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

VOL. CXLII, No. 21. Whole Number 3784.

DETROIT, MICH., SATURDAY, MAY 23, 1914.

50 CENTS A YEAR 82 FOR 5 YEARS.

#### 27 Cost of a Opinions on

requested to do so, will state where, Cook, Shiawassee County. in my opinion, Mr. Crum is in error, and that is in giving the potato crop these things and then credits only an of our last year's potato field, taken in the same number. It seems to me day for this work. average crop of 100 bushels. If Mr. Crum gives his crop such care, and does not get on the average 200 bushels per acre, he should change his location if he desires to continue in the potato growing business.

If any other crop were figured out on the same basis, i. e., charging the expense of growing in the very best possible manner, with high-class seed and care throughout, and then crediting only the average crop of the country, it would be manifestly unfair.

There is one item which, were I making the report, I should have to enlarge materially, and that is the charge for use of tools. This item is but \$2.00 in Mr. Crum's report. My special potato tools are as follows, with prices of similar tools, new, attached:

Machine seed cutter\$	
Potato planter-fertilizer	90.00
Power sprayer (horse)	80.00
	125.00
Elevator sorter	35.00

Total .....\$345.00 This gives an interest charge of have an additional charge of \$34.50, or in the yield of the two parts. a total of \$55.20 for use of tools. With

I am not trying to contradict Mr.

Digging, one man and one boy,

These tools, I cut the estimate made Crum in his statement, but can asby Mr. Crum of the expense of plant
sure you that we are not donating Drawing to market eight miles, a total of \$55.20 for use of tools. With ing, digging, storing and sorting so much that I refrain from giving the figures, and besides, as I said on the start, in these times of so much complaint about the high cost of living, it ill becomes any farmer to dwell on how cheaply he can produce any certain crop.

After an experience of over 20 years with all the common farm crops of Michigan on land fairly well suited to the potato crop, with the assistance of special potato machinery and with the price 50 cents per bushel, and raising on the average twice the average crop, I have found nothing as profitable. Some years we do not get that price, some years we get more, but if I were sure of 50 cents every year and could not make money out of the potato crop, I would be at a loss to know what to turn to.

Of course, if anyone was not going to raise quite an acreage, it would not

tell how cheap we can do things, out them, and the more acres the less the time when I received only \$60 and as far as I am concerned I should the cost per acre of owning them. A from the same field of potatoes, but be glad to let Mr. Crum's article on great many potatoes are raised in that was during the panic, and the "The True Cost of a Crop," published Michigan which cost more than 50 year before, I received only \$20 from fully kept and are accurate. I and in a recent number of the Michigan cents per bushel to grow, but the man the field next to it, which in every my son, a lad of 12 years, did all the Farmer, stand and be handed down to who goes at it on business principles way is equal to it, but that year the work. In all the work we never put posterity just as it is, but since I am can flourish at that price .- A. B. frost struck us hard in the month of in more than eight hours per day.

Grows Big Crop with Profit.

such splendid care, with such careful recent number of the Michigan Farm- fall. Now, Mr. Editor, I will close for as much as eight hours every day. I seed, 10 bushels, 10 hours for which our family. Now we claim to know the ground for another crop of pota- man and team for eight hours' work, he charges seven and one-half cents something about raising potatoes, as toes.-Wm. J. Nielsen, Montcalm Co. \$2.50 for a man and one horse each cuts carefully by hand, sprays, culti- this farm, and my sons have helped vates thoroughly, is liberal in allow- to raise them as long as they can reance for plant food-he does all of member. I therefore send you a photo issue of April 25, also your editorial in 10 days and have charged \$4.00 per

T never seemed to me that it was pay to get these tools, but the man from 10 cents to 50 cents per bushel

a good policy for us farmers to with them can starve the man with- on what potatoes we sell. I have seen

Cost of 1,800 lbs. of fertilizer. 22.50

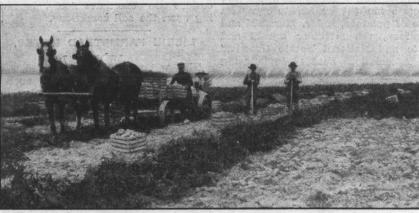
Cost of seed, 40 bushels at 20c.. 8.00 T never seemed to me that it was pay to get these tools, but the man from 10 cents to 50 cents per bushel Increased Profit.

Total .....\$152.75

The foregoing expenses were care-October. Since then I have always My family lives in town and my farm tried to get my potatoes planted early, is eight miles out. We prepared our "The True Cost of a Crop," in a so we can get at them early in the own meals and likely did not get in attention to details, i. e., hill selected er, was read with interest by all of this time and go to work to prepare have therefore charged \$3.50 for a per hour, reasonable; he treats seed, I have raised them for 27 years on Midsummer Application of Fertilizer day, and \$2.50 per day for myself and son each day. However, in draw-I read Mr. Crum's article in your ing to market I drew the 500 bushels

Perhaps it would not be amiss to state some facts as to the quality of

the land, the manner of planting, cul-



Wm. J. Nielsen, Montcalm Co., Found this Crop Profitable-240 bu. per acre.

used. We plowed the field just before we planted, rolled it right after plowing, and dragged it twice. The field was marked both ways and planted was marked both ways and planted Marking out half a day with one \$20.70, and if we allow the customary two feet and ten inches each way. 10 per cent for depreciation, (which Half the field was planted on May 9, is, in my opinion, altogether too high and the other half on May 28, and where tools are well cared for), we there was only three crates difference

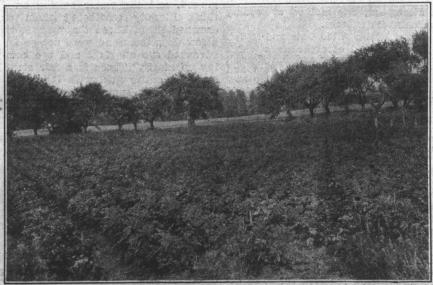
when we were digging them. We dug that potatoes can be grown cheaper early and nothing more was done to 2.400 bushels from a 10-acre field. The than Mr. Crum's estimate of \$67 per it till may 28, when I went over it ground was a two-year-old sod. We acre, and as proof of same I give be- with a spike-tooth harraw. On June applied 75 loads of barnyard manure, low the cost of growing three acres of 10 I sowed by hand, broadcast, 750 and no other kind of fertilizer was potatoes during the summer of 1913: lbs. of fertilizer. The next day I thor-

> horse ...... Distributing fertilizer, one man days ..... Cultivating five times, one day

tivating and digging. And in advance will say that all the labor was simply crude, hard work. The land was what is known as red shale in this locality, considered to be the most desirable land we have for the production of potatoes. It is a loose loamy red soil with some flat stone in it; most people from the middle west would call it very stony. This special three acres had been in meadow for two years, was rather a light sod, a little disposed to be wet and soggy in places, and was in a poor state of fertility from having been badly farmed in recent years. It was plowed oughly harrowed with a spring-tooth and on June 16 I marked out some 10 rows with a one-horse singe shovel, making a deep furrow. I then put about a tablespoonful of fertilizer in the furrow, spacing it about 20 inches apart. My son followed after me with a three-foot section of a log chain to which he attached a leather strap, pulling the chain by the strap. I might add that I put some half-dozen six-inch bolts through the links of the chain, so as to thoroughly mix the soil and fertilizer. We then dropped our potatoes about 20 inches apart and covered with a hoe. The seed was small, much of it so small that I hesitated about planting it. These potatoes were of a variety known as the American Beauty in this locality, a very shapely white potato. We finished planting on June 28. In about 10 days I set my spike-tooth harrow at an angle of about 45 degrees and ran over the patch. This broke the crust that was forming and in a few days all came up nicely. I never saw a better stand. The weather was ideal for growth for the next 30 days and the vines grew rapidly. I cultivated with a five-shovel cultivator four times. Just before cultivating the second time I sowed about 200 lbs. per acre of fertilizer by hand along

each side of each row, and then im-

mediately followed with the cultivat-



A Good Stand of Potatoes is the First Essential of Low Production Cost.

or, so as to mix the soil with the fer-Pennsylvania.

#### Why Know What it Costs?

average Michigan farmer to know erage acre of potatoes?

ing written and printed regarding the about cost in his business. you will see when we add a clause to the article he produces. them, thus: "What difference whethnipulator fixes the price we must ac- variation: above or below cost?

problems as this from, at least, a (?) Associations succeed in inducing crop after crop for less than cost of obliged to sell my acre of potatoes production when we charge all the for \$10?"—C. W. Crum, Montcalm items of cost against the crop. If the County. Agricultural College is privileged to produce baby beef and sell it for less than cost-and make money, why may not we farmers deceive ourselves in the same manner and with the same philosophy? Why should everyone in sowed when I plow my corn for the last time, will be fit for hay the folevery other line of business, jump last time, will be little every other line of business, jump lowing summer, or for seed.

Van Buren Co.

F. M. D. faces at us because we elect not to or tittle to the price of what we sell, but many more failures. cost and selling price?

terests, and you doubtless know that to insure its success. they have started a nation-wide cam- Seeding Alfalfa After Oats and Millet. seeding Alfalfa After Oats and Millet.

I have a field of eight acres which was in corn last year and fall plowed. I have sown four acres to oats and peas; the other part I intend to sow in other states, backed by the same crowd. If they succeed in increasing the production of potatoes to the extent they desire, we shall have around 500,000,000 bushels, in place of 328, 000,000 last year, and they will not sell for enough to pay the freight for solven and paint of increase the potato crop. It have a field of eight acres which was in corn last year and fall plowed. I have a field of eight acres which was in corn last year and fall plowed. I have sown four acres to oats and peas; the other part I intend to sow to millet. Will it do to sow it now at the production of potatoes to the extent they desire, we shall have around the country of the oats and peas are planted yet of the production of potatoes to the extent they desire, we shall have around they will not the production of potatoes to the extent they desire, we shall have around they will not the production of potatoes to the extent they desire, we shall have around the other part I intend to sow to sow it now or should I wait until June. I want if for hay and would like to cut it as early as possible. The oats and peas I want to seed to alfalfa. Would it to the crop, then disk it and sow, or would it do to sow it now with the crop? The oats are up now. Ionia Co.

J. O. S.

Willet may be sown at any time afsell for enough to pay the freight for hauling them 200 miles.

distribution of fertilizer and these when applied to practically all other part of May, it might be possible to before, is due to two causes, two rows at digging time were short lines of business, where a definite get the crop off during the latter part the extreme dry weather, but this is bushels on the three acres, while my the "necessity" of the maker having neighbors had to be satisfied with a the power to put a price on the plow yield of about 50 bushels per acre. I sufficiently large to cover the items used in all 1,800 lbs. of fertilizer on of cost. If the retailers' association the three acres. All digging was by fixed his price one year so that he hand .- W. W. Hedrick, Tioga County, realized 10 cents per day for his labor, and another year compelled him to lose both labor and interest on inwant to ask a question. Here it vestment, and then, because he stop-"What will it profit me or the ped making plows sets a price that gives him \$20 per day for his labor, what it costs to produce any product and the next leaves his products in that we grow to sell?" What differ- his shop a dead loss, his position ence does it make to me or the aver- would approach that of the potato age Michigan potato grower whether grower-or the average farmer, with it costs \$14 or \$67 to produce an av- the exception that the farmer is reasonably secure in his feed and fuel od of applying same for best results? items, which makes him more careless

Benzie Co.

W. A. M. Now, in the light of all that is be- items, which makes him more careless advisability and necessity of farmers though he may be compelled to dokeeping books and knowing the cost nate his labor and other items of cost I assure you, they are not. They are security not enjoyed by the plow very reasonable and sane ones, as maker, because he cannot eat plows,

But let us not get too far away er it costs \$14 or \$67-so long as the from the real question that I want size of the crop and the market ma- answered. Let me repeat with slight "What will it profit me cept for our product,"-so long as we in dollars and cents to know whether must take what we can get, whether it costs me \$14 or \$67 to grow an acre of potatoes, if Mr. Mumford and We average farmers, you must ob- his men, the fertilizer agents and serve, have come to look upon such State and National Potato Growers' semi practical standpoint. We know, farmers to produce 500,000,000 bushin a general way, that we produce els of potatoes this year, and I am

#### FARM NOTES.

#### Seeding Clover in Corn.

Please advise if mammoth clover

know the exact amount of our con- in corn under favorable conditions of tributions to those who stuff their moisture, but it is useless to sow it tributions to those who stuff their moisture, but it is useless to sow if by nature itself. Those that were is that we have an accumulation in stomachs with what we produce? at the last cultivation of corn unless put in early are just nicely up. The piles and this must be spread. At Why should we burden our already the soil is sufficiently moist to insure weary shoulders with a complicated its early germination and rapid tory which we got in before the rain, the fields that we simply dumped it and elaborate system of accounts growth. We have seen excellent of course are all up. The first field in the yard and we have quite a large when we are helpless to add one jot stands of clover secured in this way, is up nicely. Some of them are in- accumulation of manure in this yard. Two years or to affect the final result between ago the writer seeded alfalfa in standing corn at the last cultivation and You are aware that we have a State secured a perfect stand, due to excep-Potato Growers' Association, com-tionally favorable moisture condiposed largely of "middlemen," com- tions. Last year a similar experiment mercial fertilizer agents, agricultural failed of results, and this is a comcollege field men and U. S. Depart- mon experience in seeding clover in ment of Agriculture experts; that we this manner. For this reason it is have a National Potato Growers' As- necessary to exercise good judgment sociation, composed of the same in- in attempting this method of seeding

Millet may be sown at any time afthem to market for 10 cents per under warm weather conditions. The field where there is practically no to on account of the cold weather.

the alfalfa in as soon as possible.

Commercial Fertilizer for Potatoes. I have some special potato fertilizer that I want to use this spring on corn stubble. Have 250 lbs. that I want to experiment with. Is that enough to experiment with. Is that enough for half an acre? Will someone who is posted in the use of commercial fertilizer please advise through the Michigan Farmer as to the best meth-

Where one expects to apply fertilizer at the rate of 500 pounds per acre, the best way is to apply it in the row, horse planter, although it can be aping upon the soil conditions.

#### LILLIE FARMSTEAD NOTES.

with a larger acreage did not get hay just as an experiment. them in and the balance is not in

bushel or leave them rot in the pits? ordinary period required for it to de- clover at all. This is the first time

I can comprehend to a considerable velop sufficiently to cut for hay is in my farming experience, when I tilizer. There were two rows in the extent the advantages of book-keeping about two months under favorable have had to plow up a new seeding patch from which I withheld this side and a knowledge of cost of production conditions. If sown during the latter of clover. This, as I have explained fully one-fifth in yield, as compared amount of materials and labor enter of July in time to seed alfalfa with a not the sole cause. I think it was the with the rows that had fertilizer along into the production of an article of fair prospect of success, although it way we sowed the seed a year ago. each side. The last cultivation was use or ornament—and the producer is not a safe proposition to sow alfal- As I explained before, we did not get with a wide-bladed, single-shovel plow thereof places the selling price on fa after the first of August in the or- our seed sown before the ground bewhich ridged the soil high around the the same. I can understand the "nec- dinary season, since it will not have came settled and the frost all gone. As stated, weather conditions essity" of the man, who makes a time to develop sufficient root and top Then we harrowed the field and sowwere good till the potatoes were about plow, to know the cost of material, ra- growth to stand the rigors of winter ed the seed and harrowed it again. It one inch in diameter. After that we bor, interest on investment, etc. But if sown later than that in an ordinary is the judgment of all the farmers in had but little rain. But in spite of in order to have his knowledge count year, and it is preferable to get it in this vicinity that this is not the best the drought I had a fair yield, 500 for anything, I can also understand somewhat earlier if practical. Alfalfa way to seed clover on our kind of could not be successfully seeded with land. The best way is to seed it in millet, and oats and peas make too March or early in April before the dense a shade to make it a very prac- frost is entirely out of the ground. tical crop with which to seed alfalfa, Then the freezing and thawing of the especially if not sown until after the soil buries the seed and we almost inother plants have started. It would variably get a catch, at least I have be better to wait until the crop is har- never lost one before, and last year vested, then fit the ground and get being compelled to sow late I have lost the seeding. There may be another cause for this, and that is the seed was not real prime seed. The seed was grown the year before but there was such a second growth of clover and it was so late and the season was so moist that I am of the opinion that this seed was not all primo seed, that it didn't have the germinating power. Neither do I believe it had as much vitality as seed grown under more favorable circumstances, and I lay the loss of the seeding to all although it may be sown broadcast three causes, rather poor seed, too of everything they produce, these to the consumer, he is reasonably sealthough it may be sown broadcast three causes, rather poor seed, too may seem like "fool questions." But, cure against starving or freezing, a and harrowed into the soil with fairly summer. At any rate we have lost good results. Some of our most suc- summer. At any rate, we have lost cessful potato growers use 400 to 500 the seeding and we have got to plow pounds of fertilizer per acre in the the field this spring and put it into row, preferably distributing it with a some spring crop. Of course, it will be too late to put it into peas or oats plied in any way which will mix it or anything of that sort, but we can with the soil about the potatoes, grow ensilage corn and it will furnish Where applied broadcast, larger appli- more feed even than as though this cations are sometimes made, depend- field was into hay, although we certainly want a certain amount of hay to feed with the corn silage. plans now are to put about half of it into lima beans and the balance of it This wet weather has delayed put- into sweet corn and we will sell the ting in the balance of the spring ears of the sweet corn to the canning crops. Those farmers who only had factory and put the stalks into the a few oats to put in, of course had silo. I will put a portion of it, howthem all in before this rain, but those ever, into soy beans and cut them for

