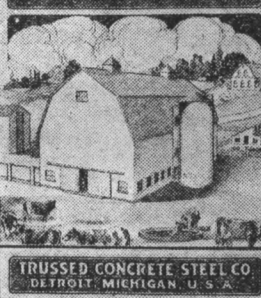
CHICAGO
72 West Adams St.

PITTSBURG
Frick Building

MINNEAPOLIS
Security Bank Building

Annual Output 10,000,000 Barrels

HY-RIB CONCRETE ON THE FARM



This 88-Page Building Book FREE!

Containing complete designs of modern concrete silos; dairy, sheep and hog barns; garages; ice, milk and hen houses; root, fruit and vegetable cellars; fences; tanks; cisterns; troughs; culverts, etc. Sent free, if you will write us about your proposed buildings.



Build all your farm buildings with Hy-Rib, steel sheathing plastered with cement. Strong—permanent—fireproof and rat-proof. No expense for painting and repairs. Cannot burn, rot or wear out. More economical than wood, stone or brick. Simple to use—set the Hy-Rib in place, apply the cement and the work is complete. No centering, wood forms or special equipment required. Hy-Rib greatly reduces the cost of all concrete construction.

Write us about your building plans and ask for free book "Hy-Rib and Concrete on the Farm."

TRUSSED CONCRETE STEEL COMPANY,
688 Trussed Concrete Building. Detroit, Michigan.

Shoo-Fly THE ANIMALS FRIEND



Keeps flies and all insects and pests off animals—in barn or pasture—longer than any imitation. Used and endorsed since 1885 by leading dairymen and farmers.

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

SEND \$1, enough Shoo-Fly to protect 200 cows, and our 3-tube gravity sprayer without extra charge. Money back if not satisfactory. Write for Booklet, free. Special terms to agents.

Shoo-Fly Mfg. Co., Dept. H, 1310 N. 10th St., Philada.

DEATH TO HEAVES NEWTON'S



21 years sale

THE NEWTON REMEDY CO. TOLEDO, OHIO

Live Stock Owners

Arrangements have been made whereby you can now procure absolutely free at drug stores

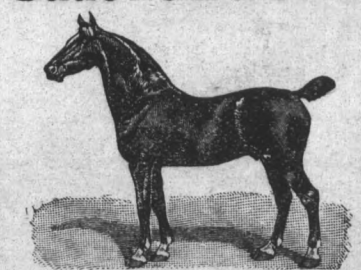
DR. DAVID ROBERTS VETERINARY BOOK

184 large pages, regular price \$1. Posts you on ailments, diseases and how to treat all kinds of live stock. If not found at your local drug store, send 10c in stamps for postage and receive direct.

DR. DAVID ROBERTS VETERINARY CO., 966 Grand Ave., Waukesha, Wis.

Warranted to Give Satisfaction.

Gombault's Caustic Balsam



Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circular, testimonials, etc. Address

The Lawrence-Williams Co., Cleveland, O.

The WINDMILL

light, heat and power for the remnant of the human race. In the interim, between the beginning and the end (where we now are) it makes a greater return to the people in proportion to its cost than any other machine. It does more cheaply, and with less attention, the thing which it is fitted to do, than any other power.

The wind blows everywhere and is free. With a windmill, the expense for oil and repairs is the only one, and that is trifling. An engine requires much more in the way of oil and repairs, and fuel—which is the great expense—has to be added.

The windmill does not require an experienced man to operate it. It is so simple that anyone can understand its workings.

A well-made windmill is a durable machine. The driving shaft of a windmill runs only about one-fifth as fast as the crank shaft of an engine of the same power. A good windmill will outlast several engines doing the same amount of work.

The best farmers, everywhere, use windmills generally for pumping water. In every progressive farming community the windmill is the most conspicuous object. It towers above most groups of farm buildings.

All the world knows that the Aermotor Company made the first steel windmills and steel towers, and made the steel windmill and steel tower business. It is believed that, since the business was fairly established, it has made, and continues to make, more than half the world's supply of windmills. In the Aermotor the plan of back-gearing was first introduced into windmill construction. By this means the power of the swiftly running wheel is utilized without operating the pump too fast.

The peculiar form of Aermotor wheel, which gives it great power, also enables it to run in the lightest breeze. No windmill has yet been made which equals the Aermotor in its light-running qualities. The form of the wheel is exactly right.

Simplicity is another of the important features of the Aermotor. There are no complicated parts to get out of order. There are no devices requiring skillful adjustment. Every part is solid, substantial and durable.

The main bearings of the Aermotor have large dust-proof oil pockets which afford the best possible means of lubrication. The other bearings have automatic oil cups.

The Aermotor has thoroughly demonstrated its staying qualities. In almost any community Aermotors can be found which have been doing duty for fifteen, eighteen or twenty years. And these old Aermotors were made before the days of the heavy gears and the shaft-carrying arms which are easily turned in their sockets so as to give new and perfect bearings for the shafts in case they have become worn through overloading or neglect. The present Aermotors are sure to be more durable and serviceable than the earlier ones.

The galvanizing of Aermotor outfits has had much to do with their popularity. Aermotor galvanizing is real galvanizing. It is the best that can be done and will last a lifetime. Aermotors which were galvanized twenty years ago are as good as ever.

The Aermotor Company has been building for the ages. It has always been working toward the building up of a great and permanent business. It has succeeded so well that Aermotors are as well known in South America and South Africa as in the United States. Dealers in Aermotor goods are found everywhere. When you want anything in the Aermotor line you can get it and get it quickly.

AERMOTOR PRICES AND POLICIES

When the Aermotor Company commenced the manufacture of the windmill, it reduced the cost of wind power to one-sixth of what it had been. It advertised its prices. It made the best thing that could be made and at the lowest price at which it could be made. It uses no traveling men. It made so good an article that one-half the world's business came to it and stayed with it. It is doing the same thing with the gasoline engine. Where one goes others follow, and we are

turning them out in great quantities, to the delight of Aermotor friends everywhere. We could send smart traveling salesmen to see you and persuade you to pay \$25 or \$50 more for a windmill or an engine, and it would be worth it—not to you, but to us. But there are plenty of reading and thinking men who prefer to save their own time and money and deal in the Aermotor way.

AERMOTOR GASOLINE ENGINES

Wherever a windmill is suitable for the work, an Aermotor furnishes the cheapest and most satisfactory power for pumping. But there are some places where a good wind exposure cannot be had. There are other places where power is wanted only temporarily. Sometimes tenants are obliged to supply their own power for operating the pump and do not wish to put up a windmill which they will have to leave behind them when they move. To supply the demand for a pumping power for such cases the Aermotor Company makes a gasoline engine which can be attached to "any old pump" in thirty minutes. It is sold complete and ready to connect to the pump for **\$37.50, F. O. B. Chicago.**

For ranch purposes, or for handling large quantities of water, a **heavy, back-gear pumping engine** is supplied for **\$100.00,** all complete, ready to receive the well fittings, which can be set up in working order within an hour after it is received. It is capable of raising sixty barrels of water an hour to an elevation of one hundred feet.

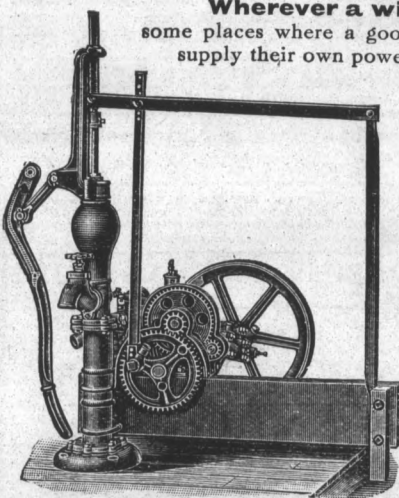
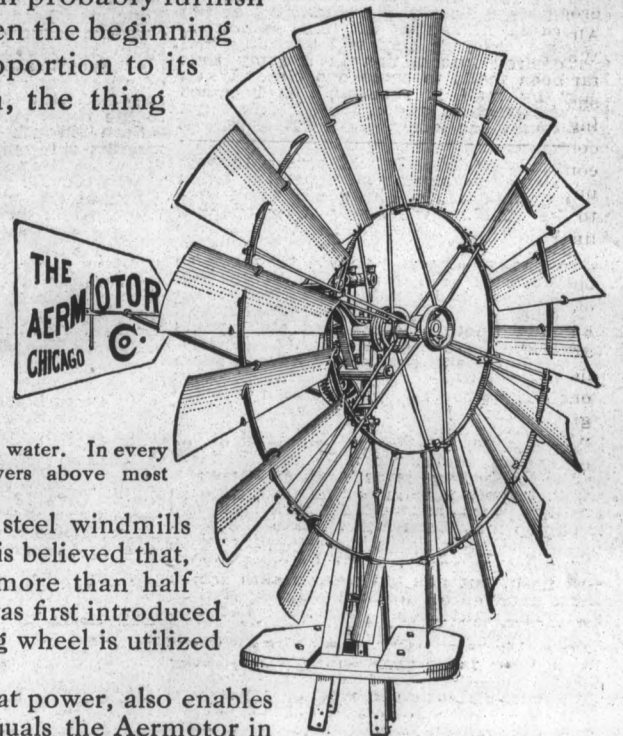
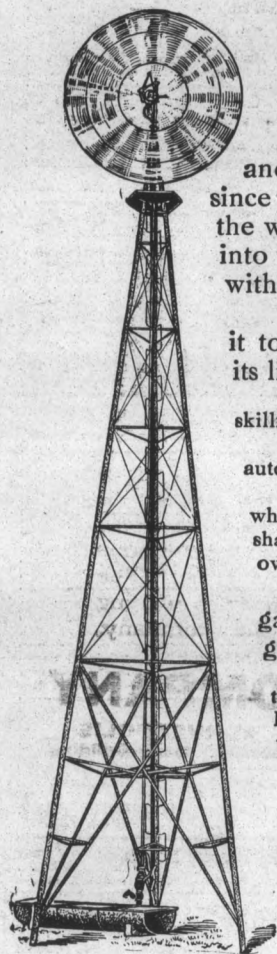
For running machinery, the Aermotor Company makes a line of General Purpose Power Engines. The **2 H. P. Hopper Cooled Engine** sells for **\$75.00, 4 H. P., \$125.00.** All prices are F. O. B. Chicago.

These engines are fitted with the Aermotor **galvanized steel pulleys.** Who ever heard of a **galvanized steel pulley?** No one. Nor did anyone ever hear of a galvanized steel windmill, or steel tower, until the Aermotor Company produced them. These galvanized pulleys are sure to revolutionize the pulley business. They are light, strong, cannot be broken, and are wonderfully cheap. **A complete set of seven pulleys** for a 2 H. P. engine is sold for only **\$8.00.** A set of seven pulleys for the 4 H. P. engine sells for **\$11.90.** We always furnish one pulley free with each power engine; but to anyone thinking of buying an engine, who writes us within one week from the appearance of this advertisement, stating in what paper he saw it, we will furnish free, with each 2 H. P. engine or larger, \$5.00 worth of pulleys of any size which you may select for either engine or line shaft, provided the order is sent in before January 1st, 1912. Pulleys for the line shaft—being used where they are protected from the weather—are not galvanized.

MAGNETO FREE

All Aermotor Power Engines are fitted with a **magneto** free. Batteries are not used with these engines. You have no ignition troubles when you buy Aermotor Gasoline Engines fitted with the Aermotor magneto. We don't believe that anyone who once sees an Aermotor Engine run with magneto will take any other engine as a gift. For full particulars write

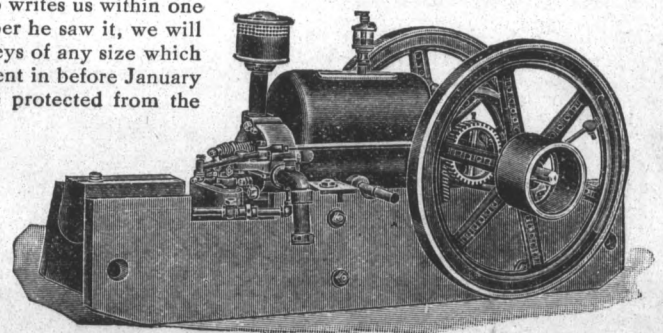
Aermotor Company 2516 W. 12th Street **Chicago**



AERMOTOR STEEL PULLEYS

Diameter of Pulley, Inches.	Width of Face, Inches.	PRICES.	
		For Engine	For Line Shaft
6	7	.75	.85
8	9	.85	1.05
10	9	.95	1.20
12	9	1.10	1.40
14	9	1.25	1.60
16	9	1.45	1.80
18	7	1.65	2.10
20	7	1.90	2.40
22	7	2.15	2.70
24	7	2.40	3.00

Compare these prices with those you have to pay for any other pulleys



VETERINARY

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

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

Abscess on Lip—Our 12-year-old horse had a swelling appear on upper lip which soon opened and discharged a thick syrup-like fluid. Whenever the opening closes the lip fills and in a few days empties. J. E. H., Fennville, Mich.—A large enough opening should be made to give abscess free drainage, then apply equal parts boric acid, powdered alum and oxide of zinc. A few applications of one part tincture iodine and eight parts water will have a good effect.

Fungus Growth on Nose—I have a yearling colt with fungus growth on nose which is rather flat protruding not more than 1/4 inch, but is spreading. I prefer not to have this bunch removed by operation. E. E. T., Kalamazoo, Mich.—Apply one part chromic acid and 15 parts water to wart growth three times a week. Apply vaseline or oil or grease to healthy parts surrounding bunch or this medicine may burn and irritate the skin.

Impure Blood—Skin Eruption—I have a horse that seems to be in good health and flesh, but has pimples on skin which must produce an itching, causing him to roll when turned out. Our local Vet. has prescribed for this animal, but have not given his treatment very long. This horse likes to be groomed. N. D., Leonard, Mich.—Give your horse 1/2 oz. doses of Fowler's solution in feed or water two or three times a day and dissolve 1/2 lb. cooking soda in a gallon of water and wash body once or twice a day. Dusting on some powdered sulphur to itchy parts occasionally will have a good effect.

Abscess in Udder—Calves Injured—A short time ago one quarter of my cow's bag caked and soon broke open. How should a case of this kind be treated? One of my calves bled at nose and eyes and soon died. Our local Vet. thought death might have resulted from tuberculosis; however, I opened calf and found only one sore spot on lung. Our bull runs in pasture with calves and I thought perhaps he had hooked them, for the other two are dumbish and bleeding from nose and eyes. F. R., Evart, Mich.—Inject one part carbolic acid and 20 parts water into abscess two or three times a day. If there is a raw sore apply one part coal tar disinfectant and five parts water to keep flies off sore. Your bull bunts calves in head, therefore death was doubtless the result of an injury and not tuberculosis. The injury to lung was the result of a blow to side. Young calves seldom die of tuberculosis. Dissolve 1/4 lb. acetate of lead in a gallon of water and bathe face five times a day. Wash out nostrils with a salt solution, a dessert spoonful of salt to a quart of water.

Worms—I have lost several lambs and one ewe lately. The principal symptom is a swelling which appears under chops, which is filled with a watery jelly-like substance. The tongue and mouth is of a very pale color. After this swelling appears they only live a day or two. W. H. J., Cedar Springs, Mich.—Your lambs are perhaps troubled with stomach worms, causing indigestion and anemic condition of body. The swelling in throat is a result of other ailments. Give 30 drops turpentine in 1 1/2 oz. olive oil to each lamb twice a week for two weeks. When this medicine is given the stomach and bowels should be moderately empty. The lambs should be treated before they get in a dying condition. Also feed your sheep one part powdered sulphate iron and 30 parts salt once or twice a week. Your sick lambs should be given two or three grains sulphate of iron at a dose daily.

Nodular Disease—Recently I have lost several sheep and am anxious to know if the trouble is contagious and what can be done to cure them. The first indication is loss of appetite and those that are milking dry up, run down, hold head low and breathe too fast. This quick breathing sets in a few days before they die. During the past eight days five of my sheep have died. I opened one of them, found lungs of a white color and a great many green spots on small bowels. J. S., Lilley, Mich.—I am inclined to believe that your sheep suffer from nodular disease, a parasitic bowel ailment that is very prevalent in this country. Diseased sheep running on land infect the pasture, but as your flock are perhaps all diseased, it is now a matter of medicating them. Only fair results can be expected when treating for this ailment. Advanced cases where the sheep show much emaciation do not as a rule receive much benefit from treatment. Give each full grown sheep 3 oz. of a one per cent solution of coal tar creosote once a week for three weeks. Some sheep raisers and veterinarians are inclined to believe that giving a teaspoonful of gasoline in four oz. of sweet milk or in two oz. of olive oil once a week for three weeks gives as good results as one part coal-tar creosote to 99 parts water, but I am partial to giving the last mentioned treatment. Mixing one part powdered sulphate iron in 30 parts salt and allowing the sheep to lick some of it two or three times a week, is helpful and even common salt given to them daily is beneficial.

Partial Loss of Power—Two of my spring pigs appear to be losing the use of their hind legs. While eating they very often sit down behind as if weak. Their food supply consists of corn and milk. C. E. M., Morley, Mich.—Your hogs are suffering from feeding on an unbalanced

ration and if you will give them each a dessertspoonful of lime water at a dose in feed two or three times a day, discontinue feeding corn, but feed some oats and green food also feed skimmed milk instead of sweet milk, they will soon improve. Furthermore they should have more exercise and sunlight.

Joint Disease in Pigs—Have a few pigs two months old that are troubled with swollen joints and I would like to know what to do for them. These bunches must cause some pain, for the pigs change legs often. W. A. M., Beulah, Mich.—Your pigs became infected through navel opening, causing this joint trouble. It could have been prevented. Apply simple home healing remedies to the navels of all young animals and you will find it pays. Paint bunches with tincture of iodine three times a week.

Sore Mouth—Scours—Have a four-months-old pig that scoured badly for some time and when eating chews his food with one side of mouth only. When I bought this pig I bought three others of same litter; three weigh over one hundred pounds each and this fellow is very light. This pig has a rough coat and dislikes solid food. B. C. P., Harbor Beach, Mich.—Give him a dessertspoonful of the following tonic powder at a dose in feed two or three times a day: Gentian, ginger, quassia and cooking soda, mixed thoroughly. Examine his mouth.

Worms—Have a cat that is now about 12 months old, which is troubled with a cough and is losing flesh rapidly. She appears to me some like as though she had sore throat, but I fail to find anything in throat. G. H., Fair Grove, Mich.—Apply one part kerosene and eight parts camphorated oil to throat once or twice a day. Give 12 gr. kamala at a dose and give two oz. olive oil at a dose two hours later, twice a week. Kindly understand the best results are obtained from vermicides when given on empty stomach.

Indigestion—My eight-year-old horse is fed six quarts of ground feed, oats, corn and beans mixed three times a day, but his flesh seems to be hard and I have fed him some ground slippery elm bark and molasses to loosen his hide. He has good life, does his work well and so far as I can tell is not sick. I wish you would tell me what to give him to cool his blood and keep him in good condition. F. L. M., West Branch, Mich.—I am inclined to believe that your horse is in good working condition and in addition to what you are feeding some grass or green fodder should be added and if so, it will produce better results than drugs. Give 1/2 oz. ground gentian, 1/2 oz. ground ginger, 1/2 oz. cooking soda and one oz. of powdered charcoal at a dose in feed twice a day. Your horse is doubtless muscular, but not fat.

Weak Heart—Kidney Disease—I have a horse that has been troubled with some sort of a kidney ailment for some time. He was in bad shape some three months ago, but I succeeded in making him better and he worked fairly well for one week; since then he has lost flesh and blows badly. His heart pounds too much and he breathes with great effort. F. R. C., Redford, Mich.—Give him one dr. ground nux vomica at a dose in feed three times a day. He will breathe most comfortably when not too full.

Dislocation of Stifle—I have a five-year-old mare that is troubled with stifle weakness. The cap seems to slip out of place and after considerable effort on her part it slips back into place and remains there for a time. G. H. L., Bentley, Mich.—The joint should be blistered lightly with cerate of cantharides once a week. The bone is kept in place most easily by lowering the fore feed a few inches and prevent foot from going back of body too far.

Bog Spavin—Joint Disease—My three-months-old filly has a large round bunch in hock joint; am at loss to know what to do for her. Our local vet. recommended poultices and they appeared to do some good. When this colt was two weeks old I noticed joint filled and enlarging some, but thought some liniment would make it all right. W. H. Y., North Star, Mich.—Your colt suffers from navel infection; apply light applications of tincture iodine three times a week; fomentations of hot water help such joint ailments.

Cow Gives Bloody Milk—Will you kindly tell me what to do for a cow that gives bloody milk from one quarter of udder. She has given good milk from the other three quarters always, but bloody milk from this one quarter for the past two months. We would like to know the cause of this trouble and have you give us a remedy. S. T. C., East Jordan, Mich.—When a cow gives bloody milk from one quarter of udder it is usually the result of an injury. It is not always an easy matter to ascertain the cause, but if you can and remove this cause it is an important step in correcting the trouble. Remove the cause if it is an exciting one and this soon corrects the trouble. Stepping over logs, fences, bars, out of ditches, over door sills and lying on hard substances will cause a cow to give bloody milk. Dissolve 1/4 lb. sugar of lead in one gal. of water, adding one pt. tincture of arnica and apply this lotion to bruised quarter three times a day and it will soon help her. It is needless for me to say she should be milked with care; pinching and pulling this quarter will have a tendency to keep the blood vessel open.

Stomach Worms—Nodular Disease—I am anxious to know what can be done for my sheep and lambs. The sheep seem to cough, gag and run down until they die. I am quite sure the lambs are affected much the same as older sheep. The old sheep were affected first. R. H. Lunn, Mich.—Your sheep and lambs suffer from parasitic stomach and bowel trouble and will be benefited by giving them coal-tar creosote one part and 99 parts water. The dose for a sheep is two or three oz., twice a week for three weeks, and lambs should be given not more than one or one and one-half oz. at a dose. Mix together equal parts gentian, ginger, quassia, cooking soda and charcoal and give each sheep a teaspoonful at a dose in feed twice a day.

AUCTION SALE MONDAY, AUG. 28, 1911, 10 o'clock, A. M. HUPP STOCK FARM

Located one mile west of Birmingham on Maple Ave. This fine farm located within 18 miles of Detroit and within one mile of the beautiful and thriving village of Birmingham, and comprising 199 6-10 acres, will be sold on the premises, together with growing crops, soil, success, good fences and buildings, also a good orchard.

At the same time there will also be sold in separate parcels, all of the live stock, machinery, tools, feed, provisions and household furniture now located on the said farm. The live stock comprises—

Registered Berkshire Swine and Guernsey Cattle

Also draft Horses, Ducks, Chickens & Turkeys. Farmers, breeders, stockraisers, investors, or anyone looking for a country home for pleasure and profit, do not fail to attend this sale.