We have an unusual amount of layet, May 7. It is quite late for oats, bor this spring in disposing of the but I consider this a very late spring. manure. Some years the ground is We have had very little warm weath- dry enough in late winter and early er up to date, only a few warm days spring so that we can haul it direct to and they were exceedingly warm, it the field at all times, but this year it is true. The pastures, meadows and was soft and the manure spreaders new seeding clover have made but would not work, the roads were soft, Clover may be successfully seeded little growth. In putting in a crop and we had to haul it quite a distance one must not go by the calendar, but to the back fields. The consequence 15 acres of peas for the canning fac- one time the roads go so very bad in jured by excessive water. The rain It all must be hauled out before we came down so fast that the water ran plow the fields for ensilage corn. Of into the low places, and even over course, it won't take long to spread tile drains, was not taken off in time this manure when all hands go to but what some of the peas were work, when we once get at it, but we drowned. This would not have hap- cannot go at this work until we get pened if the peas had not just been the field of peas and oats sown for in the right condition. They were the cows and the balance of the peas germinated, and yet not above the in for the canning factory. Then we ground, and the water coming on I are ready for the ensilage corn and think literally smothered them or the sweet corn and the manure must drowned them. Those that were sown be hauled before the ground is plowa few days later and were not so far ed. With favorable weather, however,

The new seeding has made start enough so that these vegetables will ter danger of frost is past. It does enough now so that one can see what grow from the start if you want Now, "what will it profit me and better when sown in warm weather, we are to expect from this year's crop. choice vegetables. There are a few the average potato growers to know but in a favorable season it may be I have examined one field carefully early potatoes on sandy land and whether it cost us 14 cents or 67 sown with fair results soon after corn and am positive that it will not pay some gardens on sandy spots that are cents per bushel to grow these pota- planting time, but it will take it long- to leave it and attempt to mow it. above ground at the present time, but toes when we are obliged to haul er to reach maturity than when sown There is a large area on this 20-acre they are not growing as they ought

COLON C. LILLIE.

# Practical Science.

THE MOISTURE CONTENT OF BUTTER.

BY FLOYD W. ROBISON. (Continued from last week).

ter market and when creameries are rise of the churning temperature. In paying the dairymen just as much for practically every instance, other genfat as they are receiving in the mar- eral principles being regularly followket for the finished product, it is very ed, increasing the temperature at evident that the finished product, but which the churning is conducted will ter, must have mixed or incorporated produce a butter with a higher moisin it some materials in some consid- ture content. This, provided the grain erable quantities not ordinarily pres- and general quality of the butter is ent in the milk fat. These in the not impaired, is a legitimate operamain, are salt and water. Of course, tion and we think will not yield a butthe more salt and water that may be ter with a content of moisture as high incorporated in the butter, the great- as 16 per cent but if prolonged er the margin of profit for the cream- churning is attempted a more or less ery, providing the butter maker does salvy condition of the butter is pronot change the quality in such a way duced whereby the grain may become as to get an appreciably lower price seriously injured and this product for his finished product. Probably 20 then will hold almost any content of per cent increase over the original water which may be mixed with it. satisfactory and a fair margin for the will pick out such a product every every 100 pounds of butter-fat the ness is produced by prolonged churncreamery will send out 120 pounds ing when maintaining even a low temof butter. Consequently it thus be- perature, and will be followed by a comes possible for the creamery to high content of moisture in the propay as much, or even more, per duct. The temperature of the water pound of fat received as the creamery used for washing alone does not afreceived per pound for its butter. In fect the moisture content but worksome co-operative creameries the but- ing the butter in the presence of an ter maker is paid a certain flat sum excess of water, as has been done in per pound for the manufacture and some creameries, will produce a high marketing of the product and all that content of moisture and many times is left is paid to the different patrons an abnormal content of moisture. according to the content of fat which they have contributed.

laid on this point by butter makers, tion, however, as we have stated, to If butter makers would give attention to the quality of the product they manufacture, first, all these other things should be added unto it.

#### Quality Controls the Moisture Content.

Undoubtedly a study of the proper manner of incorporating the moisture content of butter may indicate what is the most desirable method of churning and working of the butter to produce the highest grade product on the market and which will carry a reasonably high moisture content, for the temptation is greater when it is seen that by a certain manipulation, perhaps, the butter may be made to take up and hold varying high percentages of moisture. The temptation, we say, is very great, to secure a high over-run in this product and we therefore think that the regulations of the Internal Revenue Bureau are just and should be rigidly enforced.

Curiously enough, our reasons for this are that in our opinion it is vital to the butter industry itself that the moisture content be kept below 16 per cent. What, then, are the factors which control the moisture content of butter?

Several different state stations have inaugurated extensive studies to determine this factor, but one of the most thorough experiments along this line was conducted by the Purdue Experiment Station and is described in Bulletin No. 160, from that station.

moisture content. Pasteurization of the cream does seem to decrease to some considerable degree the moisture content. The most influential factor, however, in increasing the mois-Competition is very keen in the but- ture content in butter seems to be the weight of fat in the milk would be An ordinary judge of butter, however, This means that out of time. This same condition of salvi-

The High Salting of Butter.

The desire to increase the over-run With competition as keen as it is of butter, because as we have exin the butter business, naturally one plained before, it is the over-run that creamery is striving to secure as introduces the element of profit, has great an amount of substances other caused butter makers to resort to evthan fat which are natural to the but- ery expedient possible to retain in ter as is another creamery. We think the butter a high moisture content altogether too much stress has been and a high salt content. The objecthe use of a high content of salt is that its taste is disclosed in the product. One agent for a salt manufacturer some time ago thought he had hit upon an ingenious plan for encouraging the taking up of large quantities of salt with the butter without its being apparent to the taste. His instructions to the butter makers were to soak the salt overnight in hot water and in the morning pour off the brine and use the remaining salt for salting the butter. Of course, the butter maker in this way was using a larger quantity of salt but if he had taken the pains to taste the finished product he would have found that one pound of salt which had been soaked over night was just as salty, and no more so, than the pound of salt which was thrown into the sewer from the brine. Salt is salt, and one portion of it is just as completely soluble as another, and there is no selective absorption by a preliminary treatment with water. If he had a salt which was high in insoluble materials, such as calcium sulphate, and the like, which was left after a preliminary treatment with water, it would, of course, not be so salty as the portion which dissolved out, but it would have neen even more objectionable because of its insoluble nature.

"Farm Structures," by K. J. T. Ekblaw, M. S., Associate in Agricultural Engineering, University of Illinois. This volume is prepared for both the teacher and the progressive farmer who recognize the advantages of good farm building metarials location of farm The Finding of Purdue.

In the course of this series of experiments it was found that the temperature of the churning of the butter is a very great factor in retaining uniformly a high moisture butter. The richness of the cream or the degree of sourness of the cream do not seem to exert any constant influence on the

# "Sure, I did it!"

It looks bad to have a piece of shabby old furniture around, even if it is well-made. Nevertheless, it is a shame to send it to the attic or barn when it has lots of use and comfort in it.

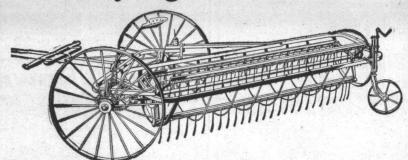
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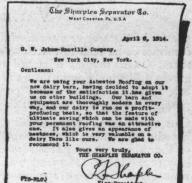
Easy to lay with J-M

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each roll. White and
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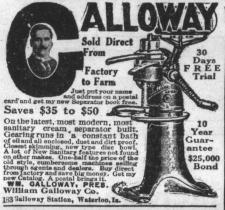
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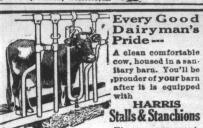




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operating under equal conditions. Solid oak frame, braced, bolted and mortised; impossible to pull out of line. Special high-grade tool-steel knives correctly spiraled to give clean, shearing cut. Cuts ten lengths from %-60 2% inches. Tremendous capacity; throat on larger sizes takes whole bundles. One lever controls feed rolls and table. Independent belt driven blower; speed adjustable to minimum use of power for any height silo. Positive, self-feed frictionless table; saves power and labor. Lowdown, cut-under frame makes machine easy to handle. Safety device positively prevents breakage. Four sizes.

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Describes all types of silos; how they are built, and the advantages length of time as ensilage corn. Some each kind. Catalog of Appleton Silo Fillers, Corn Huskers, Gasoline Engines, Manure people mix the sow bean seed in with plication to above address.

CONDUCTED BY COLON C. LILLIE.

PROTECTING WIRE FENCES FROM UNRULY COWS.

some experience along that line, and I take a heavy wire and make a wire circle to put around the cow's nose. Be sure to make it large enough so that it will not bother her about feeding. Then I bring another wire over the neck just back of the ears, and fasten it to the first wire on each side, making a wire halter. I wrap the second wire around the first two or three times, and leave an end sticking out on each side about two and one-half inches in length. These ends I fashion into hooks.

When a cow puts her head through the fence and undertakes to draw it out she will get caught by the hooks nearly every time. She will frequently work for several minutes before she gets loose. I never knew a cow to try this more than two or three times. They soon get afraid of the fence. In making such a halter it is policy to make it large enough so that it can be pulled off from one cow and put on another.

Branch Co. O. A. VANDERBILT.

#### CREAMERY MEN MEET.

The regular quarterly meeting of the Michigan Association of Creamery Managers and Owners was held at the Bancroft House, Saginaw, on May 7, 1914. A large number of the managers and owners were present and topics relating to the industry were freely discussed by the membership.

The most important thing that seemed to be on the minds of the membership was the quality of Michigan butter. With the new tariff law in effect it seems to be a point of absolute necessity that the creameries of Michigan must produce better butter if they are to stay in business, and the industry be placed on a permanent basis. The cause for complaint on Michigan butter seems to be the quality of the raw material. The members were not inclined to place all the blame on the farmer. For several years past most everybody seems to have bought most anything that looked like cream, but it is a very general sentiment among the owners at this session that a better price must be paid for good cream and a lower price for bad cream, and with the enforcement of the new Insanitary Cream Law, both the producer and the buyer will be compelled not to handle the low grade cream as they are liable to prosecution by the State Dairy and Food Department.

Arrangements were made by the

#### WHEN TO PLANT SOY BEANS FOR SUCCOTASH SILAGE.

Can you give me advice as to the proper time for sowing soy beans for silage to mix with corn, when the corn I raise takes from 120 to 125 days from planting until it is fit to cut for silage? Saginaw Co.

Soy beans mature in about the same

the ensilage corn seed, planting them both together. Sometimes they plant the corn and then go over the rows with a hand-planter and plant the soy beans. Sometimes they plant the soy beans first and then go over the rows and plant the corn. Where the soy beans are grown on a separate piece of ground I would recommend that as soon as you get through planting the ensilage corn that you plant the soy I frequently see in the Michigan beans. I would try and fit the ground Farmer inquiries about the best way for the beans at about the same time to prevent a cow from reaching I did for the corn. Right after plantthrough a wire fence. I have had ing corn plant the soy beans and you will find that they will mature at just I will undertake to give that experi- about the right time so that they will ence to the readers of The Farmer. go into the silo in excellent condition.

> I believe it would pay G. G. to try some soy beans both ways; that is, plant some of them with the corn and some of them in a field separate, and see which he considers to be the most profitable way. We need some field experiments along this line. The question is, if you have a good stand of ensilage corn and a good growth, can you at the same time grow soy beans to amount to anything right with the corn? If not, of course it will not pay to plant them. On the other hand there is a theory that soy beans, being a plant of a different kind, that is, one of a different botanical family, that this plant will grow with corn better than we can grow the corn thicker. It is the same with hay. You can get a larger crop of hay if you mix the grasses than you can if you have either one of them separate. The different kind of plants work together. It is on the same principle of mixing a little spring wheat or a little flax in with the oats. Then you can raise just as many oats and get the spring wheat, the flax, or the barley extra

My past experience has been that if you have a good stand of ensilage corn that there isn't much chance for anything else to grow in the field, not even weeds. I planted some soy beans in with the corn last year and in some places where the corn was rather thin the beans did fairly well. I have tried other crops to grow in with the corn, but never succeeded in getting a very good growth if I had a good growth of corn. On the other hand, where the soy beans are grown in a separate field in rows 28 inches apart, and properly cultivated, they make a luxuriant growth. The probability is that if you have never raised soy beans before it will pay you to inoculate the soil. You can get soy bean nitro culture from the experiment station or you can send somewhere and get a little soil where soy beans have been grown successfully and inoculate the seed. The cost and the bother is so small that it certainly should not be omitted. Many people think soy beans are going to prove a valuable forage crop, but what we want is a number of experiments scattered around among practical farmers so that we will know what we are talking about.

#### CATALOG NOTICES.

Arrangements were made by the owners to systematize a plan of education among their patrons to have them take proper care of the cream and thus be able to get a higher price for it, and now, more than ever the organization wishes to urge upon the patrons the necessity of keeping their cream in a clean, cool place and deliver frequently to the buyers.

"The James Way," is the title of the new 256-page catalog published by the James Mfg. Co., Ft. Atkinson, Wis. This is unique, not only in size but in make-up. It is handily bound in stiff covers, and has many full-page illustrations showing the James equipment as installed in dairy barns, also showing details of construction, methods of installation, operation, etc. In addition to listing the full line of James barn equipment, this book contains much of valuable information "The James Way," is the title of tains much of valuable information relating to the construction of dairy barns, and will prove a valuable ad-dition to any farmer's library. When writing for same, mention the Michigan Farmer.

Harris stalls, stanchions, litter and feed carriers, manufactured by the Harris Mfg. Co., Salem, Ohio, are illustrated and described in a folder sent by this company upon applica-

Stover Ensilage Cutters, manufac-tured by the Stover Mfg. Co., Free-port. Ill.. are illustrated and describ-

# Live Stock.

# Rotation of Crops for Hogging Down.

state at large:

can be found in almost every neigh- able and serving as a cover crop. borhood in southwestern Michigan, very few farms I have found a rota- sowing. tion of three.

osition:

For smooth land that is not too between the rows in September.

The first crop turned on in the worked out. spring would be rye. Next, about May able; about August 10 or 15, the cow- is used for general farming. peas, and September 15 to 20 the corn fields should be so arranged as to be

spring pigs increase in size and more The clover and alfalfa field is available for pasture from May 10 to the end of the season. To this pasture the rape field is added about June 10, and can be used until it is necessary to turn off in the early fall, to give the clover and alfalfa seeded with it, a satisfactory revenue. a chance to get sufficient growth to go through the winter. The middle of August, when it is needed, the cowpea field is added to the feeding area. The cornfield following in September, finishes the young hogs for the

There is no theory about this proposition. There is not a single feature in it, that is not in successful operation on farms with which the writer is familiar. On one of these farms a tively low figures, yet they are capmedium sandy loam, for nine years able of being put to good use in raising cattle. At the Denver sale of breeding cattle in January buyers purchased breeding bulls by carloads at \$400 down to \$150 per head.

Sheep and lambs carried through the winter in states where the sheep largely industry flourishes have been largely fed off by hogs. If these fields are limed or marled, alfalfa can be seed-

HE following is an abstract of a would be needed for the hogs, espelecture on the above subject de- cially during the earlier part of the livered at farmers' institutes summer, still there can be no quesduring the past winter by Hon. Jason tion as to the fact that the land would Woodman, County Agent in Farm grow better under this treatment, and Management work in Kalamazoo the hogs would return a good profit. county, and the information given is If the rape is sown in rows and culthe result of his observation and study tivated on these lighter soils, a larger of conditions in that county and the growth can be secured in a dry year. The writer knows this from observa-Many Michigan farmers raise clo-tion. Rye can be cultivated in bever, alfalfa, rape, cowpeas, rye or corn tween the rows of rape about Sepand hog down these crops. Farms tember 1, adding to the pasture avail-

Where land is rolling and there is where one of these crops is raised ev- danger of gullies forming if it is ery year, and profitably harvested in cultivated, the corn crop can be this way. Occasionally I have found omitted from the rotation, and the two of these crops used for this pur- other crops sown broadcast; that is pose on the same farm, and on a to say, with all the "feeds' of the drill

On light sandy rolling land, where A proper combination of three or a catch of clover cannot be dependfour of the crops mentioned, can be ed upon, cowpeas, rye and rape can raised with profit on a large propor- be used in rotation, the cowpea field tion of our farms. During the past disked up in the latter part of Sepwinter, various combinations suited tember, and a thick seeding of rye put to different soils and conditions were on, to be used first for early spring discussed at our institutes. Following pasture, and what is left hogged down are some of the rotations suggested after it ripens and reseeded to rye by farmers interested in this prop- for a cover crop to be plowed under for rape the next spring.