Refreshments will be served on the premises free of charge and conveyances will be provided at D. U. R. waiting room. For full information and sale list apply at office or write to

UNION TRUST COMPANY,
Executor of will of Charles J. Hupp, deceased.
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For Sale by Michigan Agricultural College, East Lansing, Michigan, 1 pure bred Black Percheron Stallion 2 years old, October 10, 1911. Weight 1400. Write R. S. Hudson.

REG. PERCHERONS FOR SALE—1 stallion, 1 year old and 1 mare, 2 yrs old, both grays. M. A. BRAY, Okemos, (Ingham Co.), Mich.

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Herd, consisting of Trojan Ericks, Blackbirds and Prides, only, is headed by Egerton W. a Trojan Erica, by Black Woodlawn, sire of the Grand Champion steer and bull at the International in Chicago, Dec., 1910. He is assisted by Undulata Blackbird, Jr.
WOODCOTE STOCK FARM, Ionia, Mich.

FOR SALE One Ayrshire pedigree bull, which came from farm of Mr. James Hill, St. Paul, Minn. Owner Great Northern Railway. Also have Ayrshire bulls for breeding purposes. Address C. O. FRISBIE, Buchanan Michigan.

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Top Notch registered young Holstein Bulls combining in themselves the blood of cows which now hold and have in the past held World's Records for milk and butter fat at fair prices.
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BUTTER BRED JERSEY BULLS FOR SALE
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Silver Creek, Allegan County, Michigan.

JERSEY BULLS FOR SALE
Sired by Temis's Interested Prince 71648, whose dam made 733 lbs. butter in one year, authenticated test. Choice individuals. Prices Reasonable.
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Register of Merit Jerseys. Official yearly lot of young bulls from dams with official records of 483 pounds and upwards of butter.
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JERSEY BULLS—Reg. Ages from six months to maturity. Dams high producers. Prices right. W. E. SHELDON, Litchfield, Mich.

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FOR SALE—Reg. St. Lambert Jerseys, Cows and Bulls from high producing stock. C. A. BRISTOL, Fenton, Michigan.

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HERD BULLS (Vidas Signal St. L. No. 58197, Jubilee's Foxhall, No. 82299.

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For Sale—Double Standard Polled Durham Bulls, heifers, and cows. I am closing out. Write for prices. Sanford Gasser, Sherman, Mich.

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Oxford-Down Sheep and Polled cattle for sale. J. A. DE GARMO, Muir, Mich.

Oxford Down Sheep—Good Yearling Field Rams and ewes of all ages for sale. I. R. WATERBURY, Highland, Michigan.

OXFORD DOWN Ram Lambs and yearlings, also a few ewes for sale. JAS. P. GIBBS & SON, R. No. 4, Ithaca, Mich.

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BERKSHIRES—Registered boar pigs, excellent individuals, breeding unsurpassed. Price \$15. C. C. COREY, New Haven, Mich.

TWO Berkshire Glts, sired by Handsome Prince 3. Bred for Aug. farrowing, will sell at \$40 & \$45 also a few spring pigs left. A. A. PATTLUO, Deckerville, Mich.

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O. I. C. Swine—Bred glts, males weighing from 150 to 250 lbs. Price and type right. Geo. P. Andrews, Dansville, Ingham Co., Mich.

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C. J. THOMPSON, Rockford, Michigan.

O. I. C's for Sale—Best quality, large growthy type, either sex, pairs not akin, some fine bred glts. Choice lot of fall pigs all ages. **OTTO B. SCHULZE, Nashville, Michigan.**

CHESTER WHITES—Sold out but still in the business of raising Chesters and Holstein cattle. Both Phones. W. O. WILSON, Okemos, Mich.

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O. I. C. Choice Spring Pigs, either sex. Pairs not get first choice. All pigs shipped on approved papers. Free. **HARRY T. CRANDELL, CASS CITY, MICH.**

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O. I. C's—I am offering 12 choice young boars and 10 select sow pigs at farmers' prices in order to make room for fall pigs. Fred Nickel, Monroe, Mich. R-1.

O. I. C.—Choice boars ready for service. Glts and bred sows for September farrow. Glenwood Stock Farm, Zeeland, Mich. (Phone 94.)

DUROC-JERSEYS—Bred Glts and spring pigs for sale. CAREY U. EDMONDS, Hastings, Michigan.

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POLAND-CHINAS—Bookings spring pigs. **WOOD & SONS, Salline, Michigan.**

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THE DAIRY

CONDUCTED BY COLON C. LILLIE.

THE CARE OF MILK AND CREAM ON THE FARM.

In a very small village, close to an unimportant branch of one of our great railroads stands a little co-operative creamery. The farmers built it years ago, have stood by it loyally and are not sorry. I have watched that creamery for a long time and know that the patrons have been receiving for butter fat from two to five cents per pound more than the average price paid throughout the state. This fact is probably due to several causes, but mainly to three. In the first place, the creamery is run on the co-operative plan and patrons get everything except the cost of production. Second, it is a whole milk plant and as whole milk must be delivered oftener than cream, it reaches the creamery in better condition; and third, the patrons are a very intelligent class who take the best care of their milk at home.

Every dairyman desires the highest price for his market product. To obtain

handling of the separator which every dairyman should read. While the cream is cooling, the vessel which contains it should be open and the cream stirred now and then. After it is cool, the cream may be poured into a can and the cover closed down providing it is kept at a low temperature. The air where the cream is cooled, should be pure and free from objectionable odors. The cream should be delivered to the factory at least three times each week, if we expect the best results. No butter maker can make butter that will score extra from poor cream and attention to a few simple details will not only spare him a great deal of care and annoyance and deliver him from much undeserved blame and censure, but will enable him to produce an article that will command the highest market price, thereby rewarding the individual patron for his care and attention and making the creamery a business success.

Oceana Co.

W. F. TAYLOR.

METHOD OF PAYING FOR MILK AT CHEESE FACTORIES.

A study of the quantity of casein and fat in milk used for the manufacture of cheese, and the relation of the per cent of each to the quality of the product, has convinced the officials and investigators

with 86,000 for a year ago. These facts ought to lend good support to the butter deal. The huge operations of a year ago were probably more or less responsible for the early break in prices last winter when everyone was expecting that high prices would continue throughout the winter; but the break came and the misfortune of the market then was a lesson to many, discouraging some altogether and helping others to follow a more conservative campaign. Nevertheless the lighter buying this summer is directly charged to the lighter output of the product, making it impossible for the brokers to lay by the goods even though they were of a mind to store liberally. Short pastures in June and July limited the milk flow and consequently the amount of butter.

W.

ON FILLING THE SILO.

In commending to the dairy farmer the advantages of growing the corn crop, J. H. Grisdale of the Ontario experimental farms has the following to say regarding the proper method of filling the silo: Fill your silo properly; keep it well filled around the outside all the time, and keep it well packed. The center of the silo will look after itself. Farmers say they do not think much of cement silos or steel silos because the corn for a few inches in becomes dried out and gets in bad shape. That is not the fault of the silo, it is the fault of the man who filled it. You should put a good man in the silo. If you have a real good man whom you know is faithful, put him in the silo and say to him, "Now, John, keep this banked up against this wall and that wall and if you have any walking keep walking around the outside all the time, and keep it five or six or seven or eight inches higher than it is in the middle." When full then fill up the center a little higher than the edges, tramp it down and if convenient put a few pails of water on it. Do not put anything else on it, tramp it well and then go up about three days later and level it off and tramp down again. You will lose only three or four inches at the most. When removing keep the middle a foot higher than the edges; then the silage will not spoil and it will not freeze so badly. Do not imagine that because it freezes it is lost. It does not hurt it at all providing you thaw it out before feeding it. You should not feed ensilage while frozen because there is more or less danger of gas forming.

WHY THE COW LOST HER HORNS.

Commenting upon the performance of that wonderful cow Pietertje Ma.d Ormsby, the superintendent of the advanced registry of the Holstein-Friesian association took the liberty to say the following about dehorning since the above mentioned cow had been relieved of her horns for the lack of which some breeders criticised her in correspondence to Mr. Gardner. He says: "As an individual proposition, a neat pair of short, nicely curved, waxy horns on a cow's head may be something to be admired. As a general proposition the cow of today has no need of such weapons, and if she has them will surely use them on her mates in the herd and cause more or less loss to the owner. Ages ago when the ancestors of Pietertje Maid Ormsby ran wild in the forests of Europe it was necessary for the cow to protect her calf from the depredations of wolves and other beasts of prey, and the horns which nature had provided for that purpose were a necessity, but such conditions no longer exist, and our breeders may well ask themselves as to what useful purpose can be served by horns on the head of a cow. That cows are more quiet and gentle, more companionable with each other in every way when deprived of these weapons is readily admitted by all who have seen such cows standing quietly in the barn yard or bunched in drinking at the water tank."

NATIONAL CREAMERY BUTTER-MAKERS' ASSOCIATION.

The executive committee of the national creamery buttermakers' association decided on Chicago as the location and date of holding their next annual Convention which will be held November 1st, 2nd and 3rd. The National Dairy Show will be in progress at that time. The organization represents a membership in excess of six thousand, with an annual production of nine hundred million pounds of butter, the cash value of which exceeds two hundred million dollars.



Aaggie of Lynfield Duches De Kol. This cow produced 19 lbs. butter in 7 days as a 3-year old, 21.99 lbs. as a 6-year old and 27.60 lbs. as a 7-year old. She is the property of F. S. Kenfield of Kalamazoo Co.

this, the butter must be of a high quality, and to this end, the milk and cream must have been rightly handled.

The farmer cannot resort to all the methods of the producer of certified milk and produce butter at present prices, but he can observe a few plain, ordinary rules of handling that will cost him very little, furnish the consuming public with a clean, wholesome product and bring him a nice profit.

First, the cows must be kept clean. It is usually easier to accomplish this in the summer, than during the winter months, as the cows spend much of their time out-of-doors. But if the herd is stabled nights, there are problems that must be met and solved in the interest of cleanliness. If a hand separator is used, the milk should be run through as soon as possible after it is drawn and the cream cooled as rapidly as may be to a temperature anywhere between forty-five or fifty-five degrees. In many farms there are cold springs that can be prepared with a very trifling expense to receive and preserve the cream in ideal condition. No man who has a good spring on his farm at a reasonable distance from the house, can afford to bother with ice to keep the cream sweet. If the whole milk is taken to the creamery, the spring will serve one's purpose equally well. It will surprise one who has never had the experience to find how long clean milk will keep sweet when cooled down rapidly soon after milking and placed in cold water. If the separator is used, it must be kept clean. It must be carefully washed after each skimming. I have known agents for separators to say to prospective victims that their particular machine did not need washing oftener than once a day, but these men were enemies of the dairy business. There never was a separator made and never will be, that does not need washing every time it is used. It is a matter of business economy to wash the machine, for the reason that a dirty separator cannot do clean skimming.

Some time ago, the Purdue University of Indiana published a bulletin upon the

at the Wisconsin station that cheesemakers should pay for milk upon the basis of both casein and fat content, since the former element like the latter was found to be variable in different samples of milk and the resultant cheese was influenced by the amount found. They discovered further that the butter fat test was no guide to the quantity of casein and that a test for the latter should therefore be made to learn the true value of the product as a material from which to manufacture cheese. A simple casein test has been devised, the expense of which is insignificant when compared to the advantage of its use.

BUTTER MARKET CONDITIONS.

The average price for butter the first week in August for the past five years is 25.3 cents per pound, the quotations for the several years being 24, 22, 26½, 28, and 26 cents respectively from 1907 to 1911 inclusive. This indicates that the present price of butter is now a little above the ruling price for the period in consideration. And it seems from the conditions prevailing that the farmers who are depending upon the price of butter staying up to help them secure proper returns are not going to be disappointed in the immediate future, since the talk of the trade sounds more favorable to advances in values than to declines. The amount of butter put away by the storage people during the months of June and July a year ago were considerable larger than what they are this year. For example on Aug. 1 the amount of packages in storage in the great storage houses in and about New York City, consisting in all of eight storage companies and 13 houses, according to the Produce Review, aggregated 170,000 while on the same date a year ago there were 231,800 packages. This shows a loss of nearly 62,000 packages. In Chicago the figures for the same date stand 400,000 packages for this year and 410,000 packages for 1910. In Boston this year there are 232,370 and last year 276,861 packages. Philadelphia has 55,600 packages compared

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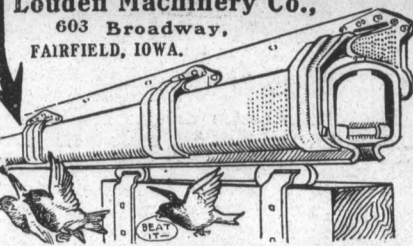
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DETROIT, AUG. 19, 1911.

CURRENT COMMENT.

During the past Silo Construction and fortnight we have The Harder Patent. received a number of inquiries from subscribers regarding the scope of the Harder patent, relating to silo construction, which was recently sustained in an opinion handed down by Judge Ray, in the U. S. Circuit Court for the northern district of New York. Most of the inquiries were apparently prompted and one of them was accompanied by a circular letter sent out by a firm engaged in the manufacture of stave silos, together with a license plate to be attached to the silo as a protection to the owner. This circular letter explains that the manufacturers had supposed their silos were fully protected by patents issued to them, but that this decision proved that they were mistaken as "This patent was apparently the first granted by the patent office covering a round silo." The letter further states that to secure protection for themselves and their patrons from the holders of this patent, the manufacturers sending it have paid them a large sum of money, and urges that the patron receiving the letter lose no time in attaching the license plate to his silo, "as the Harder Manufacturing Company have planned a vigorous campaign against manufacturers and users of silos which do not bear the license plate. This applies to cement, stone, tile, etc., as well as wood silos." In referring to the decision of Judge Ray the letter also says it "is probably the most sweeping ever handed down by the United States Court in a patent case. It practically prevents anyone making or using any kind of a silo either steel frame or wooden frame construction, continuous openings or otherwise, and of any material. In other words the decision of this court is that no silo can be constructed either by a farmer or by a manufacturer without infringing the Harder patent."

To each inquirer we have written that we were making every effort to get exact information regarding this case, and that as soon as it was in hand the essential facts regarding it would be published. Up to the present time, however, we have not been able to secure the text of Judge Ray's decision in the case in which the Harder patent was sustained. We hope, however, to have a

copy of this decision in time to review it in our next issue. While, of course, this decision is law, at least until it has been passed upon by a higher court, and while we cannot gainsay the allegations made regarding it in the letter above quoted for the reasons above noted, we have at hand the claims upon which the Harder patent is based and which form a part of the letters patent, and from a careful reading we are unable to understand the allegation that no silo can be constructed which is not an infringement on the Harder patent, since in his application for the patent Mr. Harder specifically disclaims any attempt to patent the round form of a silo, or even a continuous doorway. We quote from same, which forms a part of letters patent No. 627,732, as follows:

To all whom it may concern: Be it known that I, George D. Harder, a citizen of the United States, residing at Cobleskill, Schoharie county, State of New York, have invented certain new and useful improvements in Silos, of which the following is a specification.

My invention relates to silos or tanks of that class in which a continuous opening is made from top to bottom, through which the contents are removed at intervals. It is particularly designed for tanks used for holding ensilage.

I have shown the invention as applied to a round silo composed of various staves and hoops made on the same general principle as a barrel, except that the staves are straight. The vertical opening in this silo is made from top to bottom and practically continuous, and the opening is closed by a succession of boards or sections of doors inserted and removable from the top downward like the opening and sectional closing of an ice-house. I do not herein claim, therefore, the vertical opening from top to bottom, nor the round construction of the tank or silo, nor the means for closing formed in sections and inserted so as to be removable from the top downward and arranged to be pressed against the wall or any part of the wall in an outward direction, as I am aware that these devices and elements are very old in the same or analogous structures.

My invention relates particularly to the special form of brace or stay-piece for holding the edges of the opening at the proper distance from each other to prevent collapse, and, further, in the special means for holding the sections of the door firmly in place.

I claim—

1. In a silo or tank having a continuous opening from top to bottom and a reinforcing-strip at the edges of the opening arranged to form an overlap, a packing on the inner face of the overlapping part, a brace having shoulders bearing against the overlapping edges and an extension bearing against the outer face of the overlapping part, in combination with cross-pieces or door-sections h arranged to bear at their ends against the packing and bolts for holding the parts together, substantially as described.

2. In a silo or tank having a continuous opening from top to bottom and a reinforcing-strip on each side arranged to form an overlap, said overlap having a packing on its inner face, a brace having shoulders arranged to bear against the edges of the overlapping part and extensions bearing upon the outer face of said part, in combination with the sections h arranged as described and with a plate l and suitable bolts holding the parts together.

3. In a silo or tank having a continuous opening from top to bottom, and door-sections arranged across the opening, an overlapping part against which the said sections bear and a bracket composed of a straight bar having shoulders adapted to bear against the overlapping part and an additional bearing m forming at the same time an additional brace and serving as the bar of a ladder, substantially as described.

4. In a silo or tank having a continuous opening from top to bottom, braces between the edges of the walls forming the opening door-sections for closing the opening and reinforcing-strips for the door-sections, substantially as described.

We regret that space will not permit the reproduction in this issue of the drawings and detailed description of the specific improvements covered by this patent. However, the above quotations seem sufficiently plain for the purpose of this comment. The descriptions will be published in the next issue. While it is certainly a commendable action on the part of the manufacturers who sent out the letter above referred to to protect the users of their silos against a patent upon which they acknowledge the devices which they use are an infringement, and while the allegations made in their letter may be defensible in the light of the decision referred to, we do not hesitate to advise our readers not to get excited about the matter, nor pay any royalties on silos which they are building or using should a demand be made upon them. The silo has been in common use since 1875, when the first silo in the United States was built in Wayne County, Mich., by Dr. Manly Miles, long connected with the Michigan Agricultural College. Silos with continuous doors were in use in Michigan for several years before the granting of the Harder patent, which was issued in 1899, as were round silos and silos of almost every description. Hence we do not hesitate to advise readers who have contemplated

the erection of silos on their farms to build them as they had intended, avoiding, of course, the use of the particular devices covered by the Harder patent, and adhering to the type of construction which has been in common use, but using such material as they may desire. In purchasing manufactured silos it would be the part of wisdom to secure a guarantee of protection from infringements on the Harder patent from the manufacturers, who will doubtless receive first attention from the holders of the patent, but we cannot conceive, even should this decision be as broad as is assumed, that a patent on a principle whose common use antedates the patent itself, will be finally sustained against individual farmers who use the principle in silo construction, but avoid the use of the patented appliances which, as we read this patent, are confined to a special overlapping device or bar for holding the door frame in position, an overlapping strip at the edges of the door frame to form a jamb with a packing on its inner surface, a metal plate on the inside to hold the sectional door strips in position and the manner of bolting or fastening the same.

But in the interest of our many subscribers who have appealed to us, and the many others who are interested in this proposition, we will continue our investigations and substantiate our advice with competent legal opinions, after securing the complete data bearing upon the proposition.

We call special attention Annexation to a communication on this of Canada. page from Mr. Herbert Williams, of Ohio, advocating annexation of Canada to our country. Mr. Williams is a very close observer and a man of very broad information. If our markets are to be opened free to Canadian farm products it is surely desirable that the country should be annexed and share in all our affairs of government and expense. This may have been the unexpressed object in view of our President and statesmen in the negotiation of the reciprocity treaty.

Owing to lack of space for voluminous tables in this issue we are unable to present the summary of crop condition and indicated yield of the potato crop. In view of the fact, however, that a large proportion of Michigan Farmer readers are particularly interested in this crop we are here presenting figures and comparisons for August 1, as compiled from the figures given in the summary of crop conditions included in the national crop report.

These figures show the condition of the potato crop on August 1 to be 62.3 per cent of normal, as compared with 75.8 per cent on August 1, 1910, and a ten-year average of 84.8. In addition to the low condition of the present crop, the acreage is reported to be somewhat less than last year. The acreage now in potatoes is estimated at 3,495,000, acres, or 97.3 per cent of last year's acreage. The estimated average yield per acre is placed at 71.5 bushels, as compared with a yield of 94.4 bushels as finally estimated for 1910, and an average yield of 96.9 bushels per acre in the period from 1906 to 1910 inclusive. Reduced to bushels, this present indicated yield would mean an aggregate production for the country of 250,192,500 bushels, as the country of 249,892,500 bushels, as finally estimated for 1910.

Of course there is time for a material improvement in the prospects for the late crop with favorable weather conditions from this time on, but there is certain to be a short crop in any event, and there is ever the possibility of injury from blight should there be an excess of rainy or cloudy weather later in the season to compensate for the early drought which has so generally prevailed. Under these conditions the potato crop should receive the best of care and preparations should be made to harvest and store it with a minimum of loss, since the tubers are certain to be more valuable than for many years.

CANADIAN ANNEXATION.

Now that Canadian reciprocity has been ratified by our Congress and is likely to be ratified by the Canadian Parliament, do you not think we should begin our campaign for complete annexation of the Dominion? Two peoples "so similar and so near to each other" do not need the useless expense of two governments; with Canada a part of us and contributing to our national expenses, the opposition to reciprocity would lose its force; there has long been a strong sentiment in favor of annexation in this country; in the

past we have annexed many times, and have usually taken territory occupied by people far different from ourselves and at great distances from us—the Philippines, Hawaii, Porto Rico, Panama, and even the Floridas and the Louisiana Purchase and the territory acquired in the Mexican war were distant and occupied by different people when taken under our flag.

Great Britain is now trying to defeat reciprocity in order to hang onto Canada; many of us are opposed to it for other reasons while Canada remains alien. I read from Canadian papers that American capital has practically built up the Dominion, and that is just what British capital did in South Africa before the Boer war which annexed that territory to Britain. Of course we do not want a war of conquest, nor any other war, but should we not do all in our power to bring about the peaceful union of these sections of the world? With Senators and members of Congress from Ontario, Quebec, and other new "states," we would command the St. Lawrence River as we do the Mississippi, and England's North American base of war operations against us would be limited to the Bermudas, which she holds as a chip on her shoulder and as a club at our front door—a naval station which she is as ready to use against us as she ever was and which she could not hold without Halifax.—Herbert Williams, Ashtabula Co., O.

HAPPENINGS OF THE WEEK.

National.

The success of postal savings banks in the few large cities where they have been tried has warranted the postoffice department in establishing other such banks, and many more cities with first class offices are soon to be provided with such an institution.

Four persons were killed and 47 injured in a wreck caused by the Pennsylvania flyer, the 18-hour train between Chicago and New York, leaving the track before reaching the city of Fort Wayne, Ind. The train was then moving at the rate of 50 miles per hour.

Dr. Wiley, chief of the bureau of chemistry, department of agriculture, was on the witness stand Monday, giving testimony before a congressional committee concerning the controversy between himself and the Remsen board. Dr. Wiley and his staff have opposed the use of benzoate of soda as a preservative of food products, while the Remsen board have taken the other view. The charges are that the chief arranged to pay and did pay to certain chemists a larger stipend than the rules of the department allow. This charge is generally understood to be a mere excuse for getting the able government employee out of the road of parties favorable to the benzoate "interests."

It is feared that the statehood bill providing for the admittance of Arizona and New Mexico will fail to become a law by the president vetoing the measure, as he has been reported as being opposed to the provision which provides for the recall of judges. There is doubt that the advocates of the measures can array sufficient votes in the senate to pass the bill over the president's veto, although in the house such a possibility seems very probable.

The free list measure is still in an unsettled state. It appears more probable than it did a week ago that the progressives will get together and frame a measure acceptable to enough to members to pass it but with provisions too radical one way or the other to meet the exact ideas of a large number of the members. An agreement has been reached upon the wood schedule of an average basis of 29 per cent ad valorem. It is expected that President Taft will veto the free list bill should it come before him for his signature.

Admiral Togo of Japan who is in this country as the representative of the sunrise nation was entertained by ex-President Roosevelt at Sagamon Hill Sunday.

Senator Cullom of Illinois has introduced a good roads bill providing for the construction of seven roads leading out from Washington and carrying an appropriation of \$18,000,000.

The federal courts have pronounced prison sentences upon the officers and council for the United Wireless Telegraph Company of New York for using the mails to sell worthless stock to the public.

In his testimony before the Stanley committee which is probing the steel trust, George W. Perkins, the famous financier, declared last week that the Sherman anti-trust law as now enforced would not permit the successful existence of a large corporation.

Senator Cummins has introduced a bill into the United States senate providing for the abolishing of the monetary commission which congress established some time ago upon the ground of its tardiness in reporting and the extravagant expenditure of money.

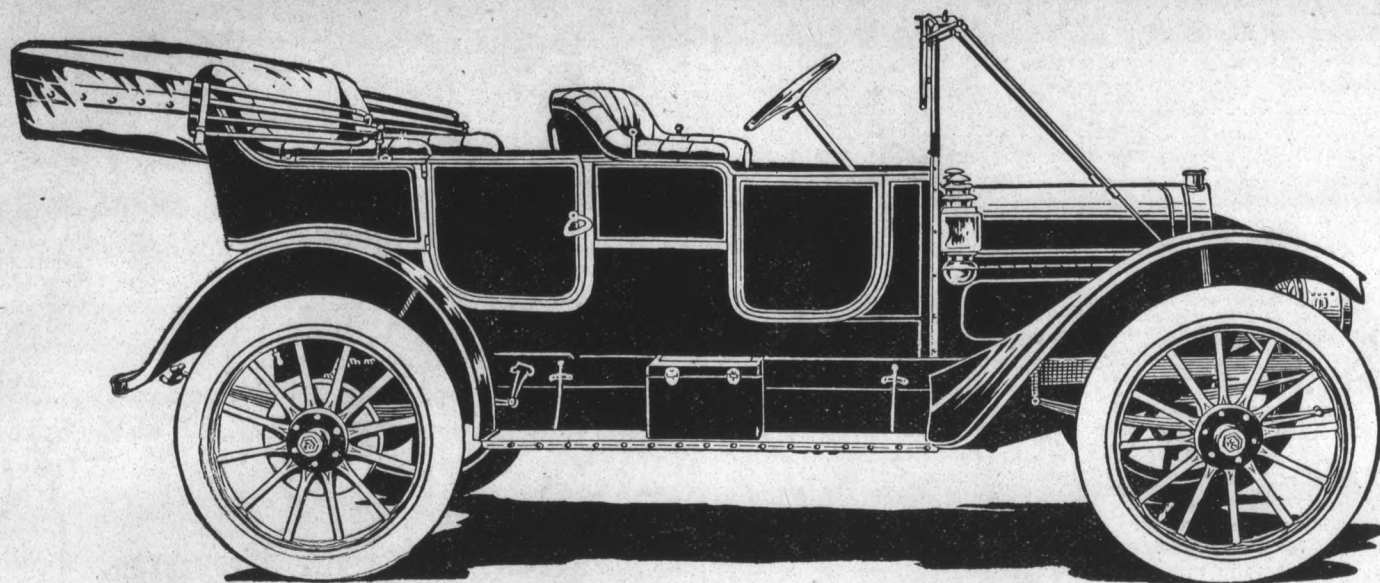
What is believed to be the fastest time made by an aviator in America for a long distance was that of H. N. Atwood in his flight from St. Louis to Chicago, a distance of 286 miles in five hours and 43 minutes actual flying time. This was the first day's travel of his flight from St. Louis to New York.

The national association of insurance commissioners is conducting an investigation of accident and industrial insurance companies of the country similar to the investigation of life insurance companies made in New York a few years ago. Charges of corrupt treatment of policy holders furnish the basis of the probe.

Foreign.

There was rioting in Liverpool and Glasgow Sunday. Laborers are dissatisfied with laboring conditions and wages and are out demanding changes along both lines. Police reserves and troops were necessary to quiet the rioting in Liverpool where many were injured in a close battle. Bristol and Manchester are also uneasy over the temperament

(Continued on page 147.)



The Reo Sensation for 1912 This Car for \$1,000

(Price Subject to Change Without Notice)

Here is the first attempt to sell a high-grade car—roomy, luxurious, speedy, and powerful—for an even-thousand dollars. It is the latest design of Mr. R. E. Olds—the finest car which this famous factory ever sent out from its doors.

The price is subject to change; it may be impossible. We count that this price will add 50 per cent to our output without added overhead expense. If it does, the price becomes possible—at the present cost of materials. If we find it impossible we shall later advance it. For we never shall skimp on any part of this car to keep the price at \$1,000.

Every Reo agent now has this car on exhibit. Each now offers this initial price. And you will find no car under \$1,500 which compares for a moment with it.

How We Did It

Year after year we have constantly increased our output. Part by part we have brought the Reo car to perfection. Gradually each important part has been standardized, and permanent machinery has been adapted to it.

Year by year we have equipped ourselves to build every part of the car—to cut off the profits of parts-makers.

All the costly experiments are ended now. The expensive changes have all been made. Our machinery, dies, jigs and tools need no more alteration.

Some expensive materials, like tires and steel, are costing less than formerly. Our selling cost is a great deal less, because of our organization.

The new Reo "Thirty," with fore-door, five-passenger tonneau. Four 4x4½-inch cylinders—108-inch wheel base—34x3½-inch tires—the best of magnetos. Our latest and finest creation—a roomy, powerful, stunning car—for an even-thousand dollars.

Top and windshield not included. We equip this car with a Mohair Top and Slip Cover, a Mezger Automatic Windshield, a Speedometer and a Gas Tank—all for \$100 extra.

We have enormous capacity and our output can now be increased by half with no extra cost save for materials and labor.

For all of these reasons, the time seems at hand when a car of this class can be sold for \$1,000. And, until further notice, we are going to try it.

No Skimping Whatever

We pledge you our word that in adopting this price, we have not skimmed the car in the slightest particular. This is the finest model, regardless of price, that we ever turned out from our factory.

It is the best car we can make. It is as good a car as any man, at any price, can make.

The car is built under laboratory supervision of the most scientific sort. The steel for each part is analyzed. It is tested for tensile strength and for hardness. Nothing is left to chance.

The gears are tested in a crushing machine, to withstand a pressure of 27½ tons. The bearings are fitted

with the best roller bearings—the Timken and the Hyatt High-Duty. The carburetor is adapted to the present grades of gasoline.

All that is known to the best modern practice is embodied in this car. From the big tires and wheels down to the smallest hidden part, we are giving you better than necessary—the very best we know.

Designed by R. E. Olds

This car was designed by Mr. R. E. Olds, the dean of automobile designers. It is built under his supervision.

Long before the days of automobiles Mr. Olds was building famous gas engines. In the early days of the motor car he built the only cars worth having. And in every step of progression since, Mr. Olds has kept well in the lead.

This car we are selling for \$1,000 is Mr. Olds' latest creation. It embodies all his skill and experience. And all his reputation as a great engineer is staked on this Reo car.

Ask for Details

On this car we publish complete specifications. We state every material, every feature, every detail of the mechanism. We do this to help you compare this car with the highest-priced cars in existence.

Please write for these facts. Then go to the nearest Reo agent and see the car itself. This is the first great car to sell for \$1,000. And, if the price is found possible, it is bound to change the whole motor car situation.

(3) **R. M. Owen & Co.**

General Sales
Agents for

Reo Motor Car Co., Lansing, Mich.

POULTRY

AUGUST-HATCHED CHICKS.

This year, as usual, we hear so much about "poor luck" in hatching and rearing the early chicks that it seems evident that a great many breeders will have to rely upon late-hatched chicks to complete the number of fowls they planned for at the beginning of the season. I consider July and August better months for hatching and rearing chicks than the month of June. Chicks hatched in June seldom do well, but those brought out a little later usually do as well as those hatched at the beginning of the season. Some breeders even claim that from their late-hatched chicks they secure their best show birds.

Certain it is that late-hatched chicks require different treatment from the early ones. Keep the late chicks away from the older ones; feed them by themselves. Trying to raise the chicks on the same ground that the early chicks have been running over all spring and summer is out of consideration. The soil will have become tainted and poisoned by the droppings and will bring sickness and death to your late-hatched chicks. I consider tainted soil one of the principal causes of the loss of so many chicks each season. The only way is to sweeten the soil again by spreading air-slacked lime over it, plowing under, and, if possible, sowing it down to some green feed.

The late-hatched chicks should be kept in the shade as much as possible. Try to arrange the coops under fruit trees, berry bushes or grape vines, which will afford ample shade and at the same time provide animal feed in the form of insects which infest the trees and bushes. The corn field is also an excellent place in which to allow the chicks to run.

As soon as the chicks are hatched grease their heads and throats with sweet cream. Dust the hen once a week with a good louse powder. After the chicks are a few weeks old dust them also with insect powder. Keep the brood coops free from lice. Take a hand spray and spray them thoroughly with a mixture of kerosene and gasoline or carbolic acid. Also whitewash the inside of coops thoroughly. Try the above methods of raising your late-hatched chicks and I am sure you will be successful.

Indiana. O. E. HACHMAN.

EGG IMPROVEMENT.

One thing that is sadly neglected on many farms is an effort toward improvement in the eggs produced. Most people seem to be under the impression that an egg is an egg, without reference to color, size or state of cleanliness. That belief is something that costs the farmers a large sum of money every year, for the price of eggs is governed by their appearance just as much as is that of fruit or vegetables. A case of small, discolored eggs will bring the bottom price, just the same as a barrel of small, wormy apples.

Uniformity in color of shell and size of eggs is one of the very important features in egg production. The eggs from a flock of mixed breeding will show a variety of shades of color in the shell, ranging all the way from very white to a rich dark brown, and they will not bring so good a price as those from a flock producing eggs of one distinct shade of white or brown. The condition of the egg cuts quite a figure in price, also. The time was when an egg was an egg in the eye of the commercial world, but pure food laws and a more discriminating public have changed conditions. The dirty eggs are sorted out, classed separately and sold at a much lower price. This is no more than right, for the bright, clean shell indicates freshness just as much as the dirty shell indicates age and carelessness in handling.

All of this serves as an argument for pure-bred fowls of whatever breed the keeper's fancy may dictate. Thus will uniformity in size and color of eggs be more easily secured. If the flock is kept at a proper standard and the eggs properly cared for and disposed of while fresh, the owner will certainly be rewarded by receiving the highest price. The market is no place for stale eggs; keep them on the farm. The person who will attempt to fust stale eggs upon consumers, especially those in the cities who are hardly capable of judging the

quality by the appearance of the egg, is nothing other than dishonest. Every poultryman should consider it his duty to raise the standard of quality in egg production just as much as it is to bring about improvement in any other branch of farming or crop production.

Ohio.

S. C.

GLEANED FROM EXPERIENCE IN RAISING DUCKS.

The ordinary beginner in duck raising, who naturally hasn't all the modern conveniences in the line of pens, etc., is apt to encounter, among his first trials, a trouble which we call "scald-foot." This occurs in the ducklings while they are still very young and is due to their running in sand or to being shut in a pen having a hard ground floor. Their feet are so tender that they quickly become sore, the skin flakes off or takes on a blistered appearance and the duckling so affected dies in a few days. I know of no remedy, but a preventive is to place the pen on a plot of soft grass and supply necessary shade and drinking water until they have reached the age at which their feet will withstand contact with rough, hard ground.

Another thing which the duck raiser must learn is that even half-grown ducks will eat harmful weeds if given free range. Purslane (commonly called pusley) will cause the neck to stiffen and bloat. Golden-rod is another of the harmful weeds. The ducklings eating this will have its neck and crop bloated and will often become cramped and fall over on its back. We give pure extract of witch hazel, a teaspoonful at full strength, in severe cases. It has never failed to cure a single case of this kind.

In 1910-11 the most difficult things, about which we knew nothing before that time, were the small flies which swarm on horses along in June and July or even earlier. They settled in patches on the ducks and buried themselves from sight in the down. We lost some ducklings in 1910 before we discovered what was killing them. Insect powder was of little use as the ducks washed it off in the water almost as soon as it was applied. Finally we used kerosene, applying it to the surface with a small brush. An application every three or four days was all we found necessary.

Mason Co.

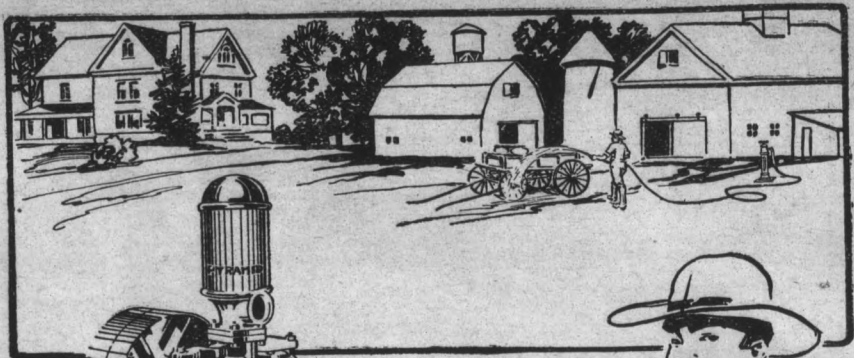
JANICE COOPER.

GETTING A PROFIT FROM SURPLUS COCKERELS.

Young cockerels that have free range possess a good frame and constitution, but lack in flesh and in quality of meat. When fed in pens or crates for two or three weeks they gain in flesh very rapidly, while the increase in bone, or frame is relatively very small. Prof. Robertson, of Canada, demonstrated by experiment that one fatted chicken had as much edible material on its frame as three like chickens not fatted. Cockerels of the general-purpose breeds, 2 to 4 lbs. in weight, are very economical producers of meat when confined in pens and fed properly. In Prof. Robertson's experiments 131 chickens weighing 492 lbs. gained in four weeks 335 lbs. The cost per pound of gain was 4.9 cents. This represents not only a gain in weight, but a gain in quality, and the market will pay much more for such chickens than for those direct from the range. From lack of exercise the muscles become more edible or tender.

Which grain to use in fattening will be governed partly by its price. For best results the grain is ground and fed moist. It is usually mixed with skim-milk or buttermilk. Professor Graham, of Ontario Agricultural College, says that the best ration used at that station is one made of two parts finely ground oats, two of finely ground buckwheat, and one of corn-meal, mixed with sour milk, using one and a half times as much milk as grain, and sometimes twice as much. Where the markets demand a yellow-flesh fowl, as most of them do in this country, a larger proportion of corn will be desirable in the ration, but corn alone will prove unsatisfactory. Ground oats alone, with the coarser hulls removed, will give good results where white flesh is not discriminated against. Barley may also form part of the ration.

The chickens should be fed lightly the first week; after that all they will eat up clean three times a day. It is important that they be kept quiet. After three weeks of feeding they begin to lose their appetites, when they should be marketed.



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It will save time and labor every day and make it possible to have running water in house, barn, stable or yard.

Goulds PYRAMID Pump

will supply all the water you can use at little expense. Don't waste your men's time carrying water from the well for stock or household use. Do away with this drudgery—have running water wherever you need it and fire protection as well.

The "Pyramid" is the highest type of Power Pump for connection to gasoline engines or other forms of drive. It is made of the best materials; every mechanical detail is perfect; solidly and strongly constructed to stand heavy pressure and give continuous service.

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tells all about this pump that every farmer needs. Tells about our many other pumps, including lift pumps and force pumps, single and double-acting pumps, hydraulic rams, etc. The most complete little book issued on the subject of pumps.

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How About a New Plow?

You can't afford to purchase a plow without carefully considering the many exclusive features of Bryan plows, both riding and walking. This line contains splendid designs that insure light draft, rigidity and durability. Each part is properly made and assembled; each plow fully guaranteed for service; the prices are a protection to you in every case. See the complete line at your local dealer's. Write us if you don't know his name. Get the information now and start your fall work with proper equipment.

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CRYSTAL White Orpington Cockerels and trios. Feb. hatched, Kellerstrass strain direct. Write for prices. Mrs. WILLIS HOUGH, Royal Oak, Mich.

"EGGMAKERS"—S. C. Brown Leghorns. Get first choice of male birds now. \$1 up. Write me. W. S. Cooper, Mt. Pleasant, Mich.

LILLIE FARMSTEAD POULTRY
B. P. Rocks, R. I. Reds, W. Wyandottes and S. C. W. Leghorn eggs for sale, 15 for \$1.26 for \$1.50; 50 for \$2.50. COLON C. LILLIE, Coopersville, Mich.

EGGS: EGGS: EGGS—White & Buff Orpington, White & Barred Rocks, Black & White Minorcas, White & Buff Leghorns, Rose & Single Comb Reds, Houdans & White Crested Blk Polish. H. H. King, Willis, Mich.

THOROUGHbred S. C. BROWN LEGHORNS.
A fine lot of COCKERELS at right prices. LEWIS T. OPPENLANDER, R. No. 4, Lansing, Mich.

R. C. B. Leghorn Cockerels—Kulp strain, the best there is, \$1 to \$3. Eggs in season. O. W. WAITE, Gobleville, Michigan.

SINGLE COMB BLACK MINORCAS—A few more pull-ets to spare. Eggs \$1.50 per setting. R. W. MILLS, Saltine, Michigan.

SILVER, GOLDEN and WHITE WYANDOTTES. Eggs \$1.50 per 15; \$2.50 per 30. A few White Roosters left, circular free. C. W. Browning, Portland, Mich.

FOR SALE—S. C. and R. O. Rhode Island Red Eggs. 15 for \$1.00; 50 for \$2.75; 100 for \$5. BUELL BROS., Ann Arbor, Mich.

WHITE WYANDOTTES—Useful and beautiful. The kind that weighs, lays and pays. A. FRANKLIN SMITH, Ann Arbor, Mich.

DOGS.

NOW WRITE W. J. ROSS, Rochester, Mich., for those beautiful sable and white and tricolor Collie Puppies. Finest breeding, natural workers.

Twenty-five Hound Pups. All bred from the best of trained Coon hunting parents, send stamp. W. E. LECKY, Holmesville, Ohio.

Collie Puppies—Blue Merles, Sables and tri-colors by Imported Ormskirk Chancellor, the best trained cattle dog in England. State wants. SELBY COLLIE KENNELS, Pontiac Michigan.

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NEW ZEALAND==Labor Conditions and Governmental Problems.

By P. A. YODER.

It would clearly be out of place for one with so brief an experience to make any sweeping statements as to the favorable or unfavorable present labor conditions in New Zealand. I must content myself with noting some observations made and opinions heard. Repeatedly I heard managers refer to the impossibility of accomplishing now what they formerly could, because of the difficulty of securing labor, or the high wages demanded, or the limited service rendered. I was told that in recent years there had been a rapid upward trend in the wage scale and, along with it, an upward trend in living expenses, and in this connection I frequently heard the opinion expressed that the result is the laborers are no better off than before, but that the masters or employers are worse off. To give an incident to illustrate the independence of laborers, and the difficulties employers have to contend with, I refer to a visit to a large estate in the Canterbury province where wheat and sheep production are the principal features. They, however, milk about fifty cows, mainly for a milk and butter supply for the farm hands. Lastly, before leaving I went to look at the dairy herd, at about three o'clock in the afternoon. I was surprised to find them milking so early, and inquired the reason. I received from the foreman of the shed the reply that they must begin that early in order to finish by five o'clock, as the milkers were unwilling to continue work after the other farm hands "knocked off" (quit work). The morning milking, I was informed, commenced between seven and eight o'clock.

On the other hand, I repeatedly heard mention made of New Zealand as the "Laborer's Paradise." Wages are high, the hours of service short, and holidays or half holidays numerous. Legislation in recent years has been extremely pro-labor. All sorts of safeguards are thrown around the laborer to defend his rights. To this end grievances between employers and laborers are submitted to forced arbitration, and decisions have in recent years been almost uniformly in favor of the laborers, and, of course, the scheme works beautifully from the laborers' viewpoint. Inquiries as to wages paid to farm hands elicited quotations of from \$5.00 a week to \$7.50 with employment the whole year. A teamster gets more than a "roustabout," i. e., laborers at miscellaneous work. An American whom I met on the steamer returning from New Zealand, and who visited there much longer than the writer, expressed himself as of the opinion that the average New Zealand laborer, whether at common labor or at a trade, accomplishes far less work per hour than the average Ameri-

can laborer. One thing seems clear, that the New Zealander does not call his country the "Laborer's Paradise" because of the inspiring enthusiasm over his work, nor of any ennobling satisfaction in what he accomplishes in building up the industries of the country, but rather because of the ease at which he can live, and the freedom from necessary concern about his future livelihood.

Socialistic Tendencies.

New Zealand, because of her relatively recent organization of governmental institutions, is in the fortunate position

secured in large grants from the crown for what now appears an insignificantly low price. The areas of many of these run into tens and hundreds of thousands of acres. After some years of hardship and almost national bankruptcy, the establishment of freezing works, at one stroke, put a quite different aspect to the utilization of land. Now mutton and lamb or beef could be exported to London at a neat profit to the producers. These estates at once commenced giving handsome returns and the owners could reach about them and add to

do not yet own land above a certain limit. In resuming land under this act, if the owner and the government representatives cannot agree on the price, it is submitted to a board of arbitration whose decision is binding upon the owner but left optional with the government. A number of estates have thus been resumed by the government, several of them forcibly.

Another act which is aimed to discourage the accumulation or holding of large estates is the "graduated land tax," which, to the owners of large estates, smacks considerably of confiscatory legislation. By this law the rate of taxation increases as the

holding increases. Up to a valuation of \$2,500 there is no land tax. From this point the rate gradually increases until at \$2,500 it is 1 penny on the pound. From a valuation of \$5,000 the rate gradually increases until at \$10,000 or above it is 3 pence on the pound.

To correspondingly discourage the accumulation of wealth in other lines of business than that dependent upon land ownership, they have a graduated income tax applying to such other business. Under this act, an income under \$300 per annum is exempted. Above this, the first \$1,000 is required to pay 6 pence on the pound, and any income above that pays 1 shilling on the pound. On the profits of companies the maximum rate applies without any exemption.