The value of the cowpea as a forsandy, first year corn, second year age crop for hogs, is fully shown by cowpeas, third year rape, sown early, the experience of farmers in this clover and alfalfa sown with the rape, county, and for that reason is sugfourth year clover and alfalfa. Rye gested for use in the plans outlined should be sown in the corn about in this article. It is possible, however, September 1. The cowpeas can be that within a few years, the cowpea planted in rows 28 or 30 inches apart will be largely replaced by the soy and cultivated, and rye cultivated in bean; when the best methods for handling the latter crop have been

A small portion of the tilled area 10, the clover and alfalfa. About of a farm can be used for this hog June 10, the rape would become avail- rotation, while the bulk of the land

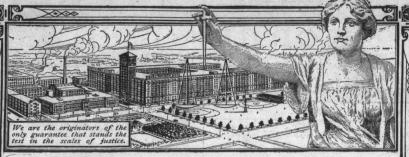
The time has come when, in conwould be ready to finish the hogs. The sidering the advisability of any agricultural practice, its effect on the soil accessible to water and to each other. must not be forgotten. Probably 60 It will be observed that as the per cent of the pork placed on the market in the United States is the feed is needed, this plan provides it. product of corn and other grains. As a rule these hogs go to market, leaving the land on which their feed is grown, less fertile. The rotation of forage crops suggested in this article will build up the soil, and at the same time, properly managed, will produce

#### LIVE STOCK NEWS.

The recent large demand at various The recent large demand at various points for high-class breeding cattle is significant as pointing to a revival of the beef cattle industry. Sales of the several breeds this year show average advances of 25 per cent over previous prices, the demand coming from all directions, including buyers owning large tracts of cut-over lands in Michigan and Wisconsin. Much of these lands are priced at comparatively low figures, yet they are cap-

sheep and lambs carried through the winter in states where the sheep industry flourishes have been largely marketed, and good markets should be witnessed from now on. Iowa went into sheep and lamb fattening marketed, and good markets should be witnessed from now on. Iowa went into sheep and lamb fattening more extensively than ever before, one great stimulus being inability to secure the usual supplies of stock and feeder cattle last autumn, so that many stockmen switched over to mutton production, with good results in a great majority of cases, notwithstanding the dearness of feed.

The Chicago packers have been discriminating against hogs held by speculators, and the latter have had a hard time in disposing of the second-hand hogs. Packers are fighting the upward tendency of the market, but so far they have not accomplished much in holding down prices.



Even if we asked as much as others, the Little Jap would still be the greatest cultivator value on the market. We guarantee it to please you better than any other cultivator you can possibly buy or we will gladly refund your money.

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TO other farm implement of modern times has so clearly demonstrated its superiority over all others of its kind. The patented Pivot Axle Seat Bar Lever Dodging Device can be obtained only on the Little Jap. It is the only cultivator perfectly adapted for either hillside or level ground use-among straight or crooked rows. A boy can operate it as easily as a man-weight of operator makes no difference.

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PLYMOUTH Hook cockerels 5 to 11 lbs., according to age, hems 5 to 8 lbs., 15 eggs 31: Mammoth Bronze Tom Turkeys 8 to 35 lbs. according to age. Price 85 to \$25, 10 eggs \$3. A. E. ORAMTON, Vassar, Mich.

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EGG-A-DAY-Barred Plymouth Rocks, Bred-to-Lay. EGG-A-DAY Poultry Ranch, Marshall Mich.

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Pine Crest White Orpingtons—Lay, pay, weigh, try \$2.50 per 15, utility 87 per 100. MRS. WILLIUS HOUGH, Pine Crest Farm, Royal Oak, Michigan.

S. L. WYANDOTTE EGGS—From great laying strain of Blue Ribbon Birds Satisfaction guaranteed, F. E. Cowdrey, Ithaca, Mich

S. C. B. Minorca Eggs \$1.50 and \$2.50 for setting Satisfaction guaranteed. R. W. Mills, Saline, Mich. Oll.VER, White and Golden Wyandottes. Eggs from Whites \$1.50 per 15, \$2 50 per 30. Silvers & Goldens at catalog prices. Browning's Wyandotte Farm, Portland, Michigan,

White Wyandottes—Eggs from best pens \$2 per 15; \$6 per 50; \$10 per 100; from 3 pens 75c per 15. David Ray, 202 Forest Ave., Ypsilanti, Mich.

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We have both boys watches and the small irl watches, state which kind you want and e will write you how you can get it. Address B. & G. Dept. The Michigan Farmer, Detroit.

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Better than the best commercial fertilizer at one-twentieth the cost.

Quarter-acre quantity, 50c; one acre, \$2; five acres, \$9. Let us explain why you need Nitrogen Bacteria and why Fer-guson's is best. Write for special book-let M, free,

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Sections, Foundation, Bee Veils, Smokers, a complete line of supplies for bee ke ready for immediate shipment. 40-page catalogue free. Bees Wax Wai A. G. WOODMAN CO., Dept. M. F., Grand Rapids, Michigan.

# Poultry.

ABOUT GEESE.

For many years there has been sufficient demand for goose flesh as to Bearing these facts in mind and con- best prices in the markets. sidering how easy the goose is to raise, and how cheap its food, more farmers would find it a profitable side-line. All breeders of long experience with whom I have talked say that there is more money in geese than in any other class of poultry. The risk of loss is smaller than with ducks, turkeys or chickens. They are the healthiest and heartiest of all fowls, seldom dying from diseases.

Geese Easy to Keep.

Some people are of the opinion that a goose will eat as much as a hog, but this is not true. Old geese are strictly grazing creatures when pasture is available, and the goslings can less than one peck of grain each. The principal ration of these fowls durcomposed of grass, weeds and insects. sheep for cleaning up weeds.

utilized for a goose pasture with profmakes a good run for both old fowls, must not be understood, however, fruit for human production. that waste ground is essential for the raising of geese. They will thrive upon any pasture suitable for cattle, sheep or hogs. Cattle and geese will run peacefully together, but overpasturing with geese is bad practice ly that cattle do not like to graze after them, and if confined in a small pasture they will soon kill it out. Geese can be raised successfully withter. Ponds that are simply accumulasirable.

Confining Geese.

The chief objections to geese are the warm weather. their noisy and dirty ways. And in fact, they are a nuisance if allowed chickens in original packages, but if to run where they please, as they are crops and they will dirty the drinking greatly dislike while standing on the they are easily controlled, especially dow, or even when in the nest where the large varieties. Geese will not several hens are laying. It does not thrive in close confinement, but they take very much when it is 90 in the should be fenced away from the yard, shade, to start the germ on its way garden and stock tanks. A three-foot to feathers. The trouble is that it

Experienced breeders of geese say cold feet and dies. that it is best to purchase breeding birds in the fall, as it takes some Geese are naturally monorepruary. artificial conditions a gander will boiled long enough. relsome and ugly with age.

The females are good for breeding June.

purposes for 10 or 12 years, or even longer. They are long-lived and have been known to produce hatchable eggs up to 30 years of age. Twoyear-old females can be used for breeding purposes, but they reach their best at three years of age. The eggs of yearling geese seldom hatch well. Once the foundation is laid for goose farming there is no advantage assure high prices. The feathers have in selling off the old stock of females also commanded a high price and the until they reach a ripe old age, as breeder of geese can always derive a they are the best for breeding purconsiderable profit from this source. poses and the young birds bring the

W. F. PURDUE Indiana.

#### UNCROWN THE ROOSTER.

Mr. Rooster, monarch of all he surveys, and absolute boss of the flock, is surely a prepossessing fellow and at certain times of the year he is as useful as he is beautiful. But at other times he is of no earthly good. Therefore, he had better be in chicken heaven, for all he does is bother the hens, eat, look nice, and fight when opportunity offers.

Under natural, or jungle conditions, the rooster undoubtedly was useful as well as ornamental throughout the entire season. He kept diligent watch be grown to five months of age with and protected the members of his harem even to the point of giving up his life for them. But since man has ing the summer and fall months is taken a hand in running things in general on this earth, he furnishes this protection and has brought the On nearly every farm there are a hen to be an efficient producer of mafew places that are worthless for cul- terial wealth. In order to do this he tivation. All such places could be has regulated her habits and for his own advantage he has put a limit to itable results. Low, marshy ground her breeding season. The middle of May is considered by those who know, and goslings if they can have a dry the latest that it is profitable to breed spot on high ground for a resting hens in this state. After that the hen place during the day and at night. It should keep happily busy laying hen

Infertile Eggs Preferred.

Buyers will pay a premium for infertile eggs, because, if they can be assured that the eggs are infertile. they can be absolutely sure that they will get egg, all egg, and not some since the fowls soil the grass so bad- chicken. Because the egg shell can cover a multitude of natural developments, the farmers in this state are losing about a half million dollars a year and the producers of good eggs out water to swim in, but if a small have to suffer with those selling poor stream runs through the pasture, or ones, because the buyer is taking if there is a spring pond, all the bet-chances when he buys. It is the element of uncertainty and the lack of tions of stagnant water are not de- faith which brings down the price of any commodity. Both of these are involved in the buying of eggs during

You may not intentionally sell the eggs your hens lay are fertile they sure to be destructive to growing may develop conditions, which buyers water for the stock. But as a rule railway platform, in the store winwire netting fence will hold most of never gets there. Usually it just the breeds about gets started, and then it gets

Dispose of Rooster.

Therefore, if you wish to get better time for geese to become accustomed prices for your eggs and at the same to each other and they will not mate time help bring the egg business to a up until they become thoroughly ac- standard of certainty and faith, unquainted. The choosing of mates gen- crown King Rooster and do it before erally takes place about the first of the first of June. He can be given a fitting and useful end by gracing the gamous in their wild state, but under Sunday dinner table, provided he is

mate with several partners. But for You may have a rooster which is good results the gander should never royal blooded enough that you are be mated to more than three females. willing to pay his board bill through-Geese are very faithful and will live out the season so that he can be the in families for years, the same mating father of quality stock the next spring. taking place each spring year after Then consign him to comfortable. year. But it is not desirable to use bachelor quarters where he can do ganders over four years old. Young anything he pleases and not bother ganders are more active and insure the women of the henhouse. At any greater fertility in the eggs than old rate, for the good of the egg business, birds. The latter also become quar- the hens, and yourself, have your flock roosterless after the first of

# Horticulture.

SPRAYING AFTER THE BLOS-SOMS.

production of good fruit. The time lead and self-boiled lime-sulphur. and method of application for this. The self-boiled lime-sulphur is made Spraying Apples and Pears.

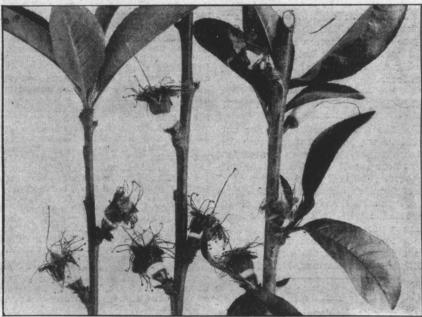
these fruits, enter the fruit through arsenate of lead should be added. the calyx. Therefore, if one has conpetals are off.

Spraying Plums and Cherries.

ent this spraying may be omitted. Another application should be made in about two weeks after the first, and a Without a doubt the spraying after third about a month before the fruit the blossoms is the most important ripens. The materials to use for all application on all tree fruits for the of these applications are arsenate of

spray will determine more than any- by starting eight pounds of fresh lime thing else, the freedom of the fruit slaking, and when it is boiling well from insect and fungus injury. Of throw in eight pounds of flowers of such value is this application that in sulphur, which has been sifted. Wasome places the growers will rely en- ter should be added gradually through tirely upon one thorough application the process but care should be taken at this time to keep their fruit clean. to keep from adding too much water and in that way drown the lime. Af-It is also probably the hardest ter the action of the lime has ceased spray to apply because of the limited plenty of water should be added to time one has to apply it for the best cool the mixture. If allowed to reeffect, especially in the case of the main hot for some time the lime and apples and pears. It is most essential sulphur will go into chemical combiin the case of these fruits to apply nation as in the case of the regular the spray before the calyx cup closes boiled lime-sulphur. This is liable to as it is known that about three-cause serious burning of the foliage. fourths of the first brood of the codlin The above amount is enough for 50 moth, by far the worst insect pest of gallons of spray; to it two pounds of

It is rather hard to make the selfsiderable spraying to do it is advis- boiled lime-sulphur satisfactory in able to start when the petals are such small amounts as one must be dropping freely and about half of the careful in slaking the lime in such small quantities. Made in 150 or 200 gallon lots the mixture works up nice-In the case of the stone fruits, the ly. However, if the smaller amount plums and the cherries, an applica- is all that is desired, warm water tion should be made just after the should be used in the process of slakblossoms drop, but there is more lati- ing the lime. The mixture should be



Peach Buds in Condition for First Spraying.

growers wait until the shucks are while spraying. coming off quite freely, but in waiting that long one is liable to have trouble with curculio; also, for fungicidal pur- phur and arsenate of lead are the two poses it is not advisable to leave the best spray materials to control the trees unprotected so long.

controlled by spraying. In some high spray. locations, which have good air circufruit. For that purpose alone the preferred. spraying will be worth while.

not be done immediately after blos- this application it is most important som petals fall, but when most of the because at this time of the year conshucks have fallen. This spraying is ditions are favorable for the developmost important in the control of the ment of the fungi and the fruit is

tude in the time of application than strained before putting it in the spray in the case of the core fruits. Some tank and good agitation is necessary

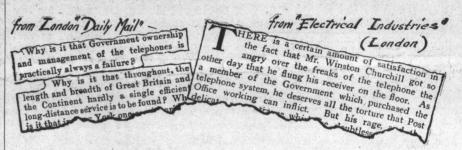
The Best Spray Material.

The commercial, or boiled, lime-sulinsect and fungus troubles of the When and How to Spray Peaches. other tree fruits mentioned. For ap-The summer spraying of peaches ples the lime-sulphur should be used has not become a common practice at the strength of one to 40, while for yet, but it will soon be that all grow- the other fruits one to 50 will be ers will realize its value. The peach found efficient. In all cases the arsescab, or black spot, the curculio and nate of lead should be used at the the rot, are the chief peach troubles rate of two-pounds to 50 gallons of

Some believe that the Bordeaux lation and drainage, the fungus trou- mixture is the best for plums and bles do little damage except in un- peaches because they think it confavorable seasons. Spraying tests in trols the fungus troubles better. Obsuch places failed to give results be- servations and experiments by comcause the unsprayed fruit was as free petent investigators show, however, from blemishes as the sprayed. How- that lime-sulphur will control these ever, it has been found that sprayed troubles on plum and cherry as well fruit will hold up in shipment better as Bordeaux, and, as it is handier and and will keep longer than unsprayed more economical to use it should be

Thoroughness, is, of course, an es-The spraying for the peach should sential factor in all sprayings but in curculio and if that insect is not pres- very susceptible to its attacks.

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"But today I found I had to talk with "But today I found I had to talk with Saint Malo, and, wishing to be put through quickly, I had my name inscribed on the waiting list first thing in the morning; the operator told me—though very amiably, I must confess—that I would have to wait thirteen hours and ten minutes (you are reading it right) in order to he are reading it right) in order to be put through."

Dr. R. Luther, in the Dresdner Anzeiger

"In the year 1913, 36 years after the discovery of the electro-magnetic telephone, in the age of the beginning of wireless telegraphy, one of the largest cities of Germany, Dresden, with half a million inhabitants, is without adequate telephone facilities."

Herr Haberland, Deputy, in the Reichstag

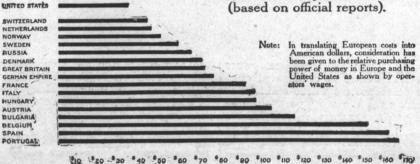
"The average time required to get a connection with Berlin is now 1½ hours. Our business life and trade suffer con-Our business life and thate salter the siderably on account of this lack of telephone facilities, which exists not only between Dusseldorf and Berlin and between Berlin and the West, but also between Berlin and the West, but also between Berlin and the West, but also between Berlin and the Street were street and the Street was the street with the street was the tween other towns, such as Strassburg, Antwerp, etc."

Herr Wendel, in The German Diet

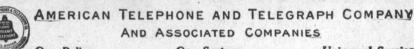
"I refer here to Freiberg. There the entire telephone service is interrupted at 9 o'clock p.m. Five minutes after 9 o'clock it is impossible to obtain a telephone connection."