To make it easier for settlers to buy and pay for land, the government has gone into the "money loaning" business. On government security, the government borrows from the financial centers of the world, at a low rate, and loans to settlers at a slightly higher rate, at present about 5 per cent, with easy terms for the repayment of the principal. Under the factories act, the government fixes a minimum wage scale for factory employees, fixes the number of hours of work, and enforces certain sanitary regulations. In operation, this

minimum wage scale is steadily screwed up by successive awards as far as the industry can bear, until it comes practically to reach the maximum wage scale. A similar thing is true also concerning the maximum of hours.

Finally an "old age pension" act provides a pension for persons over a certain age possessing property or other sources of income below a certain figure.

It is too early as yet to pass judgment as to how these various laws will work out in a long series of years, or to what extent that which proves feasible in a small country like New Zealand might be practical in a large country like our own. We will certainly be inclined to watch, with much interest, the results (Continued on page 141.)

A Day In Summer—By Mildred M. North.

WONDROUS BEAUTY OF THE MORNING.

The mellow moonlight fades, and over all
Steals a soft brightness as the sable pall
Of Night is lifted by the rose-leaf hand
Of Morning. Now the first bright silver sand,
Marking the hour of dawn, slips through, released,
And the pale face of the fair waiting East
Flushes, then crimson as the rising Sun
Kisses her softly. In the west, like one
Condemned, the moon hangs, now with visage white;
She, with a borrowed brightness, through the night
Shone in soft splendor. Now with features drawn
Stands she in guiltiness to face the dawn.
Queen of the midnight sky, too long she stayed,
Too long her flight from the bright host delayed.
Brightness and glory all too swiftly fled,
Leaving her beggar's tatters in their stead.
Faint and far off, then growing sweet and clear,
Comes the first bird-call to the list'ning ear.
Thrilled by the note, another songster wakes
And answers, and the strain of music breaks
Like the first trembling notes which greet the ear
From a great orchestra. Then far and near
With one accord the birds take up the strain
'Till orchard, field and woodland ring again
With the glad matins of the feathered choir.
Hundreds of dew-drops, lighted by the fire
Of sunshine, glitter in the grass; each blade
Upholds a tiny globe that seems 'twere made
Of liquid light. As the west wind goes by—
Fresh from its home where green prairies lie
Rolling away in emerald waves to meet
The azure sky—o'er fields of yellow wheat
Waiting the busy reaper, light and shade,
Billow on billow, by the breezes made,
Chase one another in untiring whirls.
Sweet-scented roses, white as ocean pearls,
Crimson, and yellow, pink as sea shells, sway
Over the low stone walls with lichens gray.
Great golden bees with pollen-laden feet
Buzz 'round them sleepily, dizzy with sweet.
Fair is the world! O wondrous, wondrous fair!
Brightness and scent and bird-songs fill the air!

THE FERVENT HEAT OF NOONTIDE.

Noontide has come, and over all there broods
A hush. No bird-songs, even in the woods,

Disturb the silence. Now and then the drone
Of a belated bee which comes alone
From his long pilgrimage for distant sweet
Floats through the sultry air. The fervent heat
O'ercomes the flowers and each hangs its head
Upon its slender stem, too tired to shed
Its perfume. Where the dark green willows bend
To touch the stream whose limpid waters wend
Through the thick grass and over gleaming sand,
Up to their knees the soft-eyed cattle stand
In the cool water, stooping now to drink.
Now reaching crisp green grasses from the brink.
Tired with his labor, 'neath the trees' thick shades
The farmer rests; the interwoven blades
Of grass form a soft couch on which he lays
His weary frame. Beneath the sun's bright rays
All Nature droops and waits the healing balm
And gentle touch of Evening's velvet palm.

EVENING'S GRATEFUL, RESTFUL CALM.

Shadows grow long and longer and the birds
Warble their vespers. From the fields the herds
Come slowly up the lane through dew-wet grass
Tasting its juicy sweetness as they pass.
Darker and darker still the shadows grow.
The birds are still, and stars begin to glow
And flash in the dark tresses of the night.
O'er the marsh we trace the fireflies' flight
By fitful flashes. Rising from the bogs
Is heard the harsh, discordant croak of frogs
Mellowed by distance to a softer sound.
Myriads of wings of insects all around
Vibrate and quiver, 'till the summer night
Seems filled with music. Flooding with her light
Meadow and stream and woodland, glade and glen,
Making the flowers dream 'tis day again,
Over the eastern hilltops comes the moon
Shining in light and beauty only June
Lends her pale orb. Meshes of gold and gray,
Cast through the treetops, o'er the greensward play.
Softly the West Wind rocks each sleeping flower,
Softly he steals within each leafy bower,
Stops to caress, amid his fitful play,
Half-opened buds he scorned to touch by day.
Fair are the days when Spring's first breezes blow;
And days when searching bees wing to and fro;
When red leaves flutter, and when snowflakes fall;
But a summer night is fairer than them all!

of having the experience of the world as her guide, and she is boldly proceeding to apply this experience to prevent or to minimize the evils that have arisen in some of the older countries. Among the evils that she wishes to avoid may be mentioned, the feudal system of medieval Europe, the oppression of the poor by wealthy individuals or corporations, the monotony and lack of leisure in the laborer's lot, and the horrors of indigent old age. The legislation already enacted has a distinct socialistic trend, yet the present ruling party would vigorously disclaim advocating extreme socialism.

To understand some of the recent land legislation, it is necessary to go back a ways in New Zealand's history. In the early days, much of the land was

their holdings. Many of these owners were private individuals or corporate companies in England, and whether they resided in England or in New Zealand, they were well contented to leave the estate as a big sheep or cattle pasture, regardless of the fuller utilization of which it was capable under intensive farming in small holdings, and the much greater population it would thus support. Aiming to open the way to a more rapid upbuilding of the country, the government, instead of leaving the principle of supply and demand to work it out, passed an act empowering the government to forcibly resume the ownership of estates above a certain limit—2,000 acres of agricultural land, if we mistake not—and to divide it into small holdings which they sell again to "selectors" who

A MISSOURI CAVE DWELLER—By Edgar White.

Five miles out of a little mining town in Macon county, Missouri, there dwells, in the heart of a primeval forest, a fine old Welsh gentleman who for forty years has known no home other than the little dugout cave he made to hold the land.

John G. Jones is the name of this sturdy old hermit, and he will be remembered by the children of his neighborhood long after the governor and other great men of the state are forgotten. For he has been to them the "good man of the woods." For many years he taught a Sunday school class in the little church hard by the forest, and he invariably brought with him in their season a basket full of strawberries, blackberries, apples, pears or persimmons. In the fall the basket would be overloaded with large hickorynuts and walnuts garnered on the creek bottoms, or black haws and wild berries. He never forgot, and if his classes were a little larger and more enthusiastic than others it was because he, himself a veritable child of nature, knew better how to get closer to the little hearts of "little bright eyes."

The hermit's queer little home in the forest was always a source of eager interest to his young friends. To the children it and the grounds about were the land of liberty, and they could do whatsoever they pleased with everything that took their fancy. No sharp voice warned to "drop that." None said: "Don't go there!" While there "the earth and the fullness thereof" were theirs, and the only bitter thing about it all was that they could not throw off the shackles of civilization and live the luxurious, unfettered life of God's good man of the woods.

Perhaps it will be an aid to his acquaintance if we give a brief description of the cave farmer's home:

The floor of his bedroom is the cold, hard earth and the window is a sodded aperture on the north. When he goes to bed he ascends a short ladder, and crawls into a dark shelf, on which are piled sacks stuffed with corn husks, and old quilts. It is warm, and safe from water that might trickle in during storms.

On all sides of the cave are shelves packed full, so there is but room enough for one person to pass at a time. The first glance gives one the idea of a small underground store. But, peering closer under the candle's dim rays, one sees a variety of articles in which no storekeep-

order, are a garden fork, spade and double-edged ax.

When Mr. Jones came from Wales to America 40 years ago his capital was the clothes he wore and a strong constitution. He took up a railroad claim amid these rolling lands, built a cave and settled down. The spot he selected was an ideal one for the lover of nature, and he soon became a picturesque part of the landscape. His home was established on a small promontory, well-drained and protected. His first money was earned by raising potatoes, which he loaded into a basket and carried to the village market. The returns were small, but so were the hermit's needs. Little by little his savings grew. One day a neighbor was wondering where he could raise a few dollars. To his surprise Mr. Jones said he could accommodate him. A note was drawn bearing the legal interest. The incident was related and others went to the man of the wilderness for financial accommodations. Mr. Jones soon had all his money invested, yet he toiled in his garden patch and in the harvest field for others as diligently as ever. He sold his claim, retaining only two or three acres, on which stands his curious little home and such odds and ends as are rarely seen even in the most primitive settlements.

In the enclosure, carefully fenced by hedges, everything is as neat and well-ordered as in a city park. Across the drains are mossy bridges, sparkling with violets. On the upper part of the tract is a tall round stack of poles, which at a distance looks like an Indian's wigwam. At the base of these poles are old rusty stovepipes, all neatly arranged side by side; pieces of boards and stakes to repair the stiles and fencing.

When the writer visited the hermit there was not a dog, cat or animal of any description about the place, though Mr. Jones said at certain seasons of the year the squirrels and rabbits and birds came to see him, and were great company. Some of the squirrels had become so bold that they would slip up and partake of the food he was eating. He never killed any of these, and, in fact, did not have a gun or weapon of any kind about his place.

The interpreter asked Mr. Jones why he lived all alone in such an isolated place. The old man shrugged his shoulders and smiled kindly. "It is home," he

time; it must be renewed or paid at maturity. And yet he is never harsh with his debtors. At one time a friend was taken sick and put to great expense for doctor's bills. Jones took his cane and tramped over the country to see the men who were owing him. He raised a thousand dollars and handed it to his friend: "Here, Dave," he said, tendering the money; "there is more if you want it; when you get well pay me back if you can; if you don't all right."

Mr. Jones is over 70 now. If he wanted to, he could dwell the balance of his days in the best hotel in the county, or he could return to Wales and enjoy life amid the home folks, which would mean all the conveniences and luxuries of modern civilization. But the idea does not appeal to him. He shakes his head and smiles wistfully.

"This place is the healthiest and prettiest," he said. "When a man has lived this way almost half a century he becomes established. There is too much noise in town; you can't think well."

A squirrel crept up to the hedge fence, looked craftily around and then ran up the side of the cave and sat down on the comb of the thatched roof. The hermit threw a crumb of bread up, which the little animal caught and eagerly devoured.

"Comrades!" he said, waving his hands towards the thick forest, "Where will you find such as these?"

AS GOOD AS A BOY.

BY Z. I. DAVIS.

"Papa, why can't we have a pretty white house, and an automobile like Gladdis Warren has? There she goes now in their runabout with four of her city friends. I think that she might invite me once in a while for a ride. Tonight they are going to have a corn roast and melon party. The yard is to be decorated with jack o'lanterns and flags." And Bessie Lee cast a wistful glance after the honking motor as it bowled out of sight.

"It must be on account of having my boys both girls," replied her father, tantalizingly.

The words had the desired effect, and the young girl bit her lips in vexation. Whenever she was tempted to murmur at her lot, he was sure to remind her that she ought to have been a boy. "Then," he added, "you might help me to break up the marsh land so that we could make it profitable. There are ten acres of ground on which I pay taxes year after year, and I do not derive one cent of profit from it. If it was plowed and harrowed it would take the time of one person all summer to subdue the weeds.

"About all girls are good for is to chase the hens, and tease their parents, and make other folks uncomfortable." There was a serious look in Mr. Lee's face as he relapsed into silence. He had never spoken quite so plain before, and Bessie was deeply cut by his sharp words.

She was made aware that she had not greeted him very kindly after his hard day's work in the field. Instead of showing gratitude for his self-sacrificing drudgery, she had found fault because he did not do more.

She felt that she had deserved the rebuke. Closing her lips firmly she resolved to do something worth while. As her mother washed the dishes in silence, she narrowly observed her daughter's conduct. The girl was high-spirited and self-willed, but there was one thing in her favor. When she saw a way better than her own, she was quick to follow it.

There were many reasons why her mother wanted Bessie to make a success in life. One very good one was that Bessie's younger sister, Aleta, tried to do just as she did.

That night as they sat around the reading table, an item in the city daily arrested Bessie's attention. "Wanted—Black-Eyed Susans and Tiger Lilies for decorating with color schemes. Fifty cents a dozen will be paid for all perfect varieties."

She held her breath in astonishment. Why! the swale that joined the pasture lot was a yellow blaze with wild sunflowers or black-eyed Susans. And the muck land was overgrown with marsh grass and tiger lilies. A good deal of thought was crowded into the next few minutes, as she rapidly evolved a new plan in her inexperienced cranium.

"I will say nothing to father and mother about it until I find out whether it succeeds or not," she told herself. Open-

THE VISIT.

BY LALLA MITCHELL.

We're going for a visit,
Maybelle, Marie and I,
I know she's very little
But hope she will not cry.
She wears her hair in ringlets,
She keeps her dresses clean,
And is the bestest baby
That ever I have seen.

We're going for a visit,
Marie, Maybelle and I;
To be a model mother
I really mean to try.
So when I think she's sleepy



Her crib I do not rock
But bring her up by science
And feed her by the clock.

We're going for a visit,
Marie, Maybelle and I,
Away up state to Grandma's—
"There, Baby, hush-a-bye;
I s'pose that they will spoil her
And maybe me, as well,
But both of us will like it,
So, Baby, don't you tell."

ing her purse, she counted out a dollar in nickles and dimes. That was just enough to pay her fare both ways to the city.

From infancy she had been taught of a Heavenly Father's care over His children, and so before retiring she made her plans a subject of earnest prayer.

The next morning, after obtaining permission to visit her aunt in the city, she brought down her trunk and suitcase from the attic.

Alarmed lest she was planning to run away, her mother urged Mr. Lee to take Bessie to the depot, buy her a ticket and wire the aunt to meet her upon her arrival.

"If she runs away," he argued, "she'll be glad to run back again, in my opinion. It's a busy time to stop plowing and go to town." But the white, pleading face of his wife led him to yield the point.

"What in the world are you going to do now?" asked her mother as Bessie drew on her father's rubber boots, armed herself with a sharp hoe and started toward the swale with a pair of sheep-shears.

"How close everybody watches me," she thought. Aloud, she replied, "Do you not think Aunt Cynde would like some wild sunflowers and lilies?"

"Why, yes! How nice of you. Now I do remember that she is especially fond of them."

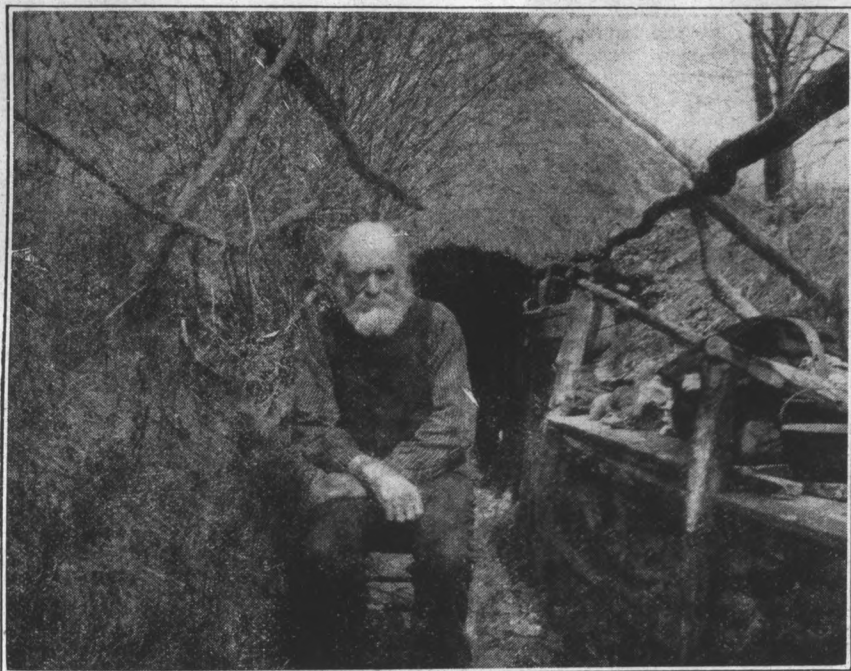
Completely disarmed of suspicion, Mrs. Lee encouraged her to gather a bouquet, but to hurry, as her father must not be kept waiting.

With a smile of exultation, Bessie soon returned with her arms full of flowers. There were so many that it did not take long to fill the small trunk and valise. A mass of damp moss was packed around them.

"She'll think you are the whole thing," laughed her patient father, as he checked her baggage at the station and placed her ticket in her hand.

"Bless you, dear. How glad I am to see you," was her aunt's hearty greeting as she arrived in the city at an early hour. "Let me call a hack for your luggage. I am glad that you have come to make us that long promised visit."

Thereupon Bessie confided to her the plan that she had in mind. "Those trunks are full of wild flowers, Auntie," she said



The Remarkable Eccentric Welsh Hermit Who Enjoys Living Close to Nature.

er would dare risk investment. Every shoe, coat and hat Mr. Jones has worn since burying himself in the forest is carefully preserved in its proper place among the articles of its kind. Every bottle, can and jar he has emptied is stored safely away, because the frugal hermit allows nothing to go to waste. There are knives, parts of locks, belts, railroad spikes, nails, coils of wire, almanacs, lamp shades, shears, funnels, ancient magazines, etc., "world without end." Then, beneath the shelves, are baskets full of packages, all containing articles of value to Mr. Jones.

The cave is propped and cross-timbered with beams like a coal mine. At the entrance, standing in workmanlike

said simply. "I started in this way and just got used to it. I like it—in fact, I love it. You people don't understand. The woods, the water, the birds, and the little animals that run through the yard are all friends. I never feel lonely. And, then, my home is safe. No storm can blow it away; it carries no mortgage; it's all mine. Life is good—I enjoy it!"

Mr. Jones is worth in the neighborhood of \$15,000. All of this is in banks except what is loaned out; he never keeps anything about the cave. Although talking Welsh almost exclusively, he can figure the interest on notes with remarkable accuracy. He does this entirely in his head. He is as prompt as a good banker in never allowing a note to run over



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with suppressed enthusiasm, "and they are for sale to the highest bidder."

"Well, well," was the curious response. "If they are in perfect condition," replied her aunt, "your coming is nothing less than providential. There is a golden wedding anniversary at one of our neighbor's tonight. The main room is to be trimmed as nearly like a woods as possible. The decorator wants yellow flowers and I was asked to order all the black-eyed susans and tiger lilies that were on hand at the florist's. He wants them as soon as possible, and you will receive a higher price by disposing of them there than you could get at the greenhouse. Just let me look at them, lass," smiled her aunt.

Bessie turned the key in the lock of the trunk and raised the cover. Her aunt threw up her hands in a little ecstasy of pleasure.

"My dear! they are beautiful!" she exclaimed. Then calling a hack driver, she requested that they be taken to the home of her friend.

After a close examination the decorator assured her that he could use them all, even the ferns and moss in which they were packed. "They are the nicest I have seen this season," he remarked, "and are worth 75 cents a dozen. Here is a check for the entire amount. Bring or send all you can to me as long as they last and I will pay you the same price."

Bessie stood speechless with happy astonishment as she looked at the figure in the check. There was \$9.50.

"It is nearly dinner time," reminded her aunt, taking her arm and leading her across the street to her rose-trellised home. As they drank their cocoa amidst pleasant conversation, her aunt urged her to remain "for a week's visit."

"Will you please let me postpone it until after our flower harvest," she asked. "The outlook now is that I can be worth as much as a boy to papa and mamma, and if I earn enough I can attend college."

"As sure as I live, Bess is coming up the path," exclaimed Mr. Lee that night after supper.

"Wits are as good as muscle," he chuckled, as she finished telling her experience and produced the check. "I'll never say again that I am sorry you are not a boy."

"She is no dead-head," laughed her mother, with a glance of pride.

"That is just what I have always declared," responded her father, "and where is there a better place than the farm?"

NEW ZEALAND—LABOR CONDITIONS AND GOVERNMENTAL PROBLEMS.

(Continued from page 139.)

of these experiments. If New Zealand succeeds well, thus in the beginning of her career, and with the experience of other and older nations at her command, surely these other nations will gladly let her be the world's experiment station to try new theories of government. We are made to wonder if a forced minimum wage scale, a maximum hour law, and an old age pension, will make individuals less provident, and if it will not retard progress by taking away the incentive to do one's best by thus putting all on the same level. We wonder if graduated land and income taxes will drive capital out of the country, and, if so, whether the state can take the place of private capital in developing the industries of a country, including agriculture. We wonder, too, if it is safe legislation to establish a principle that makes it a function of the state to forcibly deprive a land owner of his freehold at a price that may or may not be acceptable to the owner, for the purpose of again using it as farm land. To New Zealand we would say, "Go on, fair Isle of the Southern Seas. You have tackled big problems and the eyes of the world are upon you. We trust that you are equal to the task before you and, most heartily, we all wish you well."

BOOK NOTICES.

Washington's Farewell Address and Webster's First Bunker Hill Oration. Edited by Frank W. Pine, M. A., English Master, The Hill School, Pottstown, Pa. This is the latest addition to the Gateway Series of English Texts, prepared under the general editorship of Henry van Dyke to meet the College Entrance Requirements in English reading. Cloth, 16mo, 117 pages, with portrait. Price, 30 cents. American Book Company, Chicago.

Latin Primer. By H. C. Nutting, Ph. D., Assistant Professor of Latin, University of California. This little primer supplies a satisfactory manual for teaching Latin in the upper grades of the grammar school. Cloth, 12mo, 240 pages. Price, 50 cents. American Book Company.

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Why It Should Be In Your Kitchen

Before deciding upon a range, the wise woman will examine closely into the superior points of merit of the **Great Majestic**—the range with a reputation, built on honor—of the best materials. Read some of them:

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It is the only range made entirely of malleable iron and charcoal iron. Charcoal iron won't rust like steel—malleable iron can't break, and while the first cost of a **Great Majestic** may be more than others, it outwears 3 ordinary ranges.

Perfect Baker—Fuel Saver
The **Majestic** is put together with rivets (not bolts and stove putty) making it absolutely air tight, like an engine boiler. The joints and seams will remain air tight forever as neither expansion, nor contraction can affect or open them. The oven is lined with guaranteed pure asbestos board, 1/4 inch thick, covered

with an iron grate—put there to stay—you can see it. No heat escapes, or cold air gets into the oven, thus with but half the fuel used in other ranges, you get an absolutely even, dependable baking heat.

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Heated like a tea kettle through copper pocket (stamped from one piece of copper) setting against left hand lining of fire box. Boils 15 gallons of water in a few moments and, by turning lever, the frame—and reservoir—moves away from fire. This feature is patented—found only on the **Majestic**.

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Don't buy any range "unsight, unseen"—what ever range you buy get it from a local dealer—and it will pay you to drive many miles to closely examine the **Majestic** before investing your money in any range. The **Majestic** is for sale by the best dealers in nearly every county in 40 states. Write for our booklet, "Range Comparison." Every farmer's wife should read it before buying any other range.