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The ACRE-AN-HOUR Sifter any kind of manufactured dry insecticides, will operate as fast as desired Better, easier and faster than any \$5, \$10 or \$15 spray pump. Insist on your dealer show-ing you this wonderful little implement. Propaid. 75c. Agents wanted. Circulars. ACRE-AN-HOUR SIFTER CO. DEPT. E. POUGHKEEPSIE, N. Y.

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WE GUARANTEE to stop THE MICHIGAN FARMER immediatly upon expiration of time subscribed for, and we will pay all expenses for defending any suit, brought against any subscriber to The Michigan Farmer by the publisher of any farm paper, which has been sent after the time ordered has expired, providing due notice is sent to us, before suit is started

RATES OF ADVERTISING,

40 cents per line agate type measurement, or \$5.60 per inch (14 agate lines per inch) each insertion. No objectionable advertisements inserted at any price. Entered as second class matter at the Detroit, Michigan, postoffice.

#### DETROIT, MAY 23, 1914.

#### CURRENT COMMENT.

Cost?"

"Why Know the in this issue is a lines. symposium on "The

ing to Michigan Farmer readers. Not farmer is an exception among busithe least interesting of the opinions ness men in that he can possibly published under this head is that pre-know too much about the details of sented in the last section of the arti- his business. Nor do we believe that cle, in which the gentleman whose the farmers of the state or country previous article is commented on by can be too well organized along inthe other writers whose opinions are dustrial lines, particularly along lines given, asks the very pertinent ques- of special production. "In unity there tion, "Why know the cost," and at- is strength," and there are plenty of tempts to prove that there is really examples to prove that this is just as no object in the farmer knowing what true in its relation to commercial, as it costs him to grow crops in general to civic unity. or the potato crop in particular.

sons, as stated by one of the contributors to this discussion, why it ill becomes a farmer to dwell on how alike has been aroused, has proven an profitless to a farmer to know what haps this form of road improvement it costs to produce any product which has reached its greatest development is grown for sale on his farm, to be in Missouri, where long sections of well taken. In fact, to use the com- earth road have been worked with the parison presented in the article re- King drag and improved in other ferred to, it would seem even more ways by the donated labor of interessential that the farmer should know ested citizens. In at least one section what any given crop produced on his of Michigan similar results were atfarm costs in money, time and labor, tained in a similar manner last year. than that the plow manufacturer know exactly what his product costs him. that Governor Ferris has acted on the The apparent reason for this statement is that the farmer is engaged fostered the movement and other orin a complex business, some departments of which may be conducted at tion of road improvement in Michigan a profit, while other branches are by issuing the following proclamation carried on at a loss, and an accurate knowledge of costs would enable him for Michigan this year: to reduce or eliminate the unprofit- In 1913 the townships of Michigan able or uncertain items of production raised \$4,336,029 for the improvement to reduce or eliminate the unprofitand specialize more particularly in the more profitable lines to which his farm is adapted. It is true that under the county road system levied county road taxes amounting to \$1,621,681 and the state appropriated der present conditions the farmer has \$800,000 for the payment of state reno power to fix the price at which his products sell on the open market and that his market is far more uncertain so far as stability of price is concernant counties raised money by bonded than is that of the plow manufac- ing and many public spirited citizens turer, for instance, and yet the plow that it is a low estimate to say that manufacturer has the power of fixing prices only within narrow limits, expended on Michigan's roads during since there are always competing pro-the past year.
While this has resulted in ducers in his field, and as he produces building of more miles of excellent but a single article the only way in highways than were ever before built which an accurate cost record will in a single year, there is still much to help him in the making of a profit is be desired. The people want more good roads and want all of the roads in enabling him the better to analyze cared for better than they have been costs and perhaps materially reduce in the past. them without lowering the value of his finished product. While little emphasis has been placed on this feature. It was a success; wet pieces

writer has well said, upon the size of the crop, and that an excessively large crop may bring less money to the producers than a normal or short crop. But this would not appear to be a good reason for deprecating the work of the potato growers' associations, even if the question mark used after growers were wholly appropriate, and although some of the influences identified therewith may be working toward the stimulation of greater production. Some of the work already attempted in certain sections

Shore Road Association and the West Michigan Pike Association, and to the end that this good work may extend over the state and all the people receive the benefits, I, Woodbridge N. Ferris, do ask that the people of the state of Michigan set apart Thursday and Friday, June 4 and 5, 1914, as "Road Bee Day," and as far as possible turn out and work under well planned and competent supervision on the highways of this state in such manner as shall make them more fit, safe and pleasant for public travel.

While the average citizen doubtless large crop may bring less money to already attempted in certain sections undoubtedly well calculated to benefit producers, especially the standardization of the product which is the line along which most of the initial work seems to have been done. And if there are possibilities of a broader benefit to producers from the work of such an organization, as we believe there undoubtedly are, all the potato growers have to do to realize them is to affiliate with the organization and The leading article assume its direction along the desired

We think and we believe, that upon Cost of a Crop," reflection the reader will hold with us, which we believe will prove interest that it is hardly possible that the

The "Road Bee." While there may be very good rea- A Road Bee Date where general infor Michigan. terest of town and country people

cheaply he can produce a certain effective means of improving the comcommodity, we do not believe this mon earth roads in various sections writer's position that it will prove of the country in recent years. Per-So successful did this effort prove suggestion of the organization which

ture of a cost record for the farm, it of road were drained; logs, roots,

The Michigan Farmer will have a measure of the same adsumps and stones were removed from the readway; bad stretches of clay were sanded; bad pieces of sand were spect that it has for the manufacturer, and this is but another argument in its favor.

will have a measure of the same adsumps and stones were removed from the roadway; bad stretches of clay were sanded; bad pieces of sand were clayed; gravel was hauled; road drags were set to work, and altogether so much enthusiasm was aroused that many farmers put in a full week in-It is true that the price which the farmers of the country receive for any special product, such as potatoes, for instance, depends principally, as this writer has well said, upon the size

At the request of the Michigan Good Roads Association, the Huron Shore Road Association and the West

While the average citizen doubtless of Michigan by this organization is feels that he contributes enough in road taxes without making further voluntary contributions of money or time to the cause of good roads, yet it is apparent that all of the common earth roads cannot be improved through the ordinary channels for many years to come, and where there is local enthusiasm sufficient to lead to the making of an effort to secure needed road betterments through a and desperate fighting. Smaller victories in the west were won, while a general engagement is now on for majority of public spirited citizens the capture of Santillo. Gen. Villa is will not let the occasion pass without directing the attack on Santillo perdischarging what they feel to be a public duty in helping the good work along. That others have felt repaid for the expenditure of similar effort ing. is attested by the attitude that they have taken in securing the above official action. It will be well worth while for each of us to place ourselves in a position to feel a similar degree of satisfaction over a good deed well done by helping to make Michigan's first official road bee day a success.

#### LEGAL QUESTIONS ANSWERED.

For the accommodation of our subscribers, we have arranged with Mr. Allan Campbell, a competent attorney, to answer legal inquiries for our subscribers. For this service a fee of 25 cents for each question will be charged to insure that only questions of importance will be asked. This will bring a personal letter of advice from the attorney, to whom the questions are referred. Address Legal Departare referred. Address Legal Department, Michigan Farmer, Detroit, Mich.

#### HAPPENINGS OF THE WEEK.

An explosion at the plant of the Mexican Crude Rubber Company, at Detroit, last Friday, caused the death of ten men and seriously injured six others. No satisfactory explanation of the cause of the explosion has yet been given

be observed in Persia, Scandinavia and Russia for the small period two minutes and 13 seconds.

Plans have been filed for reorganization of the Wabash Railroad. The plan contemplates the reduction of over ten million dollars in the capital stock of the company, and an assessment of \$20 per share on all stockholders

Both Governor Ammons, of Colorado, and the striking miners are anxious that federal troops be retained in the strike district until a complete settlement is made.

A wide interest is being taken by students in the military camps of instruction to be held at Ludington, Mich., this summer and many applications are being received.

#### Foreign.

This week representatives of the United States, Mexico, Brazil, Argen-tine and Chili will gather at Niagara Falls, Canada, to consider terms for peace between this country and Mexico. It is generally understood that the United States will demand as one of the conditions for settlement, that Gen. Carranza, Villa and Huerta all be removed and a new land law enacted.

Vera Cruz is rapidly showing the effects of the sanitation measures instituted by the American authorities. The fish, meat and street markets have been cleaned up, garbage cans installed and compulsors are installed. installed, and compulsory vaccination is now being planned for.

Last week the Mexican rebels added further victories to their credit. Tampico was taken after a long siege sonally.

Hon. F. D. Monk, former minister of public works of Canada, died at Montreal, Queber, last Friday morn-

Although no political outbreak has occurred, the situation in British politics, as regards the Home Rule question and Ulster, is very acute and much apprehension is felt lest the nation be plunged into civil strife.

Political conditions in Sonto Domingo are unsettled. The revolutionists are not only worrying the forces of President Bordas, but they have also defied American custom house officers and smuggled ammunition across the border from Haiti.

John L. Griffiths, general counsel of the United States in London, England, was stricken with heart disease last Sunday and died a few hours later.

The Italian government will experiment with ultra-violet rays to determent with ultra-violet rays to deter-

phe or from exposure since.

Prison conditions in Mexico as discovered by the American troops, have been very shocking to those accustomed to conditions prevailing in penal institutions of civilized countries. At San Juan de Ulua, where political offenders have been confined for many of the cells were generations, many of the cells were constructed entirely underground with no provisions for sunlight and no san-itary precautions taken whatsoever. The sights hark back to prison scenes

fostered the movement and other organizations interested in the promotion of road improvement in Michigan by issuing the following proclamation designating an official road bee date for Michigan this year:

In 1913 the townships of Michigan raised \$4,336,029 for the improvement and repair of highways; 44 counties under the county road system levied under the county road system levied and repair to the following proclamation of the cause of the explosion has yet the explosion has yet the explosion has yet the sights hark back to prison scenes of medieval times.

Large imports of South American beef are over for the season, and during the months of May and June, importations of frozen and chilled beef from Argentina are not expected to more than equal the product of from Argentina are not expected to more than equal the product of from Argentina are not expected to more than equal the product of from Argentina are not expected to more than equal the product of from Argentina are not expected to more than equal the product of from Argentina are not expected to more than equal the product of from Argentina are not expected to more than equal the product of from Argentina are not expected to more than equal the product of from Argentina are not expected to more than equal the product of from Argentina are not expected to more than equal the product of from Argentina are not expected to more than equal the product of from Argentina are not expected to more than equal the product of from Argentina are not expected to more than equal the product of from argenting are not expected to more than equal the product of from argenting are not expected to more than equal the product of from argenting are not expected to more than equal the product of from argenting are not expected to more than equal the product of from argenting are not expected to more than equal the product of from argenting are not expected to more than equal the product of from argenting are not expected to more than equal the product of from are not expe



HE GREATEST single factor in putting "Truth" into advertising has been the "Square Deal" idea first used by the papers.

But today the "Truth" idea has spread so that it now permeates all advertising everywhere—all business everywhere. As a result we see a growing confidence in manufactured products and their advertising-a confidence that insu es more value to the consumer and lessened selling cost to the manufacturer.

Truth in advertising is the slogan-and it must win because it is right. Honesty in

advertising interests every reader, especially readers of farm publications. The day is past when the advertiser expecting to continue in business can afford to deal other than honestly. Aside from the moral effect which of late very materially enters into its consideration, one of policy and good judgment likewise controls it. At the meeting of the Advertisers' Clubs of America, which meets in Toronto, June 21-25, the question, "Truth in Advertising" will be a subject of much prominence.

# Magazine Section

LITERATURE POETRY HISTORY and INFORMATION



The FARM BOY and GIRL SCIENTIFIC and MECHANICAL

This Magazine Section forms a part of our paper every week. Every article is written especially for it, and does not appear elsewhere

# Glimpse at Modern Agricultural Methods

By PROF. ALFRED VIVIAN.

TO one is in so good a position to enjoy a trip around the world in art and architecture all the pleasure that is open to the man of the the engineering skill that made it succession that only hasty glimpses the ridging is begun with an implecity, and in addition he can enjoy many things that are sealed books to anyone having no knowledge of things agricultural. Some travelers say that leaving America. A Michigan farmer Irishman who stood gazing after an work is laboriously completed by they dread the long railroad rides, and always travel at night when they possibly can, or, if forced to use day- small. Evidently much trouble is ex- ed in the mouth of a tunnel. Upon that these farmers are very "set in light trains, they long for an interesting novel to help pass the time away. There is nothing to see in the country, they say, and after a short time the view becomes monotonous. How south exposure of the Italian farm the hole!" different it all seems when one's major interest is in agriculture!

months have been passed in gazing cattle. out of the car window at the farms; From Venice to Bologna the train planted chiefly on the rougher ground. sights of this locality consists of the watching the workers in the fields; traverses the rice-producing section. The grapes are planted in rows far long-horned oxen used especially in

and observing the different agricultural practices as the panorama was unfolded before our eyes.

So many things of interest were seen in Britain and the northern part of Europe that the sojourn in that region was extended beyond the original schedule. This change was probably justified as the climatic conditions there met with are such as to make any observations of especial value to one interested in the agriculture of Michigan. On the other hand, this change necessitated a hurried journey through Italy in order to be in Naples in time to catch the boat for the voyage to the Orient. As only a small number of stops could be made we have had to depend to an unusual extent upon the car window method of study.

higher. There are really two parallel no inspiration in traveling through a sixty miles of this journey the train very intelligent explanation of this wage of the laborer—and for what re-

possible.

the first corn (maize) observed since of the passengers is reminded of the planting potatoes, etc. After that the would consider the ears nothing bet- express train which, going at the rate hand; the soil being thoroughly pulter than nubbins and the fodder very of fifty miles an hour, had disappear- verized during the process. It is said perienced in curing the corn in this being asked why he gazed so long and their ways" and that it is practically wet climate, for large bundles of it intently after the train he exclaimed, impossible to introduce new machinwere seen hanging on the porches "Begorra! I was wondering what ery, or to induce any of them to try which are commonly found on the would have happened if it had missed new and improved methods of culture. houses.

in daylight) has been passed on the looking stumps are a prominent fea- farmers follow a mixed husbandry, or to help pass the time, for we have are found everywhere in Italy, are of farming and gardening. This sysshe rapidly turned the pages. An apart and ordinary field or garden employment the year around and reis an anxious student and applies as an occasional herd of black and followed, and splendid vegetables are pleasantest days of the last few same, strongly resemble the Holland on the farms are grain, olives (for

practice was elicited from these farmers living here. A tremendous amount as the farmer, for he can find tunnel, but we never enter one with- passes through forty-seven tunnels, of labor is expended in forming these out being filled with admiration for following each other in such rapid ridges. After plowing and harrowing can be obtained of the lovely moun- ment such as is sometimes used in In the vicinity of Milan was seen tain scenery. What wonder that one America for opening a furrow for

The land in the immediate vicinity Florence is located in one of the of Rome is the most poorly farmed The route from Milan to Veniceslies most prosperous agricultural commu- of any seen since landing on the con-We have traveled at least five thou- over level country with the foothills nities to be found in Italy. The foot- tinent. Apparently not more than sand miles by rail since crossing the of the Alps rising abruptly from the hills of the Apennines produce olives one-tenth of it is cultivated, and the Atlantic, and only one night (and plain a short distance to the north, abundantly, and Tuscany is noted the rest is inferior grass land. A few that was over ground already covered Mulberry trees trimmed back to queer world over for its vintage. All the flocks of sheep are seen and an occasional herd of cattle, but on the train. No novel has been necessary ture of the landscape. Grapes, which what Americans would call a mixture whole it seems a dreary waste although in early Roman days it was a been reading from Nature's book as here planted in rows a long distance tem has the advantage that it gives densely populated district. So far the government has endeavored in vain amazing amount of agriculture can be crops are grown between. A few sults in a high income per acre. Near to revive agriculture in this region. learned from the car window if one Brown Swiss cattle are seen, as well the cities truck farming is largely One reason for the failure is said to be that much of the land is held in himself to the task, and some of the white cattle which, if they are not the produced. The principal crops raised large parcels by men who are independent of any income derived thereoil) and grapes. The olive trees are from. One of the most picturesque

> hauling materials to and from Rome. The horns of these animals frequently measure as much as six feet from tip to tip-an unusual length of horn.

All through Italy are found remarkably good roads and their white surfaces stand out strikingly in the landscape as they wind like long ribbons through the bright verdure. These roads are always kept in good repair, and time and again were seen women carrying baskets of stones on their heads to be used in mending old roads or in the building of new ones.

Some of the most intensive truck farming that can be seen anywhere is to be found in the environs of Naples. We are informed that some of the land on which these gardens are located rent for as much

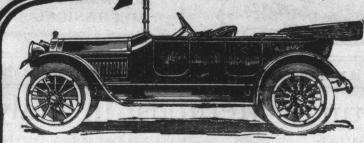
After a climb from Lausanne up the parallelograms by the rows of mulber- which are closely pruned, and a rota- dens are irrigated by water pumped beautiful Rhone valley with its snow- ry trees. The grape vines are plant- tion of ordinary farm crops is grown from wells, and the old water wheel capped mountains, the lower reaches ed between the trees, and are festoon- between the rows. In addition, a few so often seen in Oriental pictures is of which were covered with grape ter- ed from one tree to another, produc- pigs and some poultry are raised. Ev- found in most of them. Crops are races, the train slips into the Simplon ing a most picturesque effect. The ery means is used to add a few dol- grown the year around in this climate Tunnel. Close your eyes tightly for working animals of these farms are lars to the annual income. Silk is and, as the soil is highly responsive twenty-five minutes and you will be-beautiful oxen, with coats as white as produced, mainly by the work of the to good treatment, the gardeners hold the view to be seen while pass- snow. The soil must become very women, who are also noted for their make a living in spite of the high ing through the Simplon! But while hard and compact, for plowing was skill in straw plaiting at which they rent. Farther from the city on the your eyes are closed think for a mo- being done with twelve of these oxen can be seen working in their odd mo- sides of Vesuvius are found many fine orange groves, and wine, of course, is tunnel over twelve miles long (the seen five such outfits, or a total of One thing noticed throughout this produced in large quantities. What a longest in the world) dug right sixty of these fine fellows in one section was that the ground is all lot of wine somebody must drink! through a lofty mountain. The tun- small field, and over fifty teams of ridged. The ridges are about two feet You wonder what becomes of it all nel itself is 2,300 feet above sea level, twelve, and one of sixteen, oxen were wide and, as nothing was growing in until you notice that rich and poor but the mountain top is 7,000 feet seen during a four hours' journey. the bottom of the furrow, the result alike drink these light wines like wa-From Bologna the train strikes seems to be that about one-third of ter. Wine was advertised in the shop tunnels each with a single line of boldly into the Apennine Mountains the ground is producing no crop. windows at 50 centimes the liter, track. The digging was conducted and climbs these rocky hills for two This system is followed on the high which means about thirty-five cents from both ends and when the tunnels thousand feet, only to descend the and rolling ground as well as on that a gallon in American nomenclature. met their centers coincided almost other side until it reaches nearly sea which is low and flat. Our knowledge Even at that small price a gallon of exactly. Someone said that there is level at Florence. During the first of Italian being somewhat limited no wine makes a big hole in a day's



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Italy was entered from Switzerland. Here the land is laid out in regular apart and generally trained to trees as \$200 an acre, annually. The garment of the wonder of it! Here is a hitched to one plow. In one case were ments.

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Wholesale as well as retail dealers in pure copper cable, and ornaments and fixtures. turn does he spend the money?

No good horses have been seen spicuously in evidence. After some experience with Italian drivers, especially those of Naples, we were glad there were no good horses. As a rule we are "slow to wrath" but "right-eous indignation" would but mildly express our real feelings toward these drivers because of the way in which been just as well that we could not understand each other.

How the Italian likes bright colors! costumes and in the way they deck out the horses in bright ribbons and red blankets. Even the carts are blues, rivaling the tints of the rain-

The Italian must be a lover of variety for he seems never to hitch two matched animals to the same wagon now prevent that practice. or cart. If the team is two horses one one of these hitched with an ox. Any are still alive to tell the tale.

day in Naples may be seen carts pull ed by teams consisting of an ox, a since reaching Italy. Perhaps there donkey and a horse, and usually none are some, but if so they are not con- of them is in such condition as to engender fear of death from foundering.

Fresh milk in Naples is true to name. The cows or goats are driven from house to house, and the milking done on the spot. The cow is driven up on the sidewalk, a bottle or pitcher is lowered in a basket from an upper window, and the milking is done they treat their horses. It may have under the watchful eye of the custom er. The basket is drawn up and returned again with the change. The Neapolitan knows himself too well to The love of color is seen in their own have any confidence in milking that is done beyond his range of vision. Even then he is likely to accuse the milk cords, and cover them with brilliant man (or woman) of giving the cows a drink of warm water before leaving painted in the brightest of reds or home so as to dilute the milk and increase the quantity. The goats were formerly taken up the stairway and milked at the door in the upper hallway, but the municipal regulations

"Vedi Napoli e poi muori (see Nais large and the other a mere pony. ples, and then die), is an old saying More commonly, however, the team which the Neapolitans are fond of consists of a horse and a donkey, or quoting. We have seen Naples and

# An Unfortunate Black Cat.

By MARY L. DANN.

ed on a low stool by the window, paring the potatoes for seemed rooted to the spot. dinner, occasionally stopping to watch actly even.

cat, who was washing his face with his paws, as he sat in a broad shaft of sunlight by the kitchen stove.

some time, when it suddenly disappeared. He looked dejectedly down from gazing into the darkness.

"Never mind, foolish," said Doroyou don't do the same thing with

then raced through the rooms in a try, squaring his shoulders and mafrenzy of delight. Finally, he again nipulating the muscle of his right laid down in the sunshine beside the arm. "All black cats are unlucky," he stove, with his small paw thrust down through the knot-hole, which he seemed to regard as the highwayman who had robbed him of his treasure.

The potatoes were pared and Dorothy was shredding the cabbage for quarter it's a Jab." the salad, when Africa sprang up with a blood-curdling cry of pain, his one admonished almost tearfully. paw still thrust through the knot-hole. manner that she did not dare to go near him.

"Help him get his foot out, dear," exclaimed Aunt Florence. However, this command was easier given than about so rapidly and biting and claw- as a cat." ing so fiercely at everything near him, As Robert came up, Aunt Florence but was unable to do so. Something of stone. held it fast. She removed her apron imprisoned foot would permit.

Aunt Florence panted, as she once stick." and tried to extricate him.

OROTHY EDMONDS was seat- go under to see what is there." Dorothy was white and shaking and

"Go out on the street and see if Aunt Florence making quick passes there isn't someone passing who will with her flat iron over the snowy tow- help us, and don't be so frightened. el, and folding it every corner ex- We are going to release Africa someway," said Aunt Florence soothingly, "Catch it, Africa," she called, toss- holding the cat up as far as she ing a small potato to the sleek, black could, while he bit and tore at her apron and made life intensely interesting for her.

Dorothy rushed out and called Rob-Africa rolled the potato about for ert Atwood, a boy of about eighteen. who happened to be going by.

"Oh, Robert, won't you please come the knot-hole in the floor, which had and help us," she pleaded, "Africa has swallowed his plaything, the pupils of put his foot through a knot-hole in his eyes growing larger and larger the floor and I can't pull him out and Aunt Florence can't, and he's bouncing around under Auntie's apron and thy, "I'll get you another, but watch clawing and biting and we don't know what can be holding him."

"I'm your knight, fair lady," said Africa fell to chasing his tail and Robert, with a great show of gallancontinued, as he followed her toward the house, "Probably a jabberwock has got him. They come up through a fissure in the earth and gobble anything they can get. I'll bet you a

"Do be sensible, Robert," Dorothy

Robert, however, continued his run-He continued to circle about, howling ning comment: "If it's a jabberwock, and caterwauling in such a frenzied you'll have to feed it a bat and a lizzard and three pink mice before it will go away. You must stop the opening it came through with a wisp of deadly nightshade, or it will return in thirteen hours, and the next time it executed, for Africa was gyrating comes it is just as likely to get a cow

that Aunt Florence herself hesitated removed her apron from the tortured to make the attempt. At last, she Africa, who spit spitefully at him, and threw her gingham apron entirely ov- then, as if begging his assistance, er him and tried to lift him up and looked up in his face with a pitiful withdraw his foot from the knot-hole, meow that would have melted a heart

"Gee-whiskers, Africanus, I can't from the spitting, agonized creature, see you suffer like this if I have to who seemed to realize that an effort saw the house down over our heads was being made to release him, and to get you loose," Robert continued he tried to come to her, as far as his as he tried to pull up the troublesome foot. "Whatever has you, must have "There is something holding him come up from China, and probably he from beneath and it pulls and jerks," has mistaken your paw for a chop-

more threw her apron over her pet Robert dropped the cat and stepped to the door of the woodshed. He soon "What shall we do? How can we returned with a wide chisel and a get him loose? There is no cellar un- hammer. It happened that there was der this part of the house; so we can't a joint in the floor of the kitchen, a

short distance from the knot-hole. Here was the point of least resistance and here Robert made his attack. He forced the edge of the chisel under the end of the board and the matched edges began to give way. Higher and higher he pried the board and now he could see beneath. To his astonishment he beheld a weasel serenely tearing the flesh from the tiny black paw, his bright eyes shining in the dim light, and his slim body almost raised from the ground, as he clung to his victim.

Robert caught up the broom and used the handle as a pry to tear the board from its place. There was the glimmer of a yellow and white body, as it sped past the opening, and Africa was free.

Dorothy and Robert bathed the injured paw in an antiseptic solution and bandaged it carefully. "Take it from me, Mr. Dark Continent," said Robert, "that when you go fishing for weasels again, you had better use something beside you paw for bait."

#### THE MAPLE TREE.

BY MILDRED M. NORTH.

I love it, that stately maple, I watch it the whole year through. From the springtime bright till the ground is white, Its beauty is ever new.

'Tis first to awake from slumber
When grasses are brown and sear
When its red buds glow, though the
chill winds blow I know the spring is near.

And when the winds blow softer Some day before my eyes All its tassels swing while the robins sing 'Neath the swiftly-changing skies.

In summer its green leaves whisper Of coolness and shade and rest,
Till I scarcely know as the seasons go
Which time is, of all, the best.

October comes, when the daylight Grows shorter, the mights more chill, When banners of gold and of red And are on every hill.

Then my tree spreads out its treas-The gold of the sunlight sweet, The rose of dawn and of sunsets gone, Are showered at Autumn's feet.

In winter though gray and leafless Its graceful branches show,

I know what its roots and its slender shoots Are hiding from ice and snow.

And often in morning sunshine When the storm clouds roll from sight Its branches seem 'neath the sun-light's gleam Like silver burnished bright.

And so from spring to winter,
From winter back to spring,
It greets my sight with some new delight,
A lovely changing thing.

#### FISHING MEMORIES.

BY CHAS. H. MEIERS. When I walk along the river, In the shadow of the trees, While the leaves above me quiver In the cool, refreshing breeze, Fancy brings a boyhood friend
To me at the quiet bend,
And once more with him I stray In the old free, happy way.

Then we settle down to fishing, With our feet hung o'er the brink, And the water goes on swishing
While we rest and smile and think. signt, And I pull with all my might— Comes a bullhead, bringing joy To a small, bare-footed boy.

Thanks to fancy for the pleasure It has seen fit to convey; Fishing memories I'll treasure As the long years roll away.
When I walk beside the stream
I'll be walking in a dream
Filled with joys I used to know In the days of long ago.

If the youth decides to consume all his time and strength in making his arms big and his legs brawny, he ends his career a physical giant, indeed, but also an intellectual pigmy.—Hillis.

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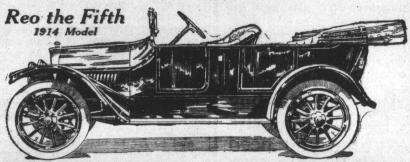
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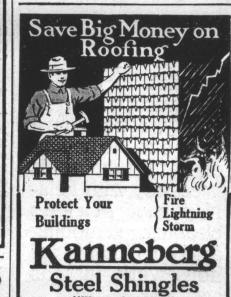
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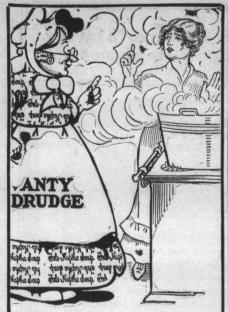
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# Woman and Her Needs At Home and Elsewhere

### A Race of Law Breakers.

of the law excuses no man." We have what shall we say? heard it so often in connection with of the state and the nation are spread ought to feed him cereals, eggs, a bit pan. on the statute books so that he who of meat and other cell-forming foods, runs may read. If we break them we she replied that "she hadn't time to ded cabbage, thrown into ice water do so at our own risk. We can not fuss cooking stuff for him." The boy for an hour. Cut half can pimentoes, plead ignorance.

Similarly, nature has made laws relaid down by man. For, while some wouldn't take his bottle of milk he mustard and one-half cup of whipped by luck or acuteness escape the civil could go hungry. The lad survived, cream. Dress with lettuce and yolks single law of nature and go forever us warnings in the form of head- affliction on an innocent child. aches, dizziness, tangled nerves and

withstood our intemperance we will break down. not admit that we are harming ournature's laws.

It is bad enough to see grownups

cried day after day of hunger, the one large sweet pepper and one dozen sicky, sweet condensed milk not only olives into small pieces. Dry the cabgarding our physical well-being, laws failed to satisfy him, it positively nau- bage and stir in the above ingredients which are punished just as swiftly seated him. His mother said nothing with mayonnaise dressing, to which and far more surely than the laws ailed him but ugliness and if he has been added a teaspoon of dry law, no one can expect to break a through some miracle, but at seven of four hard-boiled eggs put through years tuberculosis of the bone set in. a ricer, sprinkling it over the top. Cut unpunished. And, as in the legal Could anyone make the mother be- whites of eggs in rings and garnish world, so in the natural, we cannot lieve that her criminal negligence in with pimentoes cut in tiny triangles plead our ignorance as an excuse. Not those first three years was responsi- or rounds. only has the press surrounded us with ble? Of course not. She blamed the avenues of information, nature her- whole thing onto God and railed at a rice in a hot skillet containing a lump self has safeguarded us. She sends Providence that would send such an of butter, melted. Let brown well,

sleepless nights as first hints that we might similar be traced to the ruth- ped onion, one-half can of tomatoes, are infringing on her laws. If we dis- less ways in which we walk over na- chopped red or green peppers to regard these she has no recourse but ture's laws. We sleep in rooms which taste, also salt sufficient, cook all toto follow them up with more drastic are never aired, sell the eggs we gether till the rice is done. ought to eat, fail to bathe and exer-And so far as nature is concerned, cise properly, and then wonder where ed one pint pink beans. Chop fine we are law-breakers all. If in no oth- we ever contracted tuberculosis. We three slices of fat salt pork and same er way we offend in eating and drink- keep up on stimulants instead of amount of beef fat. Fry these toing, afflicting our long suffering stom- nourishing food and then wonder why gether till a nice brown, then drop inachs with ill-assorted foods in over- our nerves get out of tune. We work to the fat one finely chopped onion abundant quantities, washed down beyond our strength, not so much and brown it. Then put into the fat with strong tea and coffee, and per- because we must, as because we are one pound of Hamburg steak. Stir haps stronger drinks. Because, by afraid of the neighbors, and then well till steak is done and browned. reason of abundant strength we have blame it onto Providence when we Add the cooked beans and two table-

selves. "It never hurt me yet," is the cause we are such persistent law- one hour. Have enough water with ever-ready response of the glutton, breakers. The rule of living is really the beans so no more will be required There may never have been an abso- very simple temperance in all things. as the dish must be moist when lute breakdown, but over-indulgence Temperance in eating and drinking, served. acts as an accumulative poison, lay-working and playing is nature's deon our own heads.

DEBORAH.

#### Wash and sprinkle with salt. Cover with one large onion sliced, one lemon sliced, one large bay leaf broken HERE is an old saying, heard ruining their own health. But when finely, and five whole cloves. Dot libfrequently, regarding the pro- they deliberately kill their children's erally with butter and cover completeceedings of justice, "Ignorance chances of health by wrong feeding, ly with tomato catsup, about one cupful. Bake at least two hours in a A mother kept her baby on con- moderate oven, basting frequently and civil laws that we are ready to con- densed milk until he was three years adding half a cup of water from time cede its inherent rightness. The laws old. To all suggestions that she to time, as the gravy thickens in the

Mexican Salad.—Three cups shred-

Spanish Rice.—Stir one cup of dry then fill the dish with boiling water Most of our railing against fate and leave to simmer. Add one chop-

Chili Con Carne.—Have ready cookspoons (or less) of Chili powder, salt, Life is a tangle to most of us be- stir well together and simmer slowly

Spanish Luncheon Dish.—Put oneing up a train of ills which will sure- cree. If we obey we are left alone, half cup of olive oil in frying pan, ly overtake the persistent breaker of If we disobey, the punishment be up- with one clove of garlic and one onion sliced. Fry brown. Add one pound of cold roast beef cut in cubes and fry brown in the fat, then add one can of tomatoes and five chili peppers. Meanwhile cook 12 sticks of macaroni in salted water till tender, then add to the meat with one cup of TOT every American palate ac- blespoonful of drippings in a frying mushrooms and salt to taste. Serve cepts Spanish cookery with rel- pan and add one medium sized onion hot, covered thickly with grated

Spanish Kidney.—Boil quarter of a Chili peppers are standard favorites tomatoes and cook slowly until done, pound of macaroni in salted water till and their flavor usually predominates. Stir in one cup of old cheese, grated, tender. Drain and put a layer in a buttered baking dish then a layer of

Frijoles.-One quart Mexican beans. an hour before it is done, and serve then add two red chili peppers and Spanish Flank Steak.—Take two to hot. Some recipes substitute a few

### Some Spanish Recipes that May be Tried By ELLA E. ROCKWOOD.

In the far southwest many Ameri- salt, pepper and a little sugar.