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As sparkling, wholesome and refreshing as a spring house icicle. So next time you're hot or tired or thirsty, if you're anywhere near a place that sells Coca-Cola, go in and give yourself a real treat.

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We have been making rubber boots for 45 years, often as many as 10,000 pairs a day—in the only exclusive rubber boot mill in the U. S.

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Elephant Head Trade-Mark



Woman and Her Needs At Home and Elsewhere



CULTIVATING JOYOUSNESS.

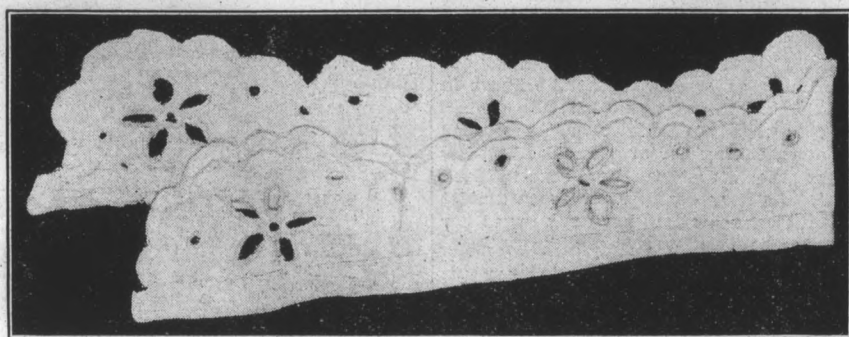
SINCE I have learned never to expect justice in this world I am becoming happy. There is no such thing as justice between man and man, therefore I no longer look for it and thus I am spared many a pang. With this attitude I am trying to cultivate the spirit of joyousness, and life has lost much of its bitterness.

A good bit of philosophy, isn't it? And one that should work out well if your resolution to put it into practice in your own life is strong enough to hold out to the end. Half the unhappy people in the world are unhappy because they are not getting what they think they deserve. The way to be happy, then, is to cease thinking of your desires, to accept conditions as they are if you can not change them, to throw yourself soul and body into some work and to forget the thorns. After awhile they will cease to trouble you, and then for you they no longer exist.

Perhaps you are the odd one in a large family and you think your parents do not treat you as kindly as they do your brothers and sisters. Well, maybe they don't show you the same favors as the rest, for, wrong as it seems, the number of families where partiality is shown is larger than those in which strict justice is observed. But then there may be a reason. Your brothers and sisters may be pleasanter to live with, for if you are given to thinking of injustice you are probably given to moods. Probably the other children are jolly and lighthearted and fill the house with sunshine, while you are quiet or even taciturn. And it is more than likely that they are a bit selfish and take what they want, while you with your ideas of justice and fairness wait for someone to give you what you want. That may be the secret of what you deem partiality, it may be that the others take what you think father and mother give. If so your remedy is to wake up and help yourself. The world has nothing to offer to the person who waits for gifts. The one who demands is the one who gets.

At any rate, whether this is the secret of what you deem unfairness or no, you aren't going to help matters by dwelling on them. Put them out of your mind, cease to expect justice for yourself and look for your happiness in working hard and thinking of others.

Perhaps you are married and the injustice comes from your husband or his family. The same rule holds good, you will not make things better by brooding over them and sighing for justice. If a frank talk does not mend matters, try to ignore conditions entirely. Determine to live well yourself, to deal fairly and honorably with others no matter what



their attitude towards you. In this way only can you keep your self-respect, without which you can never expect even an imitation happiness.

Then cultivate joyousness. But how? If you are a nature lover it is easy for there is always something out of doors to give you cause for thankfulness and praise. If you are not, then it must be books, bright songs, the funny things the children do, your neighbor's quaint remarks. Anything which turns your mind from introspection towards others, will tend to put a bit more of the joy of living into your life.

Finally, forget. Forget the unpleasant, the unjust, for by your forgetting they cease to exist.

DEBORAH.

EYELET WORK—BY MAE Y. MAHAFFY.

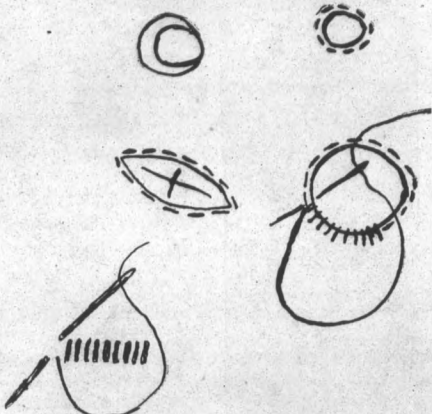
In English embroidery, or eyelet work, the major part of the design takes the form of open disks or ovals, and these are usually referred to in a general way as eyelets. In the Maderia and French laid embroideries, two of the most beautiful forms of needlework in existence, eyelets are a distinctive feature, combining, as they do, with solid work and fanciful stitchery. Eyelets are used in both white and colored work, but are peculiarly adapted to all white embroidery. There is necessarily a sort of sober or cold look to solid white work, but when eyelets enter into the design they lighten the effect, producing a lacy, airiness of detail which is fascinating.

While eyelets are not difficult to make, it requires considerable practice to be able to make them well. They must be made very even and exact as to size and shape. The round holes are punched with a stiletto, a sharply pointed instrument made for the purpose. The ovals are slit with sharp scissors, first lengthwise, and then across the widest part. The overcast stitch, shown at the bottom of the sketch, is, as its name implies, a simple over and over stitch, equal in length throughout, close set, with no overlapping of the threads, yet no gap between stitches.

In working the eyelets a row of running stitches, longer on top than underneath, are placed around the stamped outline. The overcasting is then done directly over these stitches, which serve as a slight padding, and also strengthen the edge. The placing of these running stitches appears in the oval and in the eyelets shown in the drawing. The center of the oval also indicates how the material is cut. The raw edges are rolled back under the finger and thumb

in the overcasting process, so that they are caught underneath by it.

The little collar shown includes both eyelets and ovals. This style collar may be utilized as a turnover, or be worn directly on the band of the waist, as the Dutch collars are worn, the narrow effects being in favor just now. With it a tie of narrow black or colored velvet should be worn, tied in a prim, short-looped bow, with very long ends, comparatively. Or, the new bows or jabots of many loops and ends of narrow ribbon,



bedecked with sweet peas or rosebuds may be substituted.

Oftentimes the eyelets may be used in a design intended for other work, for there are frequently small disks or ovals which will look well cut out, although the remainder of the design is different. Then, too, there are numerous attractive scallops made with eyelets. For instance, a row of small scallops are made, each with an eyelet in the center. The inside edge is simply overcast around that

portion of the eyelet, while the part which will be cut out later to form the scallop is buttonholed, this edge being wider than the other, after the manner of the one shown in the sketch. This wider side is of course padded a little more than the other. The scallops may be rounded or pointed. Other scallops are made with an oval at the juncture of every pair. Long rows, scrolls, circles, etc., composed entirely of eyelets, usually of the same size throughout, form charming decorations for various articles, and these can be laid out without the aid of a pattern, a pencil or other small round object serving as a guide.

Daisies, forget-me-nots, and similar flowers, are very often made in eyelet work, each petal being represented by an

oval, with an eyelet in the center. Small leaf forms are also converted into ovals at times. The wheat-ear pattern, a dainty, effective one in most styles of needlework, is extremely so in eyelet work. Each wheat-ear or head is made as an oval, with a short row of fine overcasting or outlining projecting from the tip to indicate the beard. The stem is then made of slightly heavier outlining or stem stitch.

Another pretty usage for small eyelets is to run them in a row in the center of bowknots, long leaves, etc., the edges being outlined or worked in stem stitch or overcasting. This creates a more delicate effect than solid stitchery, and is quite as well adapted to the figures, as a general thing, much depending upon the character of the remainder of the design. All parts of a design must of course harmonize nicely.

MANY HOMES OPEN TO THE POOR.

THE great hindrance to our Fresh Air work is that so many people do not want to help a child unless it is pretty, healthy and good. As the majority of the children coming to us for aid are not pretty and not overly strong, you see we find it hard to please those offering homes," says Miss Alice M. Hewitt, of the Michigan Fresh Air Society. "It makes it hard all around, for I can understand how anyone hates to have the care of a strange child who is unattractive and puny. At the same time, they are the children who need help most, and it is in taking them that the real charity is shown. A pretty, bright child is never at a loss for friends.

"Then the stories the children tell, occasionally hinder our work. Children are born romancers and out in the country they frequently tell wonderful tales of fine clothes they have at home and of the large house in which they live. As a matter of fact, we never send out a child who is not absolutely in need of help. I personally go to every home and investigate conditions before sending a boy or girl out. We guarantee to see that they have one good outfit to travel in, but that is all we can do as to clothes, and I am afraid the poor clothes of some have discouraged many of the women who have kindly opened their homes to the city's poor.

Michigan Farmer readers have responded to the call for help, but unfortunately some of those asking for a child are so far from Detroit as to make it impossible to take the boys and girls. A day's journey is out of the question, usually, as the cost of car fare is so great and

AT THE PARSONAGE

Coffee Runs Riot No Longer.

"Wife and I had a serious time of it while we were coffee drinkers.

"She had gastritis, headaches, belching and would have periods of sickness, while I secured a daily headache that became chronic.

"We naturally sought relief by drugs without avail, for it is now plain enough that no drug will cure the diseases another drug (coffee) sets up, particularly, so long as the drug which causes the trouble is continued.

"Finally we thought we would try leaving off coffee and using Postum. I noticed that my headaches disappeared like magic and my old 'trembly' nervousness left. One day wife said, 'Do you know my gastritis has gone?'

"One can hardly realize what Postum has done for us.

"Then we began to talk to others. Wife's father and mother were both coffee drinkers and sufferers. Their headaches left entirely a short time after they changed from coffee to Postum.

"I began to enquire among my parishioners and found to my astonishment that numbers of them use Postum in place of coffee. Many of the ministers who have visited our parsonage have become enthusiastic champions of Postum." Name given by Postum Co., Battle Creek, Mich.

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the parents do not want the children so far from home.

Among our readers who have opened their homes are: Mrs. George Lossing, of Yale; Mrs. Ray Ott, Albion; Mr. and Mrs. W. O. Tobias, Shultz; Mrs. Frank S. Baldwin, Berlin; Mary Easson, Oshkosh; Mrs. Mary Palmateer, Cass City; Miss Mary Riddle, Howell; J. C. Bacon, Blanchard; Mrs. Cecil Bowerman, Chief; Mrs. Edgar Case, Benzonia; Reuben A. Lee, Lowell; Mrs. E. D. W. LaForge, New Baltimore. L. H. Allen, of Ovid, found homes in his neighborhood for eight children. The children of the "refined German woman," mentioned in a previous article had many offers of help and were quickly provided for. In writing address The Michigan Fresh Air Society, 406 Washington Arcade. Be sure to give references as to your reliability.

COUNTRY GIRLS' CHANCES IN TOWN.

BY HILDA RICHMOND.

For the girl fitted to teach school there are always openings in the larger places. Many of the cities issue circulars of information to guide prospective teachers, setting forth the course of study and regulations, and giving all necessary information in regard to becoming an applicant for a position. To the girl earning forty or fifty dollars per month for eight months per year in the country or village, six or seven hundred dollars per year looks very large. Without stopping to take into consideration the short vacation, tedious reports, much red-tape and other disadvantages of the city schools, the young girl becomes a part of the vast machine and loses her identity almost entirely. If a teacher can pass a good examination she has a good change to enter the city schools, since more and more city teachers are deserting the ranks, especially the men, claiming they can not live on the scanty pittance handed out by those in school authority. The girl fresh from the country has all that to learn, and therefore is a willing applicant for the place made vacant by the departing man.

Generally speaking the country teacher need fear very little in preparing for the city school, though there are many fads and fancies forced upon the pupils in some of the large public schools. The "Three R's" still show the ability of the teacher to the board of education in many places and the smaller things are overlooked. It is safe to say that any girl who is above the average in the common branches, and is quick to take up with new ideas, can find a place in some city school without much trouble. Of course the girl who is teaching in the country simply for the money that is in teaching will never be a success anywhere, and she cannot easily hide her short comings. And the girl who is going to the city to apply for a school to enjoy herself, aside from her school duties, might as well remain where she is. Indeed it is positively wicked for any girl to teach school when she frankly admits to her friends that she "just hates" it. The poor children under her care will be cheated, and she will cheat herself as well into the idea that she is really earning her money by remaining in the school room with them.

The country teacher who wants to try for a place in the city should not be discouraged because she has no influential friends to help her. Politics do control some schools in a shameful manner, making it impossible to get a position unless you have influence with the ring, but the girl is better off to never have a place in a city ruled like that in its educational circles. The ability to pass a good examination, a quiet, modest bearing, sensible clothes and a real desire to help the children are quickly apparent to the keen men who hire the teachers in the good schools, and country girl should have all these before planning her campaign. Then the rest is easy. In spite of all the dismal groanings of the pessimists, the world is full of places—good places—for earnest workers and in every profession there are vacancies at all times only waiting for workers who are large enough to fill them.

The six or seven or more hundreds of dollars will not look nearly as large to the girl teacher after the first year, as they did in the country, but the experience will do her good and she will learn to value her country home all the more. To the good teacher who is dissatisfied with country or village conditions and who thinks a city holds great opportunity for advancement, the best advice is to tell her to go ahead. If she finds her ideal work in the city school room, well and good, but if she is disappointed

the experience will still be worth all the time and effort she has expended. It may look impossible to get into the city schools, but it isn't at all. On the contrary there are many positions open to the teacher with ability and all she has to do is to "go up and possess the land." Of course it takes planning and work to get into the desirable schools, but there are no places waiting to drop into the hands like over-ripe fruit these days. If the position is not worth making an effort for it is not worth having in city or country.

HOME QUERIES.

Editor Household Dept.—We wish if the Editor or readers of the Woman and Her Needs in the Michigan Farmer know how to exterminate the buffalo or carpet bug, they would tell how to do it as soon as possible. This is the time of the year when they do the most damage and make housekeeping a burden. Mrs. T. C. C.

The usual remedy for buffalo bugs is gasoline. Drench the edges of the rug or carpet with gasoline and pour it in the crevices around the baseboards. Then close the room for 24 hours, being sure not to take a light in it in the meantime. Open in daylight and air thoroughly. If the carpet is badly infected take it out doors and beat well on the wrong side. Then spread out on the floor, drench the whole carpet in gasoline, roll up tightly and leave in the closed room for 24 hours, airing at the end of that time. Marion Harland recommends one tablespoonful of red pepper mixed with one pint of wood alcohol, shot into the cracks in the room with a syringe. Wet the edges of the carpet, also, with the liquid. A lump of camphor crushed with the pepper helps. This process may have to be repeated several times.

Editor Household Dept.—Would you tell through the Woman's Department how to treat a fern? My fern has thin leaves. Mrs. J. T.

Your fern probably needs repotting. Put a generous layer of manure in the bottom of the crock and fill with rich dirt. Set the fern in a north window, as it thrives better out of the sun, and then do not move it. Moving a Boston or sword fern always puts it back. Be sure not to touch the little curl on the end of the leaf as this will stop growth and the leaf will turn brown and die. Some recommend pouring a tablespoonful of castor oil around the roots occasionally. Water when the ground seems dry.

MICHIGAN FARMER PATTERNS.

The patterns illustrated and described below can be obtained through the Michigan Farmer Offices at the prices named. Be sure to give number and size of pattern when ordered.



No. 5425 Girls' Dress Closed at the Back. Cut in sizes 6, 8, 10, and 12 years. Age 8 requires 3 3/4 yards of material 27 inches wide or 3 yards of 36 inch material. Price, 10 cents.

No. 4580, Boys' Russian Suit. Cut in sizes 2, 4 and 6 years. For 4 year size it requires 2 1/2 yards of 36 inch material. Price 10 cents.

No. 4019, Ladies' Princess Slip. Cut in sizes 32 to 44 inches bust measure. For 36 bust it requires 6 1/4 yards 36 inches wide or without ruffle and with sleeve 5 1/4 yards of 36 inch material. Price 10 cents.

No. 4091, Ladies' One Piece Corset Cover. Cut in sizes 32 to 48 inches bust measure. For 36 bust it requires 1 3/4 yards of 17 inch flouncing. Price 10 cents.

No. 4646, Ladies' and Misses' Middy Blouse Waist. Cut in sizes 30 to 40 inches bust measure. For 36 bust it requires 2 1/4 yards of 44 inch material, 1 yard of contrasting material 27 inches wide. Price 10 cents.

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Boys' Suits
Boys' Overcoats
Boys' Underwear
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Infants' Caps
Watches, Jewelry
Umbrellas
Belts, Shoes
Ostrich Plumes
Feather Boas
Laces, Silks
Dress Goods
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HORTICULTURE

ATTENTION! MICHIGAN GRAPE GROWERS.

Grape growers in the Michigan grape belt will undoubtedly be interested in a report on the grape conditions in Western New York, which is at present the only serious rival of the Michigan section in the production of this important fruit.

An inspection of the entire central part of the Lake Erie Valley grape belt in Chautauqua county, including the vineyards in and around Ripley, Westfield, Portland, Brocton, Fredonia, Dunkirk and Sheridan, and comprising at least fifty per cent of the acreage of the entire section was made this week by your correspondent.

The most important fact discovered, insofar as it affects the Michigan grower is that the Chautauqua county crop is most unusually far advanced for this time of year. Grape clusters are fully grown, a condition not usually reached until August 1st to 15th. The growers who keep a record of these events say that blossoms appeared three weeks earlier than usual this spring, and that weather conditions, especially the hot spell from June 25th to July 15th served to keep conditions as far ahead of normal at all times up to now, as they were in blossoming period.

Unless a very seriously cold month of August comes on the early grapes will begin to go to market almost by the middle of the month, and Concord by the first week in September; whereas in normal seasons there has been no material shipments of Concord from this section before September 15th, and usually none until the first Monday after September 20th.

The point is that unless the Michigan grapes are equally and abnormally early the Chautauqua crop will "butt into" the Michigan crop before it is fairly started to the consumer. And Michigan growers should be informed of this situation so that they can be ready to rush their crop at the very earliest possible moment consistent with properly ripened fruit.

The Chautauqua crop looks to be in first class condition. The fruit clusters are well set, not sufficient in number to warrant expectation of a "bumper" crop, but sufficient to indicate a normal, average yield. The season has been very favorable, hot and with occasional showers, except in a few scattered localities which the showers seemed to miss. The grape berries are large, and well filled, but the bunches are shorter than usual, and set somewhat "scraggly" instead of being solid.

There is a largely increased acreage in new bearing this fall, which should serve to keep gross production up to the level of a ten year average, in spite of generally expected falling off in production per acre. The belt is extending eastward rapidly, and well posted grape men estimate that there are now between forty and forty-five thousand acres of vineyards, as compared with 30,000 acres twelve years ago.

Getting down to brass tacks on forecast on the actual size of the crop is a difficult matter. Last year's crop was not far from five thousand carloads. The year before there was a "bumper" crop, something over 7,300 carloads. The ten year average is not far from five thousand cars, one bad year six years ago pulling down the average as last year's crop in Michigan will affect her average. With this in view it is safe to predict an average crop here, but not an average crop, eliminating the one bad year. Well posted men differ materially, one good grape man saying Monday that it was the largest crop ever harvested in the belt, taking increased acreage into account another, equally intelligent saying, "There will be a lot of disappointed grape growers when they count their baskets of grapes." So to be conservative, your correspondent, well aware of the difficulty of prophecy, and calling attention to the possible damage in the ensuing four weeks from storms, hail, wind, etc., is looking for a crop not far above five thousand carloads.

The market outlook, locally, was never better. One grape juice company alone is in the market for ten thousand tons, or close to one-sixth of the entire crop. Every grape juice manufacturer will use an increased amount over last year, and the wine makers will purchase freely unless the price level is above them. The

co-operative shipping association has largely increased contracts, and will ship close to fifty per cent of the crop.

Eight pound baskets have sold freely the past three weeks for \$19.00 per M. Some baskets have changed hands as low as \$18.00 and others as high as \$21.00. The twenty pound basket is in strong demand for the bulk shipments, and are quoted close to \$40.00 per M. The Co-Operative Shipping Association supplies its contract growers handling baskets at cost, and this has served to clean up the basket situation.

A severe outbreak of "leaf hopper" has afflicted the vineyardists of the east end of the belt, but they were kept well under control by all growers ready to use the spray pump freely. The black leaf tobacco extract has proven a specific for this pest. All grape pests have been present in good number, but spraying is becoming much more general, and vineyard conditions show good general improvement in spite of the pests. There is no rot or mildew thus far reported, and will be none unless most unfavorable weather conditions come on in August.

New York.

A. M. LOOMIS.

CONVERTING GRAPES INTO GRAPE JUICE.

I have a nice lot of grapes and cannot get baskets to ship them in. Probably I would not get anything for them if I did. Can you tell me how to make it into juice and keep it from fermentation?

Berrien Co.

C. O. RAY.

While large grape juice manufacturers can make a product much more economical than the individual, the latter's output usually has a more desirable quality which enables him to secure a premium for it on the market and thereby make as much or more from the sale of the goods as the manufacturer. Unfermented grape juice may be made with or without sugar. Here is a recipe where sugar is used:

Wash the fruit carefully, crush and heat to a simmer and hold there for half an hour, after which the pulp is crushed again, strained and squeezed through a cloth bag. Return the juice to the fire, boil and skim, after which, to each pint of juice, one-fourth pint of sugar is added, allow to dissolve and then the whole boiled for five or six minutes. Bottles are scalded out thoroughly, filled with the juice while still hot and sealed at once.

The following recipe does not require sugar: Wash the fruit, boil and press out the juice. Clean bottles and place on a false wooden bottom in the clothes boiler. Pour the juice in the bottles until all are full, and then put water around the bottles until it comes up well about the necks. Bring to a boil and continue for about ten minutes. Take one of the bottles and pour into the others what is necessary to fill them full as some of the juice is likely to evaporate during the boiling. While the bottles are still hot cork them tight and seal.

There are other recipes for preserving the juice of the grape. These are representative of the two ways of manufacturing the unfermented juice and we believe, if followed carefully, will give very satisfactory results.

PEAS RIDDED OF THE APHIS.

The writer sowed peas the third of July. They were blossoming July 30. Glancing at the vines, after returning from a trip, he observed that there was something wrong, and on investigation found that the plants were nearly covered on the underside with the pea aphids. A few rods distant were other peas that had been planted about three weeks before and they were almost free from the insects. Early peas are less apt to be troubled by this pest. We jarred the vines, knocking the insects off into the rows and then thoroughly stirred the soil hoping thereby to kill many of them. This operation was repeated several times. We found that it diminished the trespassers and within ten days the vines were nearly free from the pests, and except for a few plants which were so badly damaged that they were removed, the patch now appears to be taking on new life. While a bumper crop is not looked for we now hope for a yield that will reward us for our trouble.