Tripe Spanish.—Fry brown in but- and serve hot. tablespoon of vinegar. Salt to taste, simmer slowly until tender. simmer one hour.

Tomatoes with Cheese.-Put one ta- criss-cross it with a sharp knife, use two sliced onions and five or six

ish. Indeed, for most of us cut fine, also three green peppers their dishes are too highly seasoned. minced. Fry brown, add eight large

cans, however, confess a liking to Stewed Tomatoes with Corn, Span-thinly sliced boiled kidney, then a laycertain foods prepared a la Spanish ish.—Peel six tomatoes (or take the er of sliced or canned tomatoes. Seaand our eastern cooks may be glad equivalent of the canned article), son highly and proceed in the same to learn about some of them. The press out seeds and cut in quarters. way till the dish is full. Moisten with following recipes have been placed at Put two tablespoons of butter in a soup stock and one tablespoonful of my disposal, with the assurance that sauce pan. Add one red or green pep- Worcester sauce. Cover the top with they are representative of the most per chopped fine, and cook without bread crumbs, moistened with melted approved dishes, adapted to general browning until nearly done, then add butter and bake slowly one hour. family use. The Chili peppers can be the tomatoes and one teaspoon of No group of Spanish recipes would obtained at many grocery stores. As salt. Let it come to a boil then add be complete without frijoles, prosuggested, they figure largely in the one pint of green corn freshly cooked nounced free-holies, which, translated recipes. Chili powder can be had if and cut from the cob, or same amount into English, means beans. The Mexthe whole peppers are unobtainable. of the hot canned product. Boil up icans always use the pink beans.

ter one finely chopped onion and add Spaghetti, Spanish.—Break one-half washed, one soup bone cut in pieces, one pound of tripe cut in narrow of a ten cent package of spaghetti in one long red chili pepper, discarding strips, one cup of water, piece of but- small pieces and brown in bacon fat. half the seeds. Slice pepper in rings ter size of an egg, one large tomato. Add boiling water and one onion slic- thinly and put all into cold water. Its equivalent in canned tomato may ed, also three-fourths cup of grated Cook slowly till meat leaves bones, be substituted. Season with a trifle cheese, with salt and chili powder to then remove bone and cut meat in of nutmeg, same of sugar, and one taste. Set on back of the stove and small pieces. Salt to taste about half

two and one-half pounds of flank and slices of bacon for the soup bone and

ing all together until the beans are sects readily eat the plaster mixture, done, also using chili peppers as become thirsty and drink. The water

#### A CONVENIENT DRYING RACK.

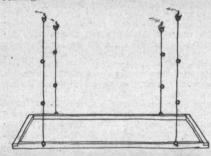
BY H. L. G.

junct to the kitchen.



end of the cord has an iron ring, ted into it with as many more rings at regular intervals along its length height from the top of the stove.

ners as in Fig. 1, nailing securely. Do fasten small strong hooks (strong for from six to 12 hours. nails bent slightly downward may be substituted), over which the rings are slipped when the rack is suspended. They should be so placed that when the rack is in position, these hooks should be directly below those in the ceiling. Attach screen, having the



tacks close together, on top side of frame, as this facilitates removing the dried products.

A rack five feet long is not difficult for two persons to handle, but one of six or seven feet is very awkward.

Just one last word: When the corn is first put on to dry, the rack may be lowered to within one foot of the stove griddles; but care should be exercised to stir the corn frequently to prevent its scorching. Later, when it is no longer sticky to the touch, it may be raised higher by means of the iron rings knotted along the strings.

#### EXTERMINATING COCKROACHES.

With the approach of warm spring weather, cockroaches multiply rapidly and leave their winter hiding places. If cockroaches are troublesome in the house the following simple remedy, recommended by one of the Department of Agriculture's scientists, will unquestionably destroy great numbers and keep them in check as effectively as troublesome insect powders and

this dry mixture in a saucer or on a flat piece of wood or tin where roaches are numerous. Nearby place another flat plate containing pure water. Supply a few inclines of wood or cardanal described in the new 32-page catalanal flat place of wood or cardanal flat place of wood or cardanal flat place of wood or tin where roaches are numerous. Nearby place another flat place of wood or tin where roaches are numerous. Nearby place another flat place of wood or tin where roaches are numerous. Nearby place another flat place of wood or tin where roaches are numerous. Nearby place another flat place of wood or tin where roaches are numerous. Nearby place another flat place containing pure water. Supply a few inclines of wood or cardanal flat place another flat place an board from the floor to the edge of alog sent upon request by this com-the plate or saucer to give easy ac-cess. Float one or two thin pieces of the hot season is here, and secure the information it contains about this wood on the water so that they will line of goods.

ripe tomatoes, with the beans, cook- touch the edge of the dish. The inmakes the plaster set in the intestines and kills the roach. Such traps may be placed in pantries, and bakeries in particular, with good results.

There are yarious poisons which it If one does not care to invest in the is asserted are fairly effective as remready-made devices for drying green edies against roaches. The only one corn, apples, etc., a little ingenuity, of these that seems to give satisfacsome strong hooks, window screen, tory results is a phosphorous paste, inch boards, etc., will serve to make sold in the form of pills. It consists this very serviceable and efficient ad- of sweetened flour paste containing one to two per cent of phosphorous, First determine where the iron and is spread on bits of paper or cardhooks, from which the rack is to be board and placed in the runways of suspended over the kitchen stove, are the roaches. As phosphorous is poisonous to human beings and domestic animals, besides being highly inflammable, it should be used very care-

Considerable relief may be gained by a liberal use of pyrethum powder. to be placed. They should be firmly It is not a perfect remedy, however, imbedded into the joists, for the rack, and is at best but a temporary expediwith its contents, will sometimes be ent, while it soils shelves and other rather heavy. The joists may be lo- objects over which it is dusted. It cated by first boring through the plas- should be used fresh and liberally apter with a very small bit. From each plied. Roaches are often paralyzed of the four hooks, stout glazed cords by it when not killed outright, and of equal length are suspended. Each the morning after an application the infested premises should be gone over about an inch across, securely knot- and all dead or partially paralyzed roaches swept up and burned.

Pyrethrum may also be burned in as one may desire, so that the rack an infected apartment. The smoke may be raised and lowered at any and vapors generated by the burning of this insecticide are often more ef-The rack is made of narrow pieces fective in destroying roaches than the one inch thick and joined at the cor- application of the substance in the ordinary way as a powder. There is no not make the ends of the rack too attendant danger of explosion, and the long for the width of ordinary window only precaution necessary is to see screen. Into the sides of the frame that the room is kept tightly closed

#### FASHIONS BY MAY MANTON.

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8207 Girl's Low Belted Dress, 8 to 12 years

dangerous poisons:

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# Markets.

#### GRAINS AND SEEDS.

May 19, 1914.

Wheat.—It has been a gentle surprise to outsiders to witness an advancing wheat market at this time. From every side the most flattering reports had been coming and it seemed that prices must go to a lower basis, but notwithstanding this the market has had good support from certain quarters and the past week has added to it. Persistent reports of damage by Hessian fly are coming from gradually widening territory with the center of greatest activity in Missouri and Illinois. While it may be that the injury to the plant has been magnified, it is certain that the work of the fly is reaching over a sufficient field that traders must reckon with May 19, 1914. of the fly is reaching over a sufficient field that traders must reckon with the results. Rough estimates have put the probable damage thus far noted at 30,000,000 bushels. Besides this, the falling off in the corn crop of Argentine has added strength to wheat here. A year ago the price for No. 2 red wheat was \$1.07½ per bu. Quotations for the past week are:

No. 2 No. 1

Red. White. July.

Wednesday ......984 9734 87

### Apples - Market is dull southern stuff is hurting some sections of the corn belt has also given supply. One year ago the price or No. 3 corn was 57½ c per buotations for the past winds and likewise a heavy decrease in the visible supply. One year ago the price of the past winds and likewise a heavy decrease in the visible supply. One year ago the price of the past winds and likewise a heavy decrease in the visible supply. One year ago the price of the past winds and likewise a heavy decrease in the visible supply. One year ago the price of the past winds and likewise a heavy decrease in the visible supply. One year ago the price of the past winds and likewise a heavy decrease in the visible supply. One year ago the price of the past winds and likewise a heavy decrease in the visible supply. One year ago the price of the past winds and likewise a heavy decrease in the visible supply. One year ago the price of the past winds and likewise and likewise a heavy decrease in the visible supply. One year ago the price of the past winds and likewise and likewise a heavy decrease in the visible supply. One year ago the price of the past winds and likewise and lik

| wednesday | past week are:
No. 2	No. 2	
Mixed.	Yellow.	
Thursday	71	72½
Friday	71	72½
Saturday	72	
Monday	72	
Tuesday	73	
Tuesday	74	
Tuesday	75	
Tuesday		

a week ago. A few reports of crop damage have come in but they have not been of any considerable moment. Visible supply decreased a half million bushels. A year ago the price was 41c for standard. Quotations for the past week are: the past week are:

		Vhite
Wednesday	421/2	42
Thursday		421/2
Friday	43	42 1/2
Saturday		43
Monday	401/	43
Tuesday	43 1/2	43
Chicago, (May 19	9).—Standard	oats

Chicago, (May 19).—Standard oats 41½c; May 40¾c; July 39½c per bu.

Beans.—Demand has eased off a little. The local board of trade quotes immediate and prompt shipment at \$2.07; June \$2.12 per bu. Chicago reports easy prices. Pea beans, handpicked, choice, are steady at \$2.20@2.25; common \$2@2.15; red kidneys, choice \$3.25@3.35.

Ryc.—This cereal is steady. No. 2 is quoted at 65c per bu.

#### FLOUR AND FEEDS.

Flour.-Jobbing lots in one-eighth paper sacks are selling on the Detroit market per 196 lbs. as follows. Best patent \$5.30; second \$5; straight \$4.75; spring patent \$5.10; rye flour \$4.40 per bhl

DAIRY AND POULTRY PRODUCTS. on

Butter.—Market is firm at prices a ½c lower than last week. Extra creamery 25c per lb; firsts 24c; dairy 17c; packing stock 15c.

Chicago.—The demand is irregular, therefore market is unsettled. Prices are ½c lower than last week. Extra creamery 25½c; extra firsts 24½c; firsts 21@23c; seconds 18c; packing creamery 25½c; extra firsts 24½c; firsts 21@23c; seconds 18c; packing stock 16c.

stock 16c.
Elgin.—Market is firm at 25½c per lb., which is ½c lower than last week. This market holds up better than was

This market holds up better than was expected.

New York.—The market is unsettled, with prices 1c lower than last week. Creamery extras 25½@26c; firsts 24@25c; seconds 22@23c; packing stock 17@17½c.

Eggs.—Market is firm at prices ¾c higher than last week. Current receipts of fresh stock quoted at 19½c. Chicago.—Market is unchanged. Trading was not as sharp as last week but all grades are selling fairly well. Receipts not as heavy as last week. Miscellaneous lots, cases included 17¼@18½c; ordinary firsts 17¼@17¾c; firsts 18½@18¾c.

New York.—Market is active, there being a good demand for fresh stock. Receipts are somewhat irregular in quality. Fresh gathered extras 22½c. @23c; storage packed firsts 21@22c; firsts 20@20¾c; extra firsts 21@22t½c.

Poultry.—Firm: prices higher. Live

Apples.—Market is dull. Fresh southern stuff is hurting the market. Quality is getting poor. Barrel stock quoted: No. 1, \$5.50@6.50; No. 2, \$4@4.50 per bbl. In Chicago an easy feeling prevails on account of slow market. Remaining stock is in few hands who keep price up. Barrel stock now quoted: Spies \$5@6; Baldwins \$5@5.25; Ben Davis \$3.50@4; Golden Russets \$5; Starks \$4@5; Willow Twigs \$5.50@6.

Potatoes.—Market is easy at unchanged prices. Demand is only moderate. Quotations. In bulk 62@65c per bu; in sacks 68@70c per bu. for carlots. At Chicago the market is unsteady. Good stock sold well at last week's prices but poor stuff is hard to sell. Good Michigan round, white stock is quoted at 65@70c per bushel.

#### GRAND RAPIDS.

The egg market opens firm this week with quotations at 17½@18c. Dairy butter is unchanged at 17c. No change is noted in potatoes, sales on the city market being at 65@70c. Oththe city market being at 50 % 70c. Other er vegetables on the market range as follows: Spinach 50 @ 60c; pieplant 40 @ 50c; asparagus 60 @ 70c. The poultry market is easier, the range for chickens being 14 @ 14 ½c; geese 12 @ 13c; ducks 16 @ 17c. Wheat is worth 13c; ducks 16@17c. Wi 92c; oats 39c; corn 65c.

\$4.75; spring patent \$5.10; rye flour \$4.40 per bbl.

Feed.—In 100-lb. sacks, jobbing lots are: Bran \$28; standard middlings \$28; fine middlings \$33; cracked corn slip; coarse corn meal \$30; corn and oat chop \$27.50 per ton.

Hay.—Good hay scarce, with prices steady. Carlots on track at Detroit are: No. 1 timothy \$16.50@17; standard \$15.50@16; No. 2, \$14@15; light mixed \$15.50@16; No. 1 mixed \$13.50 @15; No. 1 clover \$13@13.50.

New York.—Prices steady. No. 1 timothy \$22.50; No. 3 to standard \$17.50@20.50.

Chicago.—Market steady at unchanged prices. Choice timothy is quoted at \$18.50@19 per ton; No. 1, \$16@17.50; No. 2, \$14.50@15.50 at ton.

Straw.—Steady. Rye \$8@8.50; oat straw \$7@7.50; wheat straw \$7@7.50; wheat straw \$7@7.50; wheat straw \$7@7.50 is lower than last Monday. This class of cattle at the close was well cleaned up, only two or three loads remaining unsold.

Our trade was quite active on all grades of hogs, but the general market about a nickel lower than Saturday. Pigs and lights sold to best advantage, this class selling from \$8.85 in a ton.

Market closed fair and a good clear straw \$7@7.50; wheat straw \$7@7.50 at ton.

The market was slow today on yellow there were perhaps 1.5 cars of weighty cattle unsold. The handy butchering cattle, from 1100 lbs. down sold steady to about 10c per cwt.

Our trade was quite active on all grades of hogs, but the general market about a nickel lower than Saturday. Pigs and lights sold to best advantage, this class selling from \$8.85 in a ton.

Market closed fair and a good clear straw \$7.50 in the market was slow today on yellow the promition at the close of last week lightly cattle unsold. The handy butchering cattle, from 1100 lbs. down sold steady to about 10c per cwt.

Our trade was quite active on all grades of hogs, but the general market about a nickel lower than Saturday. Pigs and lights sold to best advantage, this class selling from \$8.85 in a ton.

Market closed fair and a good clear ston.

The market was slow today on yellow the promition and the pr

on lambs; sheep steady. Choice handy clip lambs selling mostly \$8.50 @8.60. We look for steady to shade higher prices last of week with mod-

higher prices last of week with moderate receipts.

We quote: Choice clip lambs \$8.50 @8.60; heavy lambs \$7.50@7.75; cull to fair lambs \$6.50@8.40; yearlings \$6.50@7.75; bucks \$3.50@4.50; handy ewes \$5.75@6; heavy ewes \$5.505.50; wethers \$6.25@6.50; cull sheep \$3.50 @4.50; yeals, choice to extra \$10.25@10.50; fair to good \$8.50@9.75; heavy calves \$5.50@7.

Chicago.

Cattle. Hogs. Sheep.
Receipts today..21,000 30,000 18,000
Same day 1913..21,518 42,761 25,368
Last week ....38,299 111,337 84,572
Same wk 1913..39,006 131,594 74,408
The receipts of cattle today were larger than the Monday requirements these times, and buyers were late in starting out, with prospects for a decline of at least a dime for most kinds, heavy steers especially. Demand centered largely on fat light steers and good butcher stock. Hogs were largely 5c higher, with sales at \$8.25@8.60. Hogs received last week were three pounds heavier than a week earlier in average weight, the average rising to 237 lbs. Today's sheep and lamb market was firmer, with a small supply for the opening day of the week.

Cattle weakened in values by the middle of last week despite continued small supplies, with only a moderate

middle of last week despite continued small supplies, with only a moderate general demand for killing stock, the bulk of the steers crossing the scales bulk of the steers crossing the scales at \$8.10@9, while the extreme range was \$7.40@9.45. On Wednesday the highest sale was at \$9.30, and the next best at \$9.15. Choice heavy beeves sold at \$9 and upward and the common to fair class of steers of light weight at \$7.40@8.15, with a medium class of steers at \$8.20@8.55 and good cattle at \$8.60@8.95. Yearlings had to be well finished in order to sell satisfactorily, the better class going at \$8.65@9.25 and common to pretty good lots at \$7.85@8.60. Most cattle sold much higher than at corresponding periods in former years, and this was true of the common and medium ing periods in former years, and this was true of the common and medium descriptions, as well as of better lots. Butchering cows and heifers had a quick sale as a rule, at \$5.20@9, with few selling over \$8.65, although numerous sales took place of yearling steers and heifers mixed, at high figures. Cutters went at \$4.70@5.15, canners at \$3.50@4.65 and bulls at \$5.50@8.10. There was as large trading in stockers and feeders as could be expected with so few offered and further sharp advances in prices, sales ranging at \$6.90@8.65, the highest quotations on record. As has been the case all along, most of the sales at high prices comprised yearling stock steers and stock calves, and packers purchased a big share of the heavy feeders. There was an animated trade in calves, especially in light vealers, these selling at \$10@10.75 for desirable offerings, while heavy calves want at \$6 and over with stock steer desirable offerings, while heavy calves went at \$6 and over, with stock steer calves in active request at \$7.65@ 8.75. The milker and springer traffic was livelier at \$60@90 per head, with good cows wanted to ship to Ohio dairy districts.

Hogs suffered declines on several

days last week, with much larger re-ceipts than for the preceding week and no corresponding improvement in the demand for choice lots to ship suffalo.

Buffalo.

May 18, 1914.

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

Receipts of stock here today as follows: Cattle 182 cars; hogs 115 d. d.; sheep and lambs 72 d. d.; calves 2,000 head.

With 180 cars of cattle on our market here today and 21,000 reported in Chicago, all cattle weighing 1200 or over sold strong 15@25c per cwt. lower than last Monday, and the heaviest cattle. At the close of the market there were perhaps 15 cars of weighty cattle unsold. The handy butchering cattle, from 1100 lbs. down sold steady to about 10c per cwt. closed at \$47.50@8.40 and stags at \$8.60 long in the demand for choice lots to ship east. General conditions are not any and May came in cold and wet, where as strong for sellers as they where as strong it is necessary for country shippers to act conservatively in the near future if the demand for choice lots of ship where as strong for sellers as they where as strong it is necessary for country shippers to act conservatively in the near future if the demand for choice heats in prices are to be tere. In spite of the cold, weter onservatively in the near future if the demand for choice heats in prices are to be tere. In spite of the cold, weter onservatively in the near future if the demand for choice heats in sit is necessary for country shippers to act to ship wheats and all small small grains look good. Meadows and pastures never looked better. In spite of the cold, we wether, the lamb crop is numbered by thousands, and are doing fine. Wool prices are quoted at 16@17c per pound, but no shearing sown, most farmers sowing from five to 20 acres. Market prices: Cream each per weit prices are to she and all small small small small small small General conditions are not any-@9.10. Prime heavy hogs sold close to top figures.

to top figures.

Sheep and lambs sold extraordinarily well last week, reaching extremely high prices for everything at all desirable in quality, as the receipts were very much smaller in volume than a few weeks ago, while insufficient offerings caused lively competition between rival buyers. Fair numbers of belated Colorado-fed wooled lambs showed up, but otherwise about everything in the live mutton line came shorn, including many Colorado lambs. Prices were decidedly the best of the year for lambs, which sold far higher than a year ago. Southern spring lambs have began moving to market, maining unsold.

Our trade was quite active on all grades of hogs, but the general market about a nickel lower than Saturday. Pigs and lights sold to best advantage, this class selling from \$8.85 @9, while yorkers, mixed and heavy, sold at \$8.85 generally. Roughs were extremely dull and best sows were quotable at \$7.50@7.60; stags \$6@7. Market closed fair and a good clearance was made.

The market was slow today on lambs, but active on sheep. Prices than a year ago. Southern spring 25c lower than the close of last week reaching extremely high prices for everything at all desirable in quality, as the receipts were sirable in quality, as the receipts were few weeks ago, while insufficient of ferings caused lively competition belated Colorado-fed wooled lambs showed up, but otherwise about everything in the live mutton line came shorn, including many Colorado lambs. Prices were decidedly the best of the year for lambs, which sold far higher than a year ago. Southern spring lambs have began moving to market,

and the big Chicago packers received fairly large supplies consigned direct to them from Louisville. Shipments of sheep and lambs from here for the week aggregated 20,258 head, comparing with only 8,821 for the same week last year. At the week's close lambs sold 40@60c higher, and sheep 15@25c higher than a week earlier. Colorado wooled lambs brought \$7.50@9.35, while clipped flocks sold as follows: Lambs \$6@8.50; yearlings \$6.25@7.10; wethers \$5.50@6.25; ewes \$4@6; bucks \$4.25@5.25; spring lambs brought \$8.50@9.75 per 100 lbs.

Horses were not in large supply last week, and yet they were largely

Horses were not in large supply last week, and yet they were largely \$5@15 per head lower, strictly prime ones excepted, for the latter were comparatively few. Buyers did not want many horses, and sales were apt to drag, with good drafters salable around \$225@250 and better ones quoted up to \$275@300. Light chunks brought \$185@220, with heavier ones taken at \$230@250. Pairs of good farm horses brought \$300@350, and quite a number of farm mares sold singly around \$180@185.

#### CROP AND MARKET NOTES.

(Continued from page 561).

(Continued from page 561).

Marion Co.—Wheat and rye are looking fine, and meadows and pastures are in good condition. Oats are up in good shape, and corn is being planted. A larger acreage of corn than usual is being put in. The fruit trees have blossomed, and there are prospects of a fair crop. Some spraying has been done, but no new orchard are being set out. Pigs and sheep are very scarce articles in this county at present. Eggs 18c; butter 18c; calves 6@7c; cows are selling at fancy prices. fancy prices.

Missouri. Wernon Co.—Small grains are in fine condition. Wheat and rye are heading, and have made an abundant growth of straw, so under favorable conditions we shall have a heavy crop of small grain. Meadows and pastures are doing very well. The fruit seems to be all right, in spite of the cold season. There is some spraying done, but not as much as there should be for proper care of the orchards. A good many fruit and forest trees have died during the past year, from what cause no one seems to know.

have died during the past year, from what cause no one seems to know. Some new orchards have been set, and old orchards filled in. Hogs \$7.60; cattle \$6@7; corn 75c; oats 55c; hay \$13; butter \$14; eggs 17c; hens 13c; geese 8c; turkeys 10c; ducks 14c.

Warren Co.—The pig crop is short, and the lamb crop fair. No shearing has been done yet, but there will be a great deal of wool at 20c. There is a large acreage of oats. Wheat, rye, meadows and pastures are fine. Fruit has not been hurt, and will make an meadows and pastures are fine. Fruit has not been hurt, and will make an abundant crop, especially apples and peaches. All orchards of any size have been sprayed, and a few new orchards have been set. A good many silos are being built. Eggs 17c; butter 25c; hogs \$7.75; wheat 90c; corn 70c; oats 50c; potatoes \$1.10.

South Dakota.

Todd Co.—Small grains have made a fine start, as there is plenty of moisture. Meadows and pastures are looking fine. This is a new country, and there is no fruit raised here. Eggs 13c; butter 20c; hogs \$8; wheat 75c; corn 60c; oats 40c; flax \$1.25; barley 50c.

ley 50c.

Meade Co.—April was a wet month and May came in cold and wet.

Wheat and all small grains look good.

Knox Co.—The weather has been somewhat rainy, and the ground is in fine shape for work. The pig crop is going to be large, but there are no sheep raised in this country on account of the wolves. Every farmer is putting in about 60 acres of small grain, and about 60 to 70 acres of corn. Since the rain, wheat, rye, meadows and pastures are doing fine, and cattle have been turned out on meadows and pastures are doing fine, and cattle have been turned out on the pastures. Fruit prospects are good, as there have been no injurious frosts. No spraying is being done. Eggs 14c; butter 20c; cows \$70; horses \$75@150; corn on ear 51c; shelled 53c; wheat 70c; oats 35c.

Kansas.

Cowley Co.—There has been plenty of rain, and wheat and rye are in fine (Continued on next page).

THIS IS THE LAST EDITION.

The first edition is sent to those who have not expressed a desire for the latest markets. The late market edition will be sent on request at any

DETROIT LIVE STOCK MARKETS.

Thursday's Market.
May 21, 1914.

May 21, 1914.

Cattle.

Receipts 1368. Bulls dull; other grades 10@20c lower than last week; milch cows \$5@10 lower.

Best heavy steers \$8.75@9.10; best handy weight butcher steers \$8.25@8.50; mixed steers and heifers \$7.75@8.25; handy light butchers \$7.008; best cows \$6.008; common cows \$5.008; canners \$3.008, 25; best heavy bulls \$7.008; bologna bulls \$6.50.06.85; stock bulls \$6.50.08; feeders \$7.25.07.50; stockers \$6.75.07.50; milkers and springers \$45.008; and springers \$45

\$6.75@7.50; milkers and springers \$45.
@75.

Haley & M. sold Rattkowsky 3 cows and bulls av 943 at \$6.60; to Hammond S. & Co. 7 steers av 991 at \$8; to Thompson Bros. 2 cows av 780 at \$6, 1 do wgh 930 at \$6.25, 1 steer wgh 1070 at \$8.25, 3 cows av 993 at \$6.25, 2 steers av 1065 at \$8, 4 do av 787 at \$7.50, 4 cows av 1157 at \$6.85, 1 bull wgh 1250 at \$6.85; to Ogman 5 cows av 980 at \$5.50; to Heinrich 26 steers av 980 at \$5.50; to Heinrich 26 steers av 916 at \$8.10; to Bresnahan 11 stockers av 600 at \$7.10; to Kull 8 steers av 792 at \$7.80, 3 cows av 793 at \$6.50; to Newton B. Co. 1 bull wgh 1350 at \$6.75; to Kamman B. Co. 5 steers av 894 at \$7.85, 4 cows av 895 at \$6.25; to Applebaum 2 bulls av 960 at \$7; to Gerisch 20 steers av 860 at \$7.90.

Roe Com. Co. sold Beach 8 feeders av 795 at \$7.65; to Mich B. Co. 2

\$6.50@7.25; fair to good sheep \$5.50 @6; culls and common \$3@4; spring lambs \$10@11.

\$6.50@7.25; fair to good sheep \$5.50 @6; culls and common \$3@4; spring lambs \$10@11.

Bishop, B. & H. sold Sullivan P. Co. 8 spring lambs av 55 at \$10.50, 6 lambs av 65 at \$6.50, 10 sheep av 67 at \$6.50, 16 sheep av 90 at \$4.50, 18 do av 75 at \$4.50; to Hammond, S. & Co. 18 lambs av 73 at \$8.25, 31 do av 82 at \$8.25, 9 do av 75 at \$8.25, 10 sheep av 130 at \$5.50, 9 lambs av 75 at \$8; to Mich. B. Co. 303 lambs av 70 at \$8.25; to Young 40 do av 60 at \$6.60; to Fitzpatrick Bros. 17 do av 55 at \$8; to Harland 8 spring lambs av 62 at \$11, 8 do av 45 at \$9.50; to Fitzpatrick Bros. 9 lambs av 75 at \$7, 16 sheep av 105 at \$5, 22 do av 75 at \$4, 13 lambs av 50 at \$5, 10 do av 70 at \$8.25; to Mich. B. Co. 29 spring lambs av 50 at \$10.50; to Hayes 9 lambs av 65 at \$8; to Fitz-patrick Bros. 10 do av 79 at \$8, 6 do av 50 at \$6; to Barlage 22 wool lambs av 55 at \$8.50; to Young 52 do av 75 at \$9; to Barlage 20 do av 50 at \$5.50. Hogs. Hogs.

Receipts, 7755. Heavy \$8.55; pigs and lights \$8.70; bulk of sales \$8.60. Bishop, B. & H. sold Hammond, S. & Co. 4390 av 190 at \$8.60. Same sold Miller & Co. 1012 av 200 at \$8.70.

at \$8.70.

Roe Com. Co. sold Sullivan P. Co. 617 av 190 at \$8.60.

Spicer & R. sold Parker, W. & Co. 1300 av 190 at \$8.60.

Haley & M. sold same 360 av 190

Friday's Market. May 15, 1914. Cattle.

Cattle.

Receipts this week 1558; last week 1269; market steady. Best steers \$8.50 @8.75; steers and heifers, 1000 to 1200, \$8@8.50; do 800 to 1000, \$7.50@8; steers and heifers that are fat, 500 to 700, \$6.75@7.50; choice fat cows, \$7@7.25; good do \$6.25@6.75; common cows \$5.50@5.75; canners \$3.50@4.25; choice heavy bulls \$7@7.25; fair to good bologna bulls \$6.50@6.75; stock bulls \$6@6.50; choice feeding steers 800 to 1000, \$7.25@7.75; fair feeding steers, 800 to 1000, \$7@7.25; choice stockers, 500 to 700, \$7@7.25; fair stockers, 500 to 700, \$7@7.25; fair stockers, 500 to 700, \$6.50@6.75; stock heifers, \$6@6.50; milkers, large, young, medium age \$65@85; common







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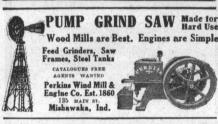
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# arm Commerce.

# Farmers Will Do Publicity Work.

important, indeed, to the owner if done half well. of the hen. That cackle may adver- Along with the name, the bulletin tise the arrival of an egg or the pres- board will find a place and thereon ence of an enemy in the coop. He goods will be advertised. A rather discussions. consciously, or unconsciously, depends common thing, and yet for that reaupon the cackle and goes to get the son it must be an effective one, or it

Now a little cackling would help among business men. the average farmer. He goes about his duties so humbly that no notice is have the habit of following the hubwish to be in the swim and so they buy of, or sell to, the man whose imitates the business man. name is on every tongue. The only way that the farmer can get the ear to make a noise, advertise.

#### Where Experience Counts.

Yes, advertise. Since the days of Benjamin Franklin the business man has been growing more and more wise to the advantages of making his business known. The large amount and the products he has for sale. of advertising space used in periodicals, newspapers, bill-boards, etc., is but of experience. Business houses many years ago used small advertisements whereas today they want more customers. It pays. The test has been made time and time again, and these concerns know about how many dollars and cents they will get in return for every dollar spent in adver-

And the farmer is learning the leshas the experience of the other to guide him. As soon as he feels that here is something he needs he will use it.

#### What May be Done at Home.

The most common of business adverpany placed over the door. Such ad- of his wares. 

THE hen's cackle should not be vertising may have its inception in overlooked. It is important, very sentiment, but it will bring business

#### Reaching the Outside Man.

But the above will only reach that given him; especially when everybody class of persons who pass by the is drunk with the noises made by the farm, so to make the influence broadbusiness men. Above their clatter and er he will put the name of the farm house. Otto Powers is taking the lead clamor for attention, any ordinary din on his stationery and wherever let- in the movement. would not be heard. But this noisy ters go out from that farm the name bunch is getting the business. People goes with it. Cards handed to friends and strangers during moments of have decided to put on the annual apbub; they want excitement. They travel reaches still further into the ple show in Jackson this fall, also to outside world. In these things he also make a fruit exhibit at the state fair.

Then the farmer will add the printed page, and that is the road laid out of those who would deal with him is by the man of affairs. He will buy space and each time he will consider more carefully what he puts in that space—something that will get the eve and hold it till the message is delivered. Here he will widen amazingly the world's knowledge of his farm

And he will exhibit. Automobile shows bring business, why not agrinot the product of an insane mind, cultural shows? At fairs, granges, but of experience. Business houses farmers' clubs, in merchants' windows, at the markets, wherever people congregate, opportunities are ofroom for their message to prospective fered. People want to see the goods; show them—give them a chance to feel the pull of superior products.

#### Holding One's Customers.

Then again, what a tragedy it would be if a satisfied and enthusiastic buyer did not know where to go for more of a product. The business man puts son. The same road that the business the address upon the goods. He inman has traveled, the tiller of the soil vites repeat orders. He makes the will go. But he will go faster. He machine or the package carry the message. So the farmer will put his name and address on baskets, barrels, boxes, cans, paper wrappers, wagons, seek it out, learn its principles and anywhere and everywhere, to catch the eye and fasten the name in the recesses of the buyer's mind as well He will advertise in many ways, as the minds of men generally.

It is along these lines that the farmtising methods will likely find first er of tomorrow will work to increase place with most agriculturists. The his income. While sentiment may ed and placed where every passerby the world, business will compel his cannot help but read, the same as the going forth and heralding abroad, pro- best condition. merchant has the name of his com- claiming wherever he can the virtues

### Many Fruit Growing Communities Fraternize. ENZIE county fruit growers and successful corporations and business

officers were elected as follows: President, A. G. Cornell; secretary, Chas.