To determine when a watermelon is ripe place both hands on the top and press downward quickly, being careful not to place the weight of the body on it. If the melon crunches it is ripe and ready for eating.

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Our men are trained and skilled. They are able to rod your buildings correctly. That is all-important. Our personal, binding guarantee is issued to you on their work. Don't wait until it is too late. Send today for fine, large book on lightning, its laws and how to control it. Gives Prof. Dodd's great lecture, many vivid lightning scenes, resolutions of insurance companies, guarantee, etc. Free.

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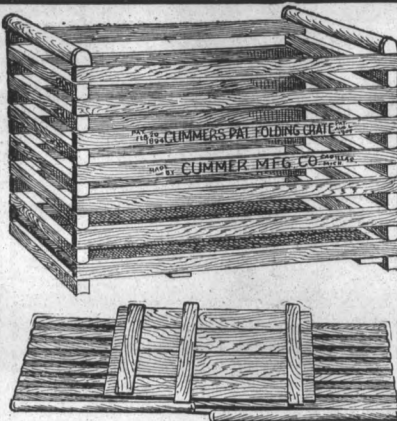
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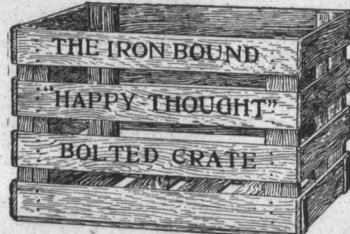


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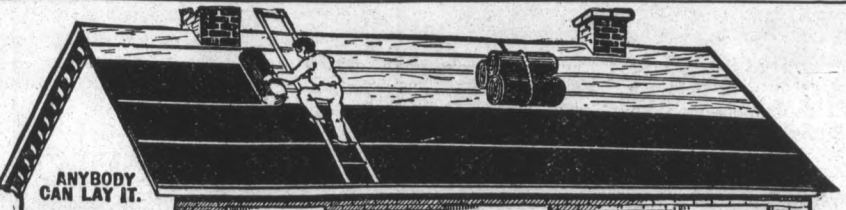


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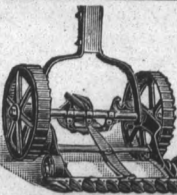
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GRANGE

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

THE AUGUST PROGRAMS.

Suggestions for Second Meeting.

"Work without rest is like bread without yeast—it is hard and heavy."

Roll call, responded to by each naming an evidence that the world is growing wiser, brighter or better.

Co-operative ownership of farm machinery—is it feasible in this locality? If so, what machines?

Conundrum contest.

Vacation experiences.

Select reading.

Value of a power engine in the work of the farm and home.

Prime lemonade, by men named A to J; served with choice cakes, by women named K. to Z.

Interperse this program with songs from "Song Knapsack."

COUNTRY LIFE CONFERENCES—II.

In Virginia, country life matters are given attention in what is called "Rural Life Week" at the University summer school, at Charlottesville. The practice was begun in July, 1908, just previous to the appointment of the Country Life Commission by President Roosevelt. This is a significant fact, but not the only one in connection with that week.

Thirteen hundred students, most of them teachers in Virginia's rural schools, attend this summer school and hear the living messages of the speakers in the conferences of Rural Week. But the printed report is the vehicle which conveys these messages to by far their larger audiences. Twelve thousand copies of it were sent free last year to farmers and others. This is Virginia's modest way of making its "humble contribution" to the wide-spread effort to make farm life "more profitable and pleasurable." At the conference itself, however, one from out of the state listens in surprise and wonder at what the rare Old Dominion is doing besides this for her rural people. You hear about her demonstration work for farmers, showing them how to double and treble the yield of crops on "worn out" soils. You marvel at the progress made in successful consolidation of schools and improvement of roads. You are delighted at the stories and reports of the boys' corn clubs and the girls' tomato clubs. While in some of these respects the state is in advance of others, you discover that conveniences about the farm homes have not increased as rapidly.

The object of Rural Week is to bring every phase of country living to the light and open it for discussion. Eighteen persons from ten states and the District of Columbia presented these phases of farm life. Almost every speaker was a specialist, giving his or her life work to the matter upon which he was heard. Rural Week brings these people together with the great body of teachers and shows all the inter-relations of their various lines of work. It does good in broadening the outlook of all. It humbles while it inspires by informing what great forces are at work to better humanity and to solve its farm problems. Because of its doing this, the plan of holding conferences upon country life is to be commended. By all means let us have one of these once in a while. You don't know how narrow and prejudiced and ignorant of many things you are until you have sat in such a conference. It does farmer, teacher, minister, business man, and farm woman, all, good to confer together concerning the things they can do together for mutual benefit. Then, welcome to the country life conferences, whether for the whole state, the county or the neighborhood. Very likely most good will result in the end from the neighborhood plan.

Over against any facts which such conferences bring out, the facts of the Grange shine with a steady light. Every patron, as he sits in such a council, recognizes it. He realizes as never before what the Grange has done for its own members. He sees it as a place where, twice a month, year after year, farm men and women have gathered to talk over the very same questions of financial co-operation, of rural school betterment, of increased yields in crops, of conveniences for farm homes, of socializing agencies, etc. He feels that through such discussions many fields do yield better crops and more houses have

bath rooms and front porches, more lawns are mowed, and more people get out to see their neighbors than would otherwise occur. In short, he feels as never before the steady and strong pull of Grange influence.

JENNIE BUELL.

GRANGE ACTIVITY IN WEXFORD COUNTY.

Clam Lake Grange built a fine two-story hall last year. The Grange is located near the city of Cadillac, but succeeds admirably in keeping the young people interested.

Boone Grange meets a short distance from the village of Boone in a school-house. Here, too, are a number of bright young people who enliven the programs and help to keep the older members young.

Wexford Grange has an excellent hall and is fortunate in having a faithful few who keep things moving the year around.

Manton Grange meets in the village of Manton, has a large membership and one of the best lecturers in Northern Michigan.

Other subordinate Granges in the county are doing good work, but it has not been the writers privilege to visit them, for which reason he cannot speak as definitely of their condition.

The Wexford County Pomona recently held a splendid meeting at Manton. Resignations were received from the worthy master and lecturer, but these vacancies were promptly filled by electing Bro. Allison Green, of Manton, master, and his excellent wife worthy lecturer. This insures for Wexford Pomona a splendid future.

The Grange, teachers, and business men of the county organized an educational association last winter in line with the Hesperia movement. An enthusiastic meeting was held at Cadillac, directed by Deputy State Master McClure, and the meeting this year promises to surpass the former one in every way. Gatherings of this kind are very popular in Oceana county, and splendid results have been achieved through them. If the patrons and citizens of Wexford county take hold of this movement with a will and a purpose to succeed, it will mean much for them in the near future.

W. F. TAYLOR.

JACKSON POMONA'S FIRST ANNUAL PICNIC.

Jackson County Pomona Grange held its first picnic at Vandercook's Lake, near Jackson, last week. It was well attended by patrons and farmers generally. Although Jackson has been one of the last of the state's good agricultural counties to accept the Grange, it promises to become strong Grange territory. The principal address of this meeting was delivered by Bro. C. H. Bramble, of Lenawee Co., who is state manager of the insurance department of the Grange. After briefly discussing the insurance feature he made an able presentation of the social, educational and legislative aims of the Grange in which he said:

"The Grange has a state and a national organization and at present is doing more to keep the boys and girls on the farm than any other agency. The social side of Grange work cannot be magnified too much."

The educational side is far reaching in its results and leads the boys and girls to a study of nature. But not all boys and girls are fitted for the farm. Leaders in many of the professions are the products of farm homes, and this is true to a greater extent than it should be because of the fact that our public schools train for the high schools and the university instead of the industrial work of life. But it requires just as much skill and education to care for an orchard and raise good crops as to practice law. The girl is well educated when she can cook well and make a successful home.

The trend of government today is toward fostering manufacture at the expense of agriculture and no nation can succeed under such policy. Take the country of Denmark, which a few years ago was the poorest country on the globe. Today they have twenty-nine agricultural schools in a territory about the size of the state of Massachusetts and the largest per capita wealth of any nation.

We don't know enough about co-operation. Laws which foster agriculture were never needed more. The Grange stands for the initiative, referendum and recall. Everyone is interested in reciprocity and the Grange vigorously opposed the bill that was forced through the congress by the executive. In Canada they have referred it to the people to decide. The Grange also stands for the parcels post, which has been tried out in other countries and has proven successful.

A Plowing Match will be conducted by Ironton Grange, of Charlevoix Co., a committee to arrange for same having been appointed at the meeting of July 25. This is the second Grange in that county to adopt the plowing match as a feature of one of its late summer or early fall meetings. Ironton patrons also initiated three candidates at this meeting and appointed a committee to collect vegetables and grains for a Grange exhibit at the coming country fair.

COMING EVENTS.

Grange Rallies.

Newaygo Co. Pomona, in Brooks' park at Newaygo, Thursday, Aug. 24. Address by State Master Hull.

FARMERS' CLUBS

OFFICERS OF THE STATE ASSOCIATION OF FARMERS' CLUBS.

President—B. A. Holden, Wixom.
Vice-Pres., J. D. Leland, Corunna.
Secretary—Mrs. C. P. Johnson, Metamora.

Treasurer—Mrs. Lewis Sackett, Eckford.
Directors—A. R. Palmer, Jackson; Wm. H. Marks, Fair Haven; C. L. Wright, Caro; E. W. Woodruff, Blanchard; C. P. Johnson, Metamora; Patrick Hankerd, Munith.

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

Associational Motto.

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

Associational Sentiment.

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

COMPULSORY SPRAYING.

Address of Mr. D. Munro, before the State Association of Farmers' Clubs at the last annual meeting of that organization.

(Continued from last week.)

"The careful and efficient work of our county fruit inspectors has been a great source of satisfaction. By a personal demonstration where needed they have shown the people how to spray, and then protected them by preventing the sale of infected fruit. The work of the inspectors should be enlarged as the industry grows. Our larger counties should now put their men on salaries and let them devote all their time to the work. Let them be instructors and advisers, traveling to every farm and talking and working personally with every man. That is the kind of work that brings results. This should be urged upon your growers and your county courts. Another thing that should be made a part of the regular duty of the county inspector is the gathering of statistics, particularly the yield of fruit. The first district commissioner, March 30, 1907: 'Everybody sprays is the slogan now.' We won the Sellwood case at Oregon City, so now we can go right ahead without any fear of damage suits, enforce the spraying laws to the limit, knowing that we have ample authority to do so, and knowing we have the decision of the court to back us up. More than one-half of the trees in this district have been sprayed already (March 30), quite a number of the old scaly orchards have been grubbed out; and if the rest of them are not sprayed and attended to right away, something will happen to them too.' March 31, 1908, this commissioner reports: 'The increase in spraying for scale in my district has been fully 40 per cent over last year.'"

"The Second District reports: The county fruit inspectors in each county in this district are enthusiastic, energetic men. They are carrying on their work as best they can considering the amount of work they have to do. They have held numerous meetings of fruit growers in various parts of their respective counties. They have held fruit fairs at the important points in their respective counties, and the promise is that they will see greater results this coming season than has ever before been manifested. I might say in passing that more meetings of fruit growers have been held than of those engaged in all other branches of agriculture combined."

"Public sentiment, or perhaps I should say self-interest, with greater knowledge of how to fight pests and make the orchard pay, has stimulated through active county fruit inspectors, the negligent orchard owners to activity. Spraying and pruning the past winter, has been with more system and energy than any former year. Many old, worn-out, pest-infested, diseased orchards, that could not be renovated, have been cut out. Inspector Riddle has caused many orchards to be sprayed for San Jose scale that were never sprayed before, and in many cases where old orchards would not pay to spray, he has caused them to be cut down and burned. Public sentiment is the prime factor in the enforcement of all our horticultural laws. The majority of our fruit growers are in accord with the strict enforcement of the laws, but the thoughtless and negligent will not bestow the necessary labor to destroy insect pests and fungus diseases unless someone with authority of law compels them to. The county inspectors receive \$3.00 per day and expenses, which is paid by the county; but it is suggested to place them on a salary for full time."

Michigan.

What is the present situation in our own state? Some of the counties where fruit is a chief industry the growers are the peers of fruitmen found anywhere. They care for their trees whether an adjacent farmer may have a neglected orchard or not. But the farmer is just awaking to the situation. There are large sections where practically nothing is being done. The San Jose scale and other pests are present, and the farmer is ignorant of it. Some competent person should go among the farmers instructing and helping them. Our State Inspector, Prof. L. R. Taft, is doing most efficient work in the state as a whole, but there is urgent need for orchard to orchard inspection. From time to time writers in The Michigan Farmer complain that the township inspectors are not busy and aggressive. There must be some reason for this. Having given the question considerable study for five years the writer has formed some opinions which he is glad to have this opportunity of expressing. His conclusions can be inferred from much that has been quoted in this paper.

The Michigan Farmer of Nov. 19, has this to say regarding "The Orchard Inspector's Pay"—"If you turn to section 18 of Act 91 of the Public Acts of 1905 you will find the following: 'The township, village and city inspectors shall be allowed for services under this act, two dollars for each full day and one dollar for each half day, and their per diem and other charges and disbursements hereunder, shall be audited by the township board or village council.' In another section of the same act it states that when the inspector is informed of trees troubled with San Jose scale, yellows or other diseases mentioned, he is 'to proceed at once.' In many parts of the state ordinary farm hands are getting two dollars per day. There are many men, and we admire them, who are willing to leave their farm and orchard work in the hands of a hired man and inspect the trees of a neighbor for two dollars per day. But we should not depend upon such sacrifice to protect our orchards. If the inspector is an incompetent man, he is dear at this price and should be dismissed. If he is competent for the position, his services are worth twice the amount allowed by the statute, to himself, and many times two dollars per day to the township, village or city. It would seem that a little change in this section by our legislature would greatly aid in making effectual what is otherwise an admirable statute. It would tend to bring an entirely different type of inspector to the service of the public."

(Continued next week.)

CLUB DISCUSSIONS.

The East Otisco Farmers' club held its annual picnic Aug. 3, in Belding city park which was attended by about a hundred, members and families, as well as a number of invited guests. Tables were spread in the park pavilion and dinner began at noon, continuing until about two o'clock. It was a good dinner put up by farmers' wives and its superlative quality and abundance betokened that the ladies concerned in preparing it were rather justly proud of their unquestioned ability as purveyors and caterers. After dinner brief talks were given by Revs. Maxwell and Bussing and the young ladies furnished some excellent music.

The Washington Center Farmers' Club met at "Lone Pine," the home of Mr. and Mrs. F. J. Bratten, near Shepherd, Mich., August 10, 1911. The party of thirty left Ashley and Ithaca on the early morning train and were met in Shepherd by Mr. and Mrs. Bratten, who welcomed them joyously. They then escorted them to a platform where they got into a nicely seated rig and drove out to their farm. When they arrived the club was greeted by a banner of welcome.

The forenoon was spent in visiting, viewing their elegant rooms and preparing for the dinner hour. The dinner was served on a rustic table under a large shade tree. The company did ample justice to the lovely dinner as most of the party had breakfasted at four o'clock.

Mr. and Mrs. Bratten then showed them over their beautiful farm which shows that Isabella county ranks with Gratiot county as to farms. After they returned to the house they listened to some music by Mrs. Mathews, the quartet and Mr. and Mrs. Bratten. Several humorous recitations were then rendered by Mrs. Hill, Mrs. Mathews, Master Floyd Bratten, Mr. Bratten and Mr. Mathews, after which they witnessed a basket ball game. Then the company were treated to ice cream, after which Mr. Bratten presented the club with a beautiful banner. They then hitched up and drove around Shepherd, which is a pretty little town; there they took the motor car for home. The day was very happily spent in spite of the threatening weather. The next meeting will be held at Echo Glen, the home of Mrs. Dancy Whitman, at 1:00 p. m., Sept. 14, 1911.—Mrs. Cora Keiser, Cor. Sec.

MARKETS

DETROIT WHOLESALE MARKET.

August 16, 1911.
Grains and Seeds.

Wheat.—It now appears that the black rust news of the northwest was overworked by the bulls in their efforts to advance values with the result that since Monday a bearish fever has attacked the market and pulled values down nearly four cents in two days of trading. Not alone in this country but in Russia, Germany and other continental countries it appears that weather conditions have greatly improved which scared holders into selling surplus stocks. The European visible supply showed a large decrease the past week compared with a substantial increase one year ago, and it is probable that from this condition might develop a demand that will relieve the market on this side and help to restore higher prices. Otherwise there is likely to be dealing upon the present basis for a few days. One year ago the price for No. 2 red wheat was \$1.02½ per bu. Quotations for the past week are:

	No. 2	No. 1	Red.	White.	Sept.	Dec.
Thursday	90½	87½	.92	.97½		
Friday	90½	87½	.92½	.97½		
Saturday	90½	87½	.92	.97½		
Monday	88½	85½	.90	.95½		
Tuesday	86½	83½	.88½	.93½		
Wednesday	86½	83½	.88½	.93½		

Corn.—While prices for this grain have weakened under the stress of a bearish wheat market the trade has weathered the situation surprisingly well and on Tuesday a firm undertone was evident although no alterations of figures was made. The deal is active. There are private reports to the effect that in Ohio, Indiana, Michigan, Kentucky and several of the western states the crop is going backwards, hence dealers are ready to support the market. One year ago the price for No. 3 corn was 66½ cents, the same price that rules today. Last week's quotations are as follows:

	No. 3	Yellow.
Thursday	67	68
Friday	67	68
Saturday	67	68
Monday	66½	68½
Tuesday	66½	68½
Wednesday	66½	67½

Oats.—Threshing does not improve the outlook for this crop as the returns in many sections are disappointing. With the decline of wheat and corn quotations there has been sufficient strength here to not only support the influence of the other deals but to make an advance of one-half cent in prices. Holders of the grain are optimistic and do not seem at all anxious to dispose of it. One year ago the price for Standard oats was 37½ per bu. which is below the present price six and one-half cents. Quotations for the week are:

	Standard	No. 3	White.
Thursday	43	42	43
Friday	43½	43	43
Saturday	43½	43	43
Monday	43½	43	43
Tuesday	43½	43	43
Wednesday	43½	43	43

Beans.—There has been no retreat from the prices established a week ago and the position of the market seemingly is firm. Its future is dependent almost entirely upon the outcome of the growing crop the condition of which may be materially altered by favorable or adverse weather. Quotations for the past week are:

	Prompt	Oct.
Thursday	\$2.25	\$2.15
Friday	2.25	2.15
Saturday	2.25	2.10
Monday	2.25	2.15
Tuesday	2.25	2.15
Wednesday	2.25	2.12

Cloverseed.—Bullish sentiment is ruling in this deal and prices have advanced to new high positions upon the news of poor yields from the limited acreage that farmers are getting ready for the harvest. Alsike has also partaken of the advance. Quotations are:

	Spot.	Oct.	Alsike.
Thursday	\$11.40	\$11.40	\$9.50
Friday	11.50	11.50	9.50
Saturday	11.50	11.50	9.75
Monday	11.50	11.50	9.75
Tuesday	11.50	11.50	10.00
Wednesday	11.50	11.50	10.00

Rye.—This grain is firm and quiet with prices marked up three cents from the advanced quotations of a week ago, the quotation for No. 1 rye now being 88¢ per bu.

Flour, Feed, Provisions, Etc.

Flour.—Market is easy with prices unchanged. Quotations are:

Clear	\$4.00
Straight	4.25
Patent Michigan	4.75
Ordinary Patent	4.50

Feed.—Prices rule about steady. Carlot prices on track are: Bran, \$25 per ton; coarse middlings, \$24; fine middlings, \$27; cracked corn, \$23; coarse corn meal, \$23; corn and oat chop, \$26 per ton.

Hay and Straw.—Both hay and straw values are steady with last week. Quotations on baled hay in car lots f. o. b. Detroit are: No. 1 timothy, \$19; No. 2 timothy, \$18; clover, mixed, \$16@17; rye straw, \$7.50; wheat and oat straw, \$6.50 per ton.

Potatoes.—Nothing new has developed in the potato situation and prices are steady. Quoted at \$1.60@1.75 per bu.

Provisions.—Family pork, \$18@19; mess pork, \$17; medium clear, \$17@18; smoked hams, 16½¢; briskets, 14½¢@12½¢; shoulders, 11¢; picnic hams, 10½¢; bacon, 15½¢@16½¢; pure lard in tierces, 9½¢; kettle rendered lard, 10½¢ per lb.

Dairy and Poultry Products.

Butter.—There is no alteration in prices and the trade occupies a firm position with a decrease in production and demand continuing brisk. Quotations are:

Extra creamery 26¢; firsts do, 25¢; dairy, 18¢; packing stock, 17¢ per lb.

Eggs.—That season is at hand when the hens lay few or no eggs and already the trade is beginning to feel the effect. Supplies are running low and demand grows more urgent. Fresh receipts, case count, cases included, are now quoted at 16¢ per doz. This price is one-half cent above the figure of last week.

Poultry.—Prices are the same as a week ago. Supply is light. Prices are: Live—Hens, 12½¢@13¢; old roosters, 9¢; turkeys, 14¢@15¢; geese, 8¢@9¢; ducks, 12¢@13¢; young ducks, 15¢@16¢; broilers, 15¢@16¢ per lb.

Cheese.—Michigan, old, 17¢; Michigan, late, 13½¢@15¢; York state, new, 14¢@15¢; Swiss, domestic block, 19¢@21¢; cream brick, 14¢@15¢.

Veal.—Market steady at last week's figures. Fancy, 10½¢@11¢; choice, 8¢@9¢ per lb.

Fruits and Vegetables.

Cabbage.—Steady. Selling at \$2.75 per bbl. for home-grown.

Plums.—Lower. Per bu., 75¢@81¢.

Peaches.—More plentiful. Michigan grown, \$1@1.50 per bu.

Huckleberries.—Supply increased and prices lower. Quoted at \$1.50@2.50 per bu.

Apples.—Supply is large and prices are lower. New Michigan grown are quoted at 50¢@60¢ per bu.

From Farmers' Wagons on Detroit Eastern Market.

The recent rains have improved this market especially in the vegetable line. Offerings were large and quality averaging good. Tomatoes, plentiful at 40¢@80¢ per bu. according to quality; potatoes scarce and of inferior grade selling at \$1.25@1.35 per bu.; cabbage around 60¢; squash 20¢ each; cucumbers 50¢ bu. for large and 50¢ per hundred for smallest; cauliflower, 3 heads for 10¢; butter beans 50¢@60¢ per bu.; melons \$1 @1.25 per basket; pears \$1@1.75 according to quality; peaches scarce at \$1.50; apples 60¢@1.25; grapes 30¢ per small basket; crab apples \$1; plums \$1.50 per bu. Hay is scarce and good timothy is going from \$22@24 per ton.

OTHER MARKETS.

Grand Rapids.

Early potatoes continue high. Stock on the local market readily bringing \$1.50. Shippers will soon begin active buying at outside leading points and the market will open around 75¢. It is estimated that the Michigan crop of late potatoes will show a decrease of 20@25 per cent over last season. Early apples, especially Duchess, continue very dull. Late apples are very shy and will bring good prices. Local shippers have standing orders for Spies and will pay almost any price for them. Prices on Tuesday's market were as follows: Grapes, 4 lb. baskets, \$2 per doz.; plums \$1@1.25; peaches, \$1.50; pears, 60¢@81¢; apples, 60¢ @ \$1. Vegetables sold as follows: tomatoes 60¢@81¢; wax beans 60¢@75¢; osage melons 60¢@81¢; cucumbers 15¢@30¢; celery 10¢@15¢; cabbage 80¢@81¢; corn 12¢@20¢. Farmers are getting \$13@16 for hay, loose in loads. The egg market is a little weak, fresh stock bringing 15¢. Dairy butter is worth 20¢, creamery 25½¢.

Chicago.

Wheat.—No. 2 red, 88½¢@89½¢; Sept. 89½¢; Dec. 93½¢ per bu.

Corn.—No. 2, 63½¢@64¢; Sept. 64½¢; Dec. 61½¢ per bu.

Oats.—No. 2 white, 40½¢@41¢; Sept. 41½¢; Dec. 43½¢.

Barley.—Malting grades, 95¢@1.15 per bu.; feeding 65¢@80¢.

Butter.—Trade here continues quiet almost to the verge of dullness, with prices showing a 1¢ decline all along the line, despite the fact that Elgin remains unchanged. Quotations: Creameries, 20¢@25¢; dairies, 18¢@22¢ per lb.

Eggs.—This market is quiet; general receipts are steady at former values but it has been necessary to reduce prices somewhat on the better qualities to keep them moving. Quotations: Prime firsts, 16½¢; firsts, 15½¢; at mark, cases included, 10¢@14¢ per dozen.

Potatoes.—Lighter receipts this week have steadied the market and last week's figures are being well maintained. Jerseys are quoted at \$1.25@1.30 per bu.; Minnesotas, \$1.10@1.15.

Beans.—Pea beans have scored another good advance but red kidneys are lower. Market firm. Choice hand-picked pea beans are quoted at \$2.38@2.45 per bu.; prime, \$2.25@2.30; red kidneys, \$3.00@3.50 per bu.

Hay and Straw.—Liberal receipts of new hay have brought a general revision of quotations and something of a reduction in values, as old stock commands a premium of \$2 per ton over the following quotations: Choice timothy, \$21.50@22; No. 1 timothy, \$19.50@20.50; No. 2 do, \$17@18.50; No. 3 do, \$13@16; No. 1 clover mixed, \$17@18; No. 2 do and no grade, \$5@12; clover, \$10@14; rye straw, \$7.00@7.50; oat straw, 7¢@7.50; wheat straw, \$5.50@6 per ton.

New York.

Butter.—Market steady with lower grades commanding slightly higher prices. Creamery specials are quoted at 27¢; extras, 26¢; firsts, 23½¢@25¢; seconds, 22¢@23¢; thirds, 20½¢@21¢.

Eggs.—Prices generally unchanged, though the market is reported barely steady with a tendency toward lower values. Fresh gathered extras, 22¢@24¢; firsts, 17¢@18¢; seconds, 16¢; western gathered whites, 18¢@23¢ per dozen.

Poultry.—Dressed—Steady. Turkeys 12¢@15¢; fowls, 11¢@16¢; western broilers, 14¢@18¢.

Boston.

Wool.—This market has shown a fair degree of activity the past week and dealers are reporting a firmer tone in prices; however, they appear ready to sell whenever opportunity for making a fair profit appears rather than to hold the product over into an uncertain future. There is active dealing in territory fine staple and Ohio ¼-blood. Following are the leading domestic quotations for fleeces: Ohio and Pennsylvania fleeces

—Delaine washed, 30¢@31¢; XX, 28¢@29¢; fine unmerchanted, 22¢@23¢; ½-blood combed, 25¢@26¢; ¾-blood combed, 25¢@26¢; ¼-blood combed, 24¢@25¢; delaine unwashed, 24½¢@25¢; fine unwashed, 21¢@22¢. Michigan, Wisconsin and New York fleeces—Fine unwashed, 19¢@21¢; delaine unwashed, 23¢@24¢; ½-blood unwashed, 25¢@25½¢. Kentucky, Indiana and Missouri—¾-blood, 25¢@26¢; ¼-blood, 24¢@25¢.

Elgin.

Butter.—Market firm at 26¢ per lb., which is last week's quotation. Output for the week, 892,700 lbs., as compared with 916,200 lbs. for the previous week.

THE LIVE STOCK MARKETS.

Buffalo.

August 14, 1911.
(Special Report of Dunning & Stevens, New York Central Stock Yards, East Buffalo, N. Y.)

Receipts of stock here today as follows: Cattle 170 cars; hogs 70 double-decks; sheep and lambs 52 double-decks; calves 1,600 head.

With 170 cars of cattle on sale here today, and 20,000 reported in Chicago, all the good grades of cattle from 5½¢ a pound up sold strong with last Monday's prices. The lower grades from 5½¢ down were slow and barely steady, and in some instances 10 cents per hundred weight lower.

We quote: Best 1400 to 1600-lb. steers, \$6.75@7.25; Good prime 1300 to 1400-lb. do, \$6.50@7.00; good prime 1200 to 1300-lb. do, \$6.25@6.65; best 1100 to 1200-lb. shipping steers, \$5.65@6.25; medium butcher steers 1000 to 1100-lb., \$5.25@5.75; light butcher steers, \$4.75@5.25; best fat cows, \$4.75@5.25; fair to good do, \$3.50@4.25; common to medium do, \$2.75@3.25; trimmers, \$1.75@2.75; best fat heifers, \$5.75@6.00; good fat heifers, \$5.00@5.40; fair to good do, \$4.25@4.85; stock heifers, \$3.25@3.50; best feeding steers, dehorned, \$4.25@4.50; common feeding steers, dehorned, \$3.25@3.50; best butchers and export bulls, \$4.50@5.00; bologna bulls, \$3.50@4.00; stock bulls, \$3.00@3.25; best milkers and springers, \$5.00@6.00; common to good, \$2.00@3.50.

The best milkers and springers about \$3.00 per head higher than last week; common kind still hard to sell at satisfactory prices.

The hog market today ruled fairly active on the yorkers and mixed, with prices about a nickel higher than the close of last week on these grades. Trade on the heavier weights ruled rather slow; the bulk of the good yorkers and mixed hogs sold from \$8.15@8.20, with several decks running to the lean and grassy order from \$8.00@8.10; the good quality heavy hogs sold generally from \$8.00@8.10, with a number of the odd bunches in these weights ranging on down to \$7.70. Pigs sold mostly at around \$8.10, and rough sows generally \$6.90@7.10; bulk of the good kind 7 cents. Stags generally around \$5.25@5.50, with a few fancy quality up to 6 cents. Hogs are fairly well cleaned up; market closing steady for the mixed and lighter grades. A few decks of the heavier grades going over unsold.

The sheep and lamb market was active today. Most of the choice lambs sold from \$7.00 to \$7.25. Wethers from \$4.00@4.25. Look for about steady prices the balance of the week.

We quote: Best spring lambs, \$7.00@7.25; wethers, \$4.00@4.25; cull sheep, \$1.50@2.50; bucks, \$2.00@2.75; yearlings, \$5.00@5.25; handy ewes, \$3.50@3.75; heavy ewes, \$3.00@3.25; veals, choice to extra, \$8.75@9.00; fair to good do, \$7.00@8.25; heavy calves, \$3.25@5.00.

Chicago.

August 14, 1911.

Cattle Hogs Sheep
Receipts today 19,000 38,000 21,000
Same day last year, 30,099 34,390 32,609
Receipts last week, 51,091 105,291 89,775
Same week last year, 68,070 85,519 131,235

Cattle made new high records today, with early sales of fat steers at \$7.75@7.85, and later there was a sale at \$8 of 47 head of fancy low-fed steers that averaged 1666 lbs. Prior to today the best price of the season was \$7.65, but it was generally understood that the \$8 steers were exceptionally prime. The \$7.75 steers were fat and heavy, but not strictly prime. Sellers quoted a further advance of 10¢@20¢ in cattle, the rise being mainly in those of desirable grading. The receipts embraced around 3,500 western range cattle, much the biggest run of the season. These were a little slow in selling, but some fancy heifers from the range brought \$6. Hogs were steady for the best and about a nickel lower for the others, with sales at \$6.80@7.90, these prices comparing with \$6.70@7.65 a week ago. The top figure last week was \$7.92½, the best price of the season. Lots averaging 176 to 210 lbs. sell highest. Pigs sell at \$5.35@7.60; boars at \$3@3.50 and stags at \$7.50@8. Hogs received last week averaged 237 lbs. compared with 252 lbs. a year ago and about steady today and lambs largely 10¢ lower, lamb sales being made at \$3.50@7.25; ewes at \$2.50@3.60; wethers at \$3.40@4 and yearlings at \$4@5.50. Feeding lambs from the range country were scarce, and so were feeding yearlings, and some orders to buy had to go unfilled. Feeding lambs have been selling at \$5.25@6.10; feeding wethers at \$3.25@3.60 and feeder yearlings at \$4.10@4.65.

Cattle pursued their accustomed upward course of prices for the choicer consignments for still another week, it being a case of large buying orders from local killers, as well as from buyers representing other packing points where fat beeves were scarce. There were enough of the poorer lots of cattle, including thin and grassy lots, and these sold at comparatively low figures, the undertone being weak. The average quality of the cattle on sale showed further deterioration, and it was evident that feeding districts had no large supplies of well-

finished beef cattle left. A large share of the steers changed hands at \$5.75@7.40, with plenty of sales by Wednesday at \$7.50, while prime steers made a fresh record by selling up to \$7.65. Exporters paid \$6.25@6.75 for medium cattle, and fat yearling steers sold at \$7@7.65. Cows and heifers on the butchering order sold freely at \$3.30@6.75, with not many straight leads of heifers good enough to land above \$6. Buyers paid \$2.75@3.25 for cutters; \$1.75@2.70 for canners and \$2.75@5.50 for bulls. Western range cattle, which were arriving a year ago at the rate of about 15,000 head weekly, showed up last week to the number of about 3,700 head, their average quality being only fair. They sold at \$4.40@6.40 for steers and \$3.25@6 for cows and heifers. Stockers and feeders sold fairly at well maintained prices, the choicer feeders being sold frequently to killers, who continued to outbid country buyers. Stockers sold at \$3@4.85 and feeders \$4.25@5.50, with few buyers willing to pay as high as \$5.25. Large losses have been suffered in recent years from feeding high-priced steers, and experience of this kind makes stockmen more cautious. Calves have sold at the customary wide range, the best lightweight vealers selling part of the time up to \$8.40 per 100 lbs., while coarse, heavy calves sold as low as \$2.75@3. Milkers and springers have met with a very restricted demand from eastern shippers and others and prices averaged all of \$5 per head lower than two weeks earlier, sales ranging usually at \$25@55. Buyers were usually indifferent and disposed to insist upon getting bargains.

Hogs, like cattle, have been headed as strongly in an upward direction as ever for another week for similar reasons, and further high-record prices for the year have been recorded. It is simply a case of inadequate offerings of hogs in Chicago and other western markets to meet the growing requirements of the fresh and cured meats trade, the receipts undergoing a marked falling off in numbers. The demand from local killers, as well as from speculators and eastern shippers, is very large, and competition is again the life of trade, the packers being forced to submit to the inevitable. The average grading of the offerings is as good as could be expected at a time when farmers are marketing so many fattened, heavy, old sows, these being among the lowest sellers, while the lighter hogs are still market toppers, with pigs, especially the little ones, offered at a marked discount. Boars are bad sellers, although some higher, and the most desirable stags sell away above the best barrows. The outlook for owners of both cattle and hogs is unusually good, and all stock should receive the best of care and good feeding.

Sheep and lambs had fallen to such extremely low prices, especially sheep and inferior lambs, that sheepmen largely shipped in much smaller numbers last week, and the relief from badly glutted markets was felt immediately, enabling owners of fat lambs to obtain decidedly better prices. The best native lambs brought the highest prices seen in weeks, and even sheep and yearlings were placed in a more secure position, although the demand continued chiefly for lambs. A large share of the offerings were furnished by the ranges of Idaho, Montana, Washington and other states, and range feeding lambs, which had been selling unusually badly at extremely low prices, suddenly became in excellent demand and had sharp advances. There was also a large demand for range feeding wethers, and breeding ewes continued in good request.

Horses were marketed last week in quite moderate numbers, but the trade requirements after Monday were so limited that by the middle of the week prices were depressed, and even good draft horses in some cases were auctioned off at losses to country shippers. Prices covered the usual wide range, with prime horses largely nominal. Few sold as high as \$250 per head, a choice grade of heavy drafters going for \$225 to \$245, while good ones brought \$195@220 and pretty good workers \$160@185. Sales were made all the way down to \$100, and some plugs sold around \$75@90. F.

LIVE STOCK NOTES.

A year ago the Chicago cattle market was receiving around 15,000 head weekly from the northwestern ranges, many being shipped in on account of the drouth. This year the receipts are running very much smaller in volume, and most of those shipped in so far have been ordinary in quality and much better adapted for feeding in the corn belt than for converting into beef. The first grass cattle from the Keeline range in Wyoming to show up this summer showed no resemblance to the fat beeves usually shipped from there, and it is pretty well understood that packers will not get any surfeit of beef cattle from the northwestern ranges this year. Sufficient rains have fallen recently in that region to keep back the cattle round-up for a month at least, but it is a settled fact that Wyoming, Montana and the Dakotas will be short of beef and long on feeders. The first full train of cars of cattle received in Chicago from Montana amounted to twenty cars, and the steers were all old, none being under four years. In a region where frames grow large their age produces roughness, and most of these cattle were common in grading. Some of the later range cattle receipts graded better, and some went as high as \$6.40 per 100 pounds.

Farmers living in sections where grass is good and corn prospects are bright are anxious to obtain good feeding cattle, but their dearthness is in many instances deterring them from buying. Many farmers are turning to good stockers, but these, too, have advanced materially in values. There is a great shortage of young cattle in the country, and farmers owning full quotas should take good care of them.

THIS IS THE LAST EDITION.

In the first edition the Detroit Live Stock markets are reports of last week; all other markets are right up to date. Thursday's Detroit Live Stock markets are given in the last edition. The first edition is mailed Thursday, the last edition Friday morning. The first edition is mailed to those who care more to get the paper early than they do for Thursday's Detroit Live Stock market report. You may have any edition desired. Subscribers may change from one edition to another by dropping us a card to that effect.

DETROIT LIVE STOCK MARKET.

Thursday's Market.

August 17, 1911.

Cattle.

Receipts 905. Good grades strong; others steady at last week's prices.

We quote: Best steers and heifers, \$5.75@6.25; steers and heifers, 1,000 to 1,200, \$5.00@5.50; steers and heifers, 800 to 1,000, \$4.00@4.75; grass steers and heifers that at fat 800 to 1,000, \$4.00@4.75; grass steers and heifers that are fat, 500 to 700, \$3.50@4.00; choice fat cows, \$3.75@4.25; good fat cows, \$3.25@3.50; common cows, \$2.75@3.00; canners, \$1.75@2.50; choice heavy bulls, \$3.50@3.75; fair to good hognas, bulls, \$3.00@3.25; stock bulls, \$2.50@2.75; choice feeding steers, 800 to 1,000, \$4.25@4.60; fair feeding steers, 800 to 1,000, \$3.50@4.00; choice stockers, 500 to 700, \$3.50@4.25; fair stockers, 500 to 700, \$3.25@3.50; stock heifers, \$3.00@3.50; milkers, large, young medium age, \$4.00@5.50; common milkers, \$25.00@35.00.

Haley & M. sold to T. Regan 9 heifers av 548 at \$3.45, 8 butchers av 521 at \$3.50; to Sullivan P. Co. 3 canners av 733 at \$2.10; to N. Cohen 1 bull weighing 1030 at \$3.90; to Mich. B. Co. 5 cows av 1194 at \$4.00, 11 steers av 980 at \$3.85; to Jettka & Son 4 do av 750 at \$4.75; to Schuman 1 cow weighing 880 at \$4.00, 6 butchers av 701 at \$4.70, 1 steer weighing 850 at \$4.25, 3 do av 890 at \$5.00, 1 do weighing 710 at \$4.25; to Goodwin 1 do cows av 1070 at \$3.85, 3 do av 960 at \$3.60; to Applebaum 5 butchers av 562 at \$3.65, 2 do av 450 at \$3.25, 1 bull weighing 870 at \$3.75; to Rattkowsky 2 cows av 790 at \$3.35, to Hammond S. & Co. 1 bull weighing 1050 at \$3.35, 1 do weighing 1050 at \$3.75; to Kamman 13 butchers av 680 at \$3.90; to Erban 1 steer weighing 850 at \$4.75, 5 bulls av 660 at \$3.00; to Wilson 3 stockers av 690 at \$3.90; to Kamman 1 cow weighing 1070 at \$2.50, 12 butchers av 663 at \$3.60; to Goose 3 cows av 950 at \$3.35; to Beadow 3 stockers av 433 at \$3.50, 4 do av 517 at \$3.50, 2 do av 450 at \$3.50; to Lowenstein 15 do av 590 at \$3.80, 4 do av 537 at \$3.75, 6 do av 470 at \$3.40, 5 do av 452 at \$3.40; to Schrader 3 bulls av 816 at \$3.60.

Spicer & R. sold Mich. B. Co. 27 steers av 962 at \$6.25, 3 do av 900 at \$5.00, 5 do av 590 at \$3.75, 28 do av 893 at \$5.00; 29 do av 820 at \$5.00; to Bresnahan 3 butchers av 820 at \$4.00, 5 do av 572 at \$2.25, 2 bulls av 740 at \$3.00, 1 cow weighing 820 at \$2.75; to Rattkowsky 3 cows av 816 at \$3.50; to Parker W. & Co. 2 bulls av 1075 at \$3.50, 2 do av 1125 at \$3.75; to Bresnahan 2 cows av 735 at \$2.50, 9 stockers av 650 at \$4.00; to Fry 12 butchers av 683 at \$4.25; to Bresnahan 1 cow weighing 900 at \$2.25, 1 do weighing 1070 at \$2.50, 1 do weighing 840 at \$2.00; to Marx 8 heifers av 760 at \$4.50; to Sullivan P. Co. 1 cow av 770 at \$3.50; to Thompson Bros. 3 steers av 973 at \$5.00, 1 cow weighing 1180 at \$3.25; to Breitenbeck 32 butchers av 772 at \$4.25; to Fry 10 do av 775 at \$4.25; to Laboe 15 do av 740 at \$4.75; to Lowenstein 11 stockers av 502 at \$3.15.

Bishop B. & H. sold Rattkowsky 3 butchers av 833 at \$4.25, 2 cows av 1000 at \$3.25, 1 bull weighing 740 at \$3.00; to Mich. B. Co. 1 steer weighing 980 at \$5.00, 11 do av 863 at \$5.50, 1 do weighing 1100 at \$6.00, 8 butchers av 716 at \$4.00; to Parker W. & Co. 2 cows av 900 at \$2.50, 1 bull weighing 1170 at \$3.50, 2 canners av 1085 at \$2.50; to Bresnahan 5 canners av 760 at \$2.25, 4 do av 950 at \$2.30, 3 do av 873 at \$2.50, 5 do av 836 at \$2.60; to Goose 3 heifers av 483 at \$3.00, 8 cows av 943 at \$3.25; to Marx 4 butchers av 637 at \$3.50; to Sullivan P. Co. 2 cows av 725 at \$2.75, 2 cows av 735 at \$3.00, 4 butchers av 890 at \$4.15, 4 do av 827 at \$4.00; to Thompson 4 do av 955 at \$4.00, 5 do av 900 at \$3.75, 2 cows av 965 at \$4.25, 1 cow weighing 900 at \$3.50; to Sullivan P. Co. 2 steers av 1045 at \$6.25; to Parker W. & Co. 3 bulls av 960 at \$3.50, 3 do av 1050 at \$3.60; to Schroder 2 do av 1085 at \$3.75.

Roe C. Co. sold Mich. B. Co. 3 cows av 1000 at \$3.50, 1 heifer weighing 570 at \$3.25, 10 butchers av 716 at \$4.50; to Bresnahan 2 cows av 840 at \$2.50, 2 do av 800 at \$2.50; to Lawson 17 feeders av 815 at \$4.25, 1 bull weighing 1100 at \$3.50; to Rattkowsky 3 heifers av 307 at \$3.50, 4 do av 445 at \$3.25; Hammond S. & Co. 1 bull weighing 1720 at \$4.00, 2 do av 900 at \$3.50, 2 do av 1430 at \$4.00, 3 do av 910 at \$3.50; to Mich. B. Co. 22 butchers av 605 at \$4.00, 4 cows av 1005 at \$3.50, 2 bulls av 735 at \$3.00.

Robb sold Sullivan P. Co. 4 steers av 1005 at \$4.25 and 2 cows av 1065 at \$3.00. Johnson sold same 5 steers av 908 at \$5.35.

Youngs sold Heinrich 22 steers av 915 at \$5.40.

Adams sold Merchleman 5 steers av 650 at \$4.00.

Veal Calves.

Receipts 648. Market strong at last Thursday's prices. Best \$8.50@8.75; others \$4.00@8.00; milch cows and springers good, strong; common, dull.

Bishop B. & H. sold Sullivan P. Co. 2 av 170 at \$8.00, 1 weighing 150 at \$5.50; to Rattkowsky 12 av 150 at \$8.00; to Friedman 4 av 135 at \$8.00; to Protzurki 2 av 225 at \$5.00, 10 av 135 at \$7.50; to Parker W. & Co. 4 av 215 at \$5.50, 18 av 160 at \$8.00; to Hammond S. & Co. 4 av 165 at \$8.50; to Mich. B. Co. 7 av 125 at \$8.00, 4 av 155 at \$8.50, 1 weighing 300 at \$5.00; to Hammond S. & Co. 2 av 150 at \$8.50; to Goose 2 av 370 at \$4.25; to Sullivan P. Co. 14 av 150 at \$8.25; to Newton B. Co. 7 av 160 at \$8.25; to Goose 4 av 225 at \$5.00; to Sullivan P. Co. 14 av 150 at \$8.25, 9 av 150 at \$8.50;

6 av 155 at \$8.75, 8 av 150 at \$8.25; 4 av 120 at \$5.00, 4 av 140 at \$8.00; to Parker W. & Co. 2 av 115 at \$8.00, 6 av 165 at \$8.50, 3 av 112 at \$6.00, 10 av 146 at \$8.00, 3 av 210 at \$8.00; to McGuire 17 av 155 at \$8.25; to Burnstein 3 av 160 at \$6.00, 9 av 155 at \$8.50; Hammond S. & Co. 13 av 150 at \$8.50, 11 av 180 at \$8.00, 1 weighing 190 at \$6.00, 3 av 100 at \$6.00, 21 av 155 at \$8.50, 15 av 160 at \$8.50, 4 av 155 at \$6.00.

Haley & M. sold to Newton B. Co. 10 av 133 at \$5.25, 5 av 165 at \$8.25; to Rattkowsky 12 av 155 at \$8.00, 2 av 250 at \$6.00; to Goose 7 av 180 at \$7.00, 4 av 140 at \$8.00; to Parker W. & Co. 6 av 160 at \$6.50, 4 av 150 at \$6.50, 9 av 200 at \$5.00; to Newton B. Co. 5 av 165 at \$8.25.

Roe Com. Co. sold Sullivan P. Co. 6 av 156 at \$6.50; to Sullivan P. Co. 6 av 165 at \$8.00, 5 av 160 at \$8.00, 13 av 155 at \$8.00; to Newton B. Co. 2 av 225 at \$7; to Goose 3 av 230 at \$3.50.

W. Long to Burnstein 9 av 135 at \$8.50. Allington sold same 8 av 150 at \$8.50. Spicer & R. sold Mich. B. Co. 3 av 125 at \$8.00, 3 av 210 at \$5.50, 11 av 153 at \$8.00; to Parker W. & Co. 7 av 150 at \$8.00, 8 av 130 at \$7.00, 9 av 150 at \$8.00; to Mich. B. Co. 3 av 135 at \$8.50, 5 av 185 at \$8.25, 18 av 160 at \$8.50; to Thompson 9 av 150 at \$8.25; to Hammond S. & Co. 2 av 165 at \$8.50.

Sharp sold Mich. B. Co. 5 av 100 at \$7.00, 8 av 147 at \$8.00.

Belheimer sold Newton B. Co. 9 av 165 at \$8.25.

Sheep and Lambs.

Receipts 3,792. Market opened 25c lower on few early sales; closing 50c@1.00 lower than last week on all grades and very dull. Best lambs, \$5.75; fair to good lambs, \$5@5.50; light to common lambs, \$3.50@4.50; yearlings, \$4.50; fair to good sheep, \$3.00@3.50; culls and common, \$1.50@2.50.

Haley & M. sold Harland 16 lambs av 58 at \$5.50; to Newton B. Co. 29 do av 70 at \$5.50; to Mich. B. Co. 92 do av 70 at \$5.75; to Newton B. Co. 33 lambs av 55 at \$4.75, 36 do av 73 at \$5.75, 14 sheep av 110 at \$3.00; to Young 68 lambs av 70 at \$5.50; to Eschrich 20 do av 65 at \$4.00, 85 do av 63 at \$5.75.

Roe Com. Co. sold Sullivan P. Co. 23 lambs av 75 at \$5.75; to Newton B. Co. 14 sheep av 110 at \$3.50; to Barlage 34 lambs av 68 at \$5.25, 43 lambs av 63 at \$5.00, 32 do av 60 at \$5.25, 12 sheep av 110 at \$3.00, 4 do av 130 at \$3.00; to Kamman 6 lambs av 60 at \$5.75; to Hayes 15 do av 55 at \$4.00; to Kamman 4 sheep av 130 at \$3.00.

Spicer & R. sold Harland 16 lambs av 58 at \$5.50; to Thompson 21 do av 73 at \$5.30; to Mich. B. Co. 11 do av 65 at \$6.00; to Sullivan P. Co. 7 do av 50 at \$4.50, 5 sheep av 120 at \$2.25; to Young 18 lambs av 70 at \$5.50, 28 do av 68 at \$5.30, 21 do av 65 at \$5.25; to Thompson 19 do av 60 at \$5.50, 22 sheep av 75 at \$3.25; to Hayes 19 lambs at 50 at \$3.75, 9 lambs av 75 at \$5.75; to Newton Beef Co. 48 lambs av 70 at \$5.65.

Stephens sold Newton B. Co. 20 sheep av 65 at \$3.50, 57 lambs av 70 at \$5.60. Belheimer sold same 28 lambs av 70 at \$5.50, 16 do av 60 at \$3.50.

Johnson sold Sullivan P. Co. 40 lambs av 65 at \$4.75.

Bishop B. & H. sold Mich. B. Co. 30 sheep av 110 at \$3.35, 17 do av 120 at \$3.35, 57 lambs av 72 at \$5.90, 40 do av 65 at \$5.90, 41 do av 67 at \$6.00, 24 do av 65 at \$6.00; to Hammond S. & Co. 26 sheep av 115 at \$3.25, 7 yearlings av 105 at \$4.50, 25 lambs av 50 at \$4.00, 5 sheep av 170 at \$3.00; to Newton B. Co. 50 lambs av 70 at \$6.00; to Sullivan P. Co. 42 lambs av 53 at \$4.50, 48 do av 73 at \$5.75, 21 do av 60 at \$4.50, 66 do av 55 at \$4.50, 8 sheep av 107 at \$2.50; to Rehfuß 44 lambs av 70 at \$5.50, 109 do av 75 at \$5.75; to Harland 22 do av 70 at \$5.75; to Breitenbeck 18 lambs av 55 at \$4.50, 57 do av 78 at \$5.75, 5 sheep av 120 at \$3.00; to Hammond S. & Co. 15 lambs av 60 at \$5.75; to Thompson 19 lambs av 50 at \$4.00, 12 sheep av 78 at \$2.25, 12 lambs av 55 at \$5.00, 31 sheep av 65 at \$2.50; to Hammond S. & Co. 81 lambs av 65 at \$5.75, 12 sheep av 68 at \$5.25; to Rehfuß 60 do av 65 at \$5.35; to Friedman 22 do av 50 at \$4.00, 12 do av 60 at \$5.00; to Sullivan P. Co. 15 do av 62 at \$4.00, 9 do av 65 at \$4.50, 31 do av 72 at \$5.50; to Fitzpatrick 9 do av 108 at \$3.00.

Hogs.

Receipts 3,451. Market steady. Wednesday's prices, 10c higher than last Thursday for good grades. Range of prices: Light to good butchers, \$7.50@7.80; pigs, \$7.50@7.80; light yorkers, \$7.50@7.80; heavy \$7.50@7.80.

Bishop B. & H. sold Hammond S. & Co. 1125 av 175 at \$7.75, 230 av 160 at \$7.50, 210 av 170 at \$7.60, 305 av 165 at \$7.65.

Spicer & R. sold Parker W. & Co. 250 av 195 at \$7.75, 90 av 180 at \$7.65.

Haley & M. sold 177 av 190 at \$7.70, 65 av 160 at \$7.65.

Roe Com. Co. sold Sullivan P. Co. 225 av 190 at \$7.70, 140 av 200 at \$7.75.

Friday's Market.

Detroit, August 11, 1911.

Cattle.

Receipts this week, 1,338, against 1,666 last week; market steady at Thursday's closing prices; bulls 25@40c lower than last week.

We quote: Best steers and heifers, \$5.50@5.75; steers and heifers, 1,000 to 1,200 lbs., \$5@5.50; do, 800 to 1,000 lbs., \$4@4.75; grass steers and heifers that are fat, 800 to 1,000 lbs., \$4@4.75; do, 500 to 700 lbs., \$3.50@4; choice fat cows, \$3.75@4.25; good fat cows, \$3.25@3.75; common cows, \$2.50@3; canners, \$1.50@2.25; choice heavy bulls, \$3.50; fair to good hognas, bulls, \$3@3.25; stock bulls, \$2.25@2.75; choice feeding steers, 800 to 1,000 lbs., \$4.25@4.75; fair feeding steers, 800 to 1,000 lbs., \$3.50@4; choice stockers, 500 to 700 lbs., \$3.50@4.25; fair stockers, 500 to 700 lbs., \$3@3.50; stock heifers, \$3@3.25; milkers, large, young, medium age, \$4@5.00; common milkers, \$25@35.

Hogs.

Receipts this week, 2,861 against 2,240 last week; market steady at Thursday's prices. Range of prices: Light to good butchers, \$7.65@7.70; pigs, \$7.50; light yorkers, \$7.70; heavy, \$7.60@7.65.

(Continued from page 136.)

of the workmen who threaten to walk out if demands are not heeded. In London success has attended strikes, and it is probably this fact that moves the men of the other cities to publish their demands with such vigor.

The English house of Lords has finally passed the veto bill which has been before parliament for over two years. The measure curtails the powers of the upper house and increases the powers and responsibility of the house of commons. The passage of this bill is considered one of the important changes in the English unwritten constitution. It is another step toward bringing the power of the government nearer the people and protecting them against the action of the lords who can veto bills passed by the commons.

Election activity is rife throughout Canada where the reciprocity issue is awakening the people to an unusual interest in political matters. From Nova Scotia to British Columbia platform orators and the press are busy persuading voters on the question.

CROP AND MARKET NOTES.

Calhoun Co., August 8.—Threshing is the order of the day, many oats being threshed from the fields on account of the lodged condition of the straw, and the absence of many heavy rains. Oats are not turning out as well as expected from the appearance of the straw. There are many light oats which blow out, probably due to hot, dry weather just as they were setting the grain. Hail storms and wind also did much damage in some localities. From 20 to 30 bushels is about all most fields will yield. The wheat crop is very variable, but there are no good yields, while there are many very low ones. I believe more fields are going ten bushels than are yielding 20. Fields in which the fly worked badly last fall are light. The market is rather dull for wheat, but oats are in fair demand and sale. There is no hay to buy or sell, and not too much to feed. More millet and rape has been sown than usual, and considerable fodder corn. Alfalfa is also gaining the attention of quite a number of farmers. A hail storm the last of July stripped and silt the corn leaves badly and pounded the stalks, and the wind accompanying it blew much of it over, so it will be mean to cut, and the yield will be considerably reduced in the hail sections.

Livingston Co., August 7.—The weather continues very dry with only light local showers to partially relieve the drought. Corn, beans and late potatoes need rain badly. Not much plowing done yet, the ground being too dry. Threshing is progressing rapidly and wheat is yielding good, averaging about 20 bu. per acre and of good quality. Oats are nearly a failure, the average yield being about 25 bu. per acre. Pastures are getting short and unless copious rains come soon stock will have to be fed. Feed will be scarce this winter, with perhaps the exception of corn, which promises well at present. New seeding is almost a total failure.

Ogemaw Co., August 5.—The fine rains of the past four or five days have been of immense value to the late potatoes and corn of this section. Wheat is about all threshed and the yield has been about up to the average though there is considerable shrunken wheat which will not grade up to No. 2. Farmers are getting around 35c. New potatoes are coming in quite freely at \$1.20 a bu. Oats are threshing out better than was expected and will be 80 per cent of an average crop. Dealers are offering 12 for hay with very little coming in. Most farmers are expecting 15 or better. Butter and eggs are firmer at 18c for butter and 22c for cream at the creamery; eggs, 15c. Plenty of fall apples at 40@50c but winter apples are scarce. A large crop of huckleberries has been gathered this year and hundreds of people have been making good money picking. Shippers are still paying \$1.50@2 a bu. Pasture is much improved since the rain.

Antrim Co., August 6.—So far this season has been quite favorable in general. Spring somewhat late but plenty of rain and warm weather during May produced a good hay crop. New seedlings were scarce on account of the dry weather of last year. Oats fair; were injured by severe heat and dry weather during latter part of June and fore part of July. Wheat good, but no threshing yet. Oats about all cut. Early potatoes scarce and high. Late potatoes a poor stand on account of the hot, dry weather during planting time, but there has been plenty of rain since July 20th and potatoes, beans and beets are looking very promising. Corn looks well, but was severely damaged by the storm of July 24th. The pickle crop is late on account of the drought keeping them back, but promise well now. Pastures good since the rains, but new seedlings again almost a complete failure.

S. E. Mecosta Co., August 4.—Wheat and rye about an average crop. Oats about half a crop. Corn and potatoes nearly up to the average. Beans fair. Fruit poor, except huckleberries and some early apples. Late apples very scarce. Some peaches. Hay nearly average in quantity and extra quality. New seeding nearly a failure. Pastures badly dried up. Ground very dry and not much plowing done for wheat.

Wayne Co., August 7.—The weather has been very warm with frequent showers, but we have not had a soaking rain since the latter part of June. Corn is doing very well. Late potatoes are looking very well. Early potatoes almost a failure, selling at present at \$1.50 per bu. Hay harvesting is over, and a fair crop. Lots of timothy being threshed for seed; price of seed very high, selling at \$5.00 per bu. June clover making a fine second growth, having good prospects for seed. Wheat poor, being injured by the fly. Threshers report yielding about 10 bu. per acre on average. Quality poor, being badly shrunken. Oats very good

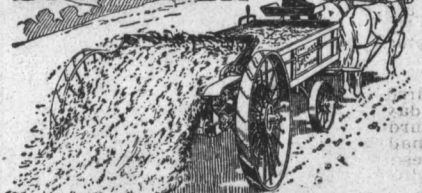
stand on ground, about all being cut at this writing. Wheat, 83c per bu.; oats, 38c; corn, 36c per basket; rye, 70c per bu.

Montgomery Co., August 7.—A heavy rain last week has ended a long term of dry and hot weather. The haying has been completed, with a very light crop. Tobacco short on account of dry weather. Some crops will come out pretty well, since the last rain. Corn will make a fair crop. Wheat, 78c; corn, 60c; oats, 40c; rye, 85c; clover seed, 7c; butter, 18c; eggs, 14c; potatoes, \$1.40.

Illinois.

Western Warren Co., August 2.—July has been a good month for crops of all kinds. Weather much cooler and more rain, which is bringing on grass very fast. There is a prospect of the best fall pasture in years. Corn is the finest that we ever had. Potatoes are very scarce and high in price, but it looks good for late ones where there are any, but there are not many planted in the country.

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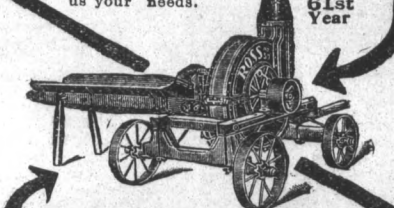
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Wheat.—The damage by Hessian fly in the southwestern part of the State, extremely hot and dry weather in the central and northern portion causing wheat to shrink by ripening too quickly, and injury by smut in some localities, has disappointed many who were quite positive that the State yield would be twenty bushels to the acre. The average estimated yield per acre in the State and southern counties is 18, in the central counties 19, in the northern counties 15 and in the Upper Peninsula 20 bushels. The per cent. of plowing done for wheat in the State is 12, in the southern and central counties 13, in the northern counties 9 and in the Upper Peninsula 11.

The total number of bushels of wheat marketed by farmers in July at 84 mills is 180,709 and at 96 elevators and to grain dealers 351,262 or a total of 531,971 bushels, which indicates that the crop of 1910 has passed out of the possession of the producers. Fifty-two mills, elevators and grain dealers report no wheat marketed in July.

Rye.—The average estimated yield per acre in the State, southern and central counties is 14, in the northern counties 13 and in the Upper Peninsula 22 bushels.

Corn.—The condition of corn as compared with an average, in the State is 82, in the southern counties 85, in the central and northern counties 79 and in the Upper Peninsula 92. The condition one year ago was 79 in the State, 77 in the southern counties, 82 in the central counties, 84 in the northern counties and 81 in the Upper Peninsula.

Oats.—The estimated average yield in the State is 30, in the southern and central counties 31, in the northern counties 24 and in the Upper Peninsula 35.

Potatoes.—The continued dry and hot weather is having a very bad effect on potatoes. The condition as compared with an average in the State is 63, in the southern counties 59, in the central counties 62, in the northern counties 65 and in the Upper Peninsula 91. The condition one month ago was 91 in the State, 92 in the southern counties, 88 in the central and northern counties and 96 in the Upper Peninsula. The condition one year ago was 72 in the State, 70 in the southern counties, 73 in the central counties, 80 in the northern counties and 75 in the Upper Peninsula.

Beans.—The condition of beans, compared with an average per cent. in the State and southern counties is 81, in the central counties 80, in the northern counties 82 and in the Upper Peninsula 84. The condition one year ago was 85 in the State, 81 in the southern counties, 90 in the central counties, 91 in the northern counties and 70 in the Upper Peninsula.

Sugar Beets.—The condition of sugar beets as compared with an average, in the State and central counties is 87, in the southern counties 86, in the northern counties 88 and in the Upper Peninsula 105. The condition one year ago was 85 in the State, 84 in the southern counties, 87 in the central counties, 90 in the northern counties and 73 in the Upper Peninsula.

Clover.—The yield per acre of clover hay in tons, is 1.24 in the State, 1.00 in the southern counties, 1.42 in the central counties, 1.47 in the northern counties and 1.71 in the Upper Peninsula.

Timothy.—The yield per acre of timothy hay in tons, is 1.19 in the State, 1.04 in the southern counties, 1.30 in the central counties, 1.34 in the northern counties and 1.58 in the Upper Peninsula.

Pasture.—The condition of pasture as compared with an average in the State is 66, in the southern counties 63, in the central counties 62, in the northern counties 65 and in the Upper Peninsula 98. One year ago the condition in the State was 64, in the southern counties 63, in the central counties 68, in the northern counties 65 and in the Upper Peninsula 54.

Apples.—The drouth, excessive heat, high winds and insects caused a very heavy fall of apples during the month of July and reduced the crop outlook very materially. The prospect for an average crop in the State is 41, in the southern counties 42, in the central counties 28, in the northern counties 40 and in the Upper Peninsula 71. One year ago the prospect was 24 in the State, southern counties and Upper Peninsula, 25 in the central counties and 22 in the northern counties. The winter varieties that promise best, are in their order: Greenings, Baldwin, Wealthy, Ben Davis, Northern Spy, Russet, Wagner and Talisman Sweet. Of the early sorts the most promising are Dutchess, Red Astrachan, Yellow Transparent, Maiden Blush, Fameuse and Early Harvest.

Peaches.—The prospect for an average crop of peaches in the Michigan Fruit Belt is 84 per cent. and in the State 75. One year ago the prospect was 39 and 49 respectively. The varieties that promise best are, in their order: Elberta, Crawford, Hill's Chili, New Prof. Elberta, Gold Drop, Kalamazoo, Barnard and Crosby.

NATIONAL CROP REPORT.

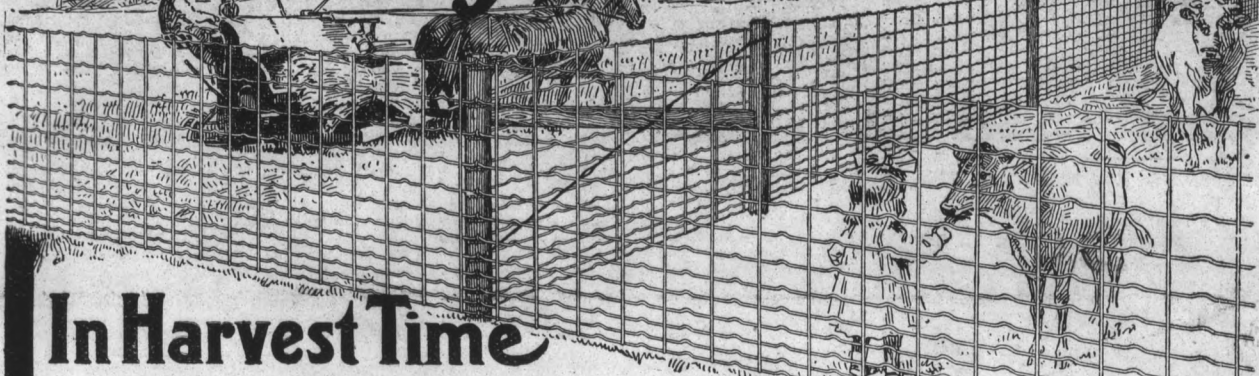
The Crop Reporting Board of the Bureau of Statistics of the United States Department of Agriculture estimates, from the reports of the correspondents and agents of the Bureau, as follows:

Preliminary returns indicate a winter wheat yield of about 14.5 bushels per acre, or a total of 455,149,000 bushels, as compared with 464,044,000 finally estimated last year, and 450,130,000, the average annual production in the past five years. Quality is 92.0, against 92.6 last year.

The amount of oats remaining on farms August 1 is estimated at 5.7 per cent. of last year's crop, or about 64,342,000 bushels, as compared with 63,249,000 bushels on August 1, 1910, and 52,663,000, the average amount on farms August 1 for the past five years.

The preliminary estimate of the production of rye is 30,677,000 bushels, as compared with 33,039,000 bushels last year, and 32,414,000, the average annual production in the past five years. Quality is 91.5, against 92.7 last year.

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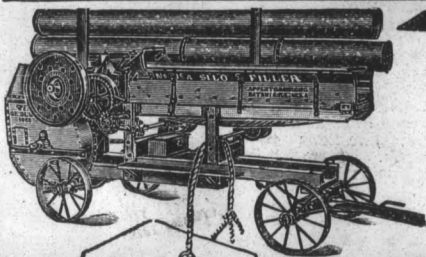
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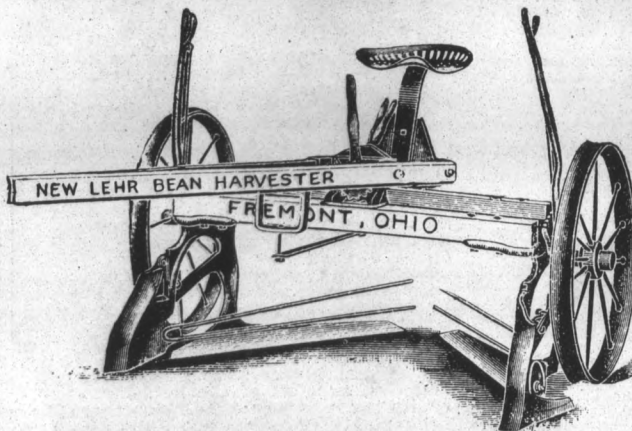
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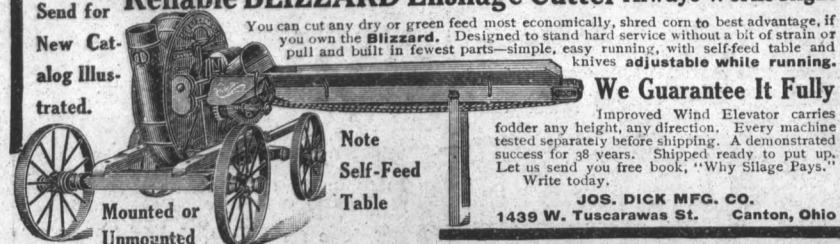
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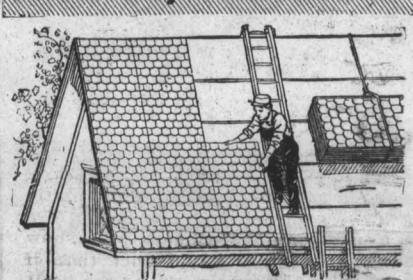
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