J. Kinney. A competent manager will be selected, also a soil expert. A central packing and shipping warehouse will be built from which point Benzie will be an additional 8,000 acres of ruit and farm products will be distributed in carlots. A standard brand which serves that territory has arpackages, machinery, etc., will be pur- or will do so at once. chased co-operatively and all unnec- About 50 Oceana county fruit grow-

farmers have organized and will houses. The by-laws specify that each combine the co-operative mar- member shall have one vote irrespecketing plan that is followed on the Pacific coast with crop improvement work, such as is being done in sections of Illinois and in other places. A meeting was held at Frankfort and loses his vote when he sells his farm that the co-operative marked with the sells farm, but the been falling all of 40 per cent short of the normal figures, and the chances are that veal is going to sell at high prices in the future. There is a marked when he sells his farm that veal is going to sell at high prices in the future. There is a marked with the packages of fruit handled or business are that veal is going to sell at high prices in the future. There is a marked with the packages of mild cown nearly everywhere, and the maturing process are borne pro rata based on the normal figures, and the chances are that veal is going to sell at high prices in the future. There is a marked with the packages of fruit handled or business are that veal is going to sell at high prices in the future. There is a marked with the packages of fruit handled or business are that veal is going to sell at high prices in the future. There is a marked with the packages of fruit handled or business are that veal is going to sell at high prices in the future. There is a marked with the packages of fruit handled or business are that veal is going to sell at high prices in the future. There is a marked with the packages of fruit handled or business are that veal is going to sell at high prices in the future. There is a marked with the packages of fruit handled or business are that veal is going to sell at high prices in the future. officers were elected as follows: Pres- and the association is bound to pay has become highly profitable

tributed in carlots. A standard brand which serves that territory has arand standard methods of grading and ranged a shipping service this season where it has been sold by retail marpacking will be adopted. Improved to meet the needs of growers and it general farming methods will be urgis expected that the boats will also good domestic beef, although it is much inferior in quality. tributed in carlots. A standard brand which serves that territory has ared, also the development of dairying give improved service. Fruit packed and hogs, poultry and bees, it being today will be put into Detroit, Toledo recognized that man cannot live by and other markets early tomorrow fruit alone, especially in off years. morning. Over a hundred growers Seed, fertilizers, spray material, fruit have already joined the association,

essary expenses cut off, as do the ers have organized the Fruit Valley very high prices.

Canning Company and will build a plant at New Era to take care of this season's crop of peaches, apples and other fruits. V. W. Green, a wellknown fruit grower, is secretary. No member may hold over \$200 worth of stock.

Osceola county growers have organized under the name of the Evart Fruit Growers' Association. S. F. Postal is president and Robert Rosen, secretary. It is the purpose to grow more fruit, particularly better fruit. and regular meetings will be held for orchard demonstrations and practical

Recognizing the urgent need of cooperation the farmers of Charlevoix egg, or to put the enemy to flight. would never have become common county has taken an option on the old sugar warehouse and lands at Charlevoix and it is proposed to form a \$10,-000 stock company with shares at \$10 each and to convert the sugar factory into a cold storage and shipping ware-

> Jackson county fruit growers have re-elected officers for the year and

#### SOME PARCEL POST HINTS.

The following hints on packing parcels for delivery by parcel post have been sent out by the postmaster at Washington, D. C.:

Pack and wrap your parcels securely.

Most of the damage and losses are due to insecure packing.

Address your parcel correctly and

Write your own name and address

in the upper left hand corner. Packages containing eggs should be marked "Eggs."

Packages containing perishable matter should be marked "Perishable." Packages containing liquids, jellies,

etc., should be marked "Fragile." Don't pack eggs, berries or similar

produce in a thin pasteboard box. Eggs wrapped separately and surrounded in cotton or excelsior and

packed in a strong corrugated pasteboard, wooden or metal box can be sent any distance. Don't put any writing in the pack-

age unless it is a bill for the goods, or a description of the contents of the package.

Do not send perishable matter so it will arrive in the city on a Saturday evening or on Sunday-unless you use a special delivery stamp.

Consult your postmaster as to the best time for mailing country produce name of the farm will be neatly print- urge him to keep from the notice of so as to reach the city at the best hour, the quickest time and in the

#### LIVE STOCK NEWS.

Wisconsin buyers report a short crop of marketable calves owing to a disposition among dairymen to retain the female calves for maturing purposes. At such central points as Fond du Lac offerings of calves have

There is a wide-spread demand for There is a wide-spread demand for cattle for grazing, and the call is especially large in districts where few young cattle were wintered because of the light supply of feed resulting from last year's drought. The largest demand by far is for yearling light stock steers, and these are bringing work high prices.

Michigan.

Gratiot Co.—Oats were late, some being sown the first week in May. The acreage of oats is above the average, and more barley is being put in than usual. Corn ground is being prepared, but a great deal of it will not be planted before May 20. Wheat is in good condition. Peppermint promises to be a factor in this section of the county, as a great many are promises to be a factor in this section of the county, as a great many are getting enough roots this year to plant several acres next year. This crop proved a paying venture to those who began last year. Fruit, except peaches, is in good condition. Many new orchards were put out. Beans are quoted at \$2. Some are leaving them out of the rotation this season, but the acreage promises as large as usual. Eggs 18c; butter 16@22c; hogs \$7.75.

usual. Eggs 18c; butter 16@22c; hogs \$7.75.

Mecosta Co.—Fall seeding is looking good. There were not as many oats sown here as usual. Fruit prospects are not very bright. Spraying is somewhat neglected. A considerable number of fruit trees are being set. Pasture is coming along rather slow. The pig crop is good. Horses and milch cows are scarce and high. There are quite a good many potatoes still in growers' hands for the time of year. Eggs 17c; butter-fat 22c; butter 18@20c; potatoes 50c; there is not much live stock marketed; hogs 8%c; yeals 7c.

18@20c; potatoes 50c; there is not much live stock marketed; hogs 8½c; veals 7c.

Hillsdale Co.—Recent rains have produced ideal conditions for meadows, pasture fields, wheat, rye, and oats, and all these crops are looking unusually promising. About the usual acreage of oats were sown, the crop for the most part being sown in good time, due largely to the extensive acreage of fall plowing. Preparations for corn-planting are now in progress, and the acreage promises to be large. Fruit trees are blossmoing full, and barring detrimental frosts, the trees will probably be ladened with fruit, as the weather is idea for the blossoming time, fairly warm, with plenty of sunshine. About the usual number of young trees have been set this spring, mostly peach, plum and cherry. But few new apple orchards are being set. The work of building and repairing roads is under way in many localities. The number of young pigs and lambs is as large as usual. The number of pigs will probably exceed that of recent years, due to the fact that cholera has not made its appearance for many months, in localities hitherto affected. The output of wool is about normal, 22c being paid for good quality. Wheat is quoted at 93c; rye 62c; oats 38c; potatoes 55@65c; hay \$11; straw \$4@6; live chickens 15c; eggs 18c; butter 20@22c.

New York.

Columbia Co.—We are having a late spring, and there are some oats to be sown yet. Pastures and meadows are promising. About the usual amount of crops will be grown. Fruit, except peaches, will be a fair crop; fruit trees are not yet in bloom. There is some spraying being done, while a few orchards are being set. The pig and lamb crops are normal. Wool 25c lb; butter 25c; eggs 20c; potatoes retail at \$1.25.

Orleans and Niagara Co.'s.—Farmers are somewhat discouraged over the outlook, as very few spring crops veals 7c. Hillsdale

retail at \$1.25.

Orleans and Niagara Co.'s.—Farmers are somewhat discouraged over the outlook, as very few spring crops are in, and very little ground is prepared, as we have had considerable rain. Winter wheat and grass are looking fine. Apple trees will blossom full, and the prospects are good for a full crop, while peaches will be almost a total failure. Other fruit seems to promise well. Spraying is about completed, although it has been accomplished under difficulties.

New Jersey.

Monmouth Co.—Pigs are scarce and high, selling at \$4.50@5 each at six weeks old. Very little wool is produced, price 20@22c. Only a small acreage of oats has been put in. Wheat, rye, meadows and pastures are looking well. Fruit prospects are

complished under difficulties.

New Jersey.

Monmouth Co.—Pigs are scarce and high, selling at \$4.50@5 each at six weeks old. Very little wool is produced, price 20@22c. Only a small acreage of oats has been put in. Wheat, rye, meadows and pastures are looking well. Fruit prospects are good and considerable spraying has been done. Fruit trees were damaged by rabbits and mice. There are not many new orchards being set. Eggs 18c; butter 30c; veal 10c; wheat \$1; corn 75c.

Morris Co.—The weather is very warm and there is plenty of rain. Only a few farmers are through seeding ones, and some have contained by the average of the cord of the orchards are leing sprayed. Very few new orchards are

many new orchards being set. Eggs 18c; butter 30c; veal 10c; wheat \$1; corn 75c.

Morris Co.—The weather is very warm and there is plenty of rain. Only a few farmers are through seeding oats, and some have started to plow for corn. The season is about two or three weeks late. Prospects for all crops of fruit are excellent. The pig crop is good, and six weeks old pigs are in great demand at \$7.50@8 per pair. There was no winter damage to fruit trees by mice, but snowbanks ruined a few by breaking them down. A few fruit trees are being set out, but no large orchards are being set out, but no large orchards are being put out. Butter 33c; eggs 22c; corn \$20 per ton; wheat \$1.

Lancaster Co.—The pig crop is slightly under normal. There are al-

Crop and Market Notes. most no lambs raised. About the usual acreage of spring grains being put in. Wheat, rye, meadows and pastures ase in excellent condition. Fruit prospects are very good, as the blossoms do not seem to be injured. Some soms do not seem to be injured. Some spraying has been done. Fruit trees were not damaged by mice, but some were killed by rabbits. Few orchards are being set. Eggs 18c; butter 29c; chickens 12@14c.

Erie Co.—Everything is very backward for the time of year. There will be the usual acreage of spring crops. The pig crop is very short. Wheat, we meadows and nestures are in fine.

The pig crop is very short. Wheat, rye, meadows and pastures are in fine

rye, meadows and pastures are in fine condition. Fruit prospects look very good. Eggs 18c; butter 26c; veal 7c; oats 50c; potatoes \$1.

Bucks Co.—We are having a wet and late spring. Oat sowing is not all done yet, although there will be the average acreage of oats and corn. Grain and grass look good. Fruit trees are in bloom and prospects are for a good crop. Many trees are being planted every year, and most every farmer sprays. No winter damage to fruit trees is reported. Choice timothy hay 70c per cwt; meadow hay 45c per cwt; eggs 20c; butter 30c; potatoes \$1; corn 82c; oats 52c; milk at creamery \$1.25; in city 4c per qt. Pigs are scarce and high.

Ohio. Carroll Co.—We have had a few light frosts, but the fruit has not been injured. The recent showers have started things growing nicely. Farmers have a lot of plowing to do yet; on account of the wet weather farmers are behind with plowing, and very little corn has been planted. There are not many sheep to shear this spring.

Columbiana Co.—As the weather has been wet, some farmers have not finished sowing oats, and some have their corn ground plowed, but it is still too cool to plant. There is going to be a good acreage of potatoes planted. Wheat is making a splendid growth. Pasture is good, and many farmers have turned their stock out. There is a fine prospect for fruit this year, but not much of the spraying has been done. Several are setting out new orchards. Sheep are about all sheared, and wool prices run from 18@22c; eggs 18c; butter 24c; chickens 18c; wheat 98c; corn 72c; hogs \$8.75. Columbiana Co.-As the weather

\$8.75.
Crawford Co.—We are having a late spring. Wheat, meadows and pastures are in good condition. The usual acreage of spring crops will be put in, Corn planting will begin as soon as the ground is prepared. Some fruit trees are in blossom, and the buds are not damaged by the frosts we had. Some spraying is being done. A large amount of wool will soon be ready for market, and buyers are now

we had. Some spraying is being done. A large amount of wool will soon be ready for market, and buyers are now offering 20c. The pig and lamb crop is large, with few losses. Eggs 17c; butter 22c; butter fat 24½c; hogs \$8; calves 8c; wheat 90c; corn 60c; oats 36c; hay \$12.

Hancock Co.—Wheat and rye will make a good crop. Pastures and meadows are a little short yet, but will make a heavy growth if warm weather continues. There are more spring pigs, and probably fewer lambs than usual. Wool is selling at 21c. On account of the wet weather fewer oats than usual were sown, and a larger acreage of corn will be planted. Fruit prospects are good. About one-half the farmers have sprayed their trees. Many water-bound pikes will be built this summer. Eggs 18c; cream 24c; butter 20c; hogs \$8.35; cattle \$7@8; wheat 92c; corn 60c; oats 42c; hay \$8@10.

Holmes Co.—The weather is warm, with plenty of rain. Pastures are good, and many farmers are turning out their stock. Wheat prospects are fine. There is not much alfalfa raised here. The average acreage of oats and corn will be planted. Some corn

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The opportunity of securing free home-steads of 160 acres each, and the low priced lands of Manitoba, Saskatchewan and Alberta, will soon have passed. Canada offers a hearty welcome to the Settler, to the man with a family looking for a home; to the farmers son, to the renter, to all who wish to live under better conditions.

Canada's grain yield in 1913 is the talk of the world. Luxuriant Grasses give cheap fodder for large herds; cost of raising and fattening for market is a trifle.

The sum realized for Beef, Butter, Milk and Cheese will pay fifty per cent on the investment.

Write for literature and particulars as to reduced railway rates to Superintendent of Immigration, Ottawa, Canada, or to Canadian Government Agent.



#### AUCTION! AUCTION!! AUCTION!!

and mules every Monday. Private sale

# Grange.

INTERESTING PROGRAM AT CLIN-TON COUNTY POMONA.

Members of Clinton County Pomona Grange, and visitors, were the guests of Wacousta Grange, Wednesday, May 6, and were accorded a hearty welcome by the Master John Espie, who gave a splendid address at the opening of the meeting.

Wacousta is a comparatively new Grange, having been organized in March, 1912, by M. T. Middleton, of Flint. Mr. Middleton evidently, in his work of organizing and installing new Granges, believes in starting with a "large quantity of charter members of good quality." In this particular Grange this precept was exemplified and seldom do we find such a substantial class of farmers and their families as formed the nucleus of The local pro-Wacousta Grange. grams that appear in the weekly pa- life's pleasures together, not each one in the Farmers' Club movement, Minper is ample testimony of the leadership that has been developed.

The entertainment of readings and music was furnished by members of the home Grange and was a credit to their talent and ability.

E. A. Winegar, of Wacousta Grange, gave a very practical talk on the care of the dairy cow, and amphasized the fact that cleanliness is the most im-lustrates that good citizenship means eous and due to the initiative of the portant factor in caring for milk and cream.

Oscar Clark discussed the future of for the man who makes a study of the subject and cares for his orchard properly.

"What is our progress in government reforms?" was the next question for discussion and was ably handled by G. F. Ottmar, who said: "We have quite a number of radical reforms. Some are not an improvement but a change. One reform that is of great benefit to the farmer, is the parcel post. While it is true that the express companies have cut rates, yet they do not bring parcels to our County Farmers' Club for 1914 is a over the old system. As for the bank date of organization of this pioneer erwise.

good citizenship.

Mr. Townsend expressed great month completes the printed pro-

pleasure in having the opportunity of gram. Special features include a sacred to the family, when the few have elapsed since its inception. books and papers were read and discussed. They often gathered around FARMERS' CLUBS IN MINNESOTA. the old organ and sang the old familiar songs, and in other ways shared going separate ways, seeking for nesota has recently outstripped her in pleasure and entertainment. The civ- the work of organizing active Clubs. ilization of that day was of the na- The reason for this is the fact that ture that cements home ties, or, in the organization of Farmers' Clubs in other words, we had a cementing civ- Minnesota has been fostered by the ilization. Today we are participating agricultural extension division of the too much in a diverting civilization. University of St. Paul, while the de-Mr. Townsend concluded by giving velopment of the Michigan Farmers' "A Message to Garcia," which well il- Club movement was entirely spontanbeing equal to the occasion.

concerning "Community Life." Moth. on February 1, 1914, there were 625 are great possibilities in fruit growing er's Day was then appropriately ob- active Clubs in the state of Minneserved, followed by luncheon, served sota. Most of these Clubs meet once by sisters of Wacousta Grange.

Ingham Co. MRS. E. J. CREYTS.

# Farmers' Clubs

YEARLY PROGRAMS.

Ingham County Farmers' Club. The annual program of the Ingham

door, nor take them away, as does neatly bound booklet, the cover page the parcel post. Since the reduction of which bears simply the name of of rate and increase of weight has the Club and the year for which the taken effect it is not only a great im- program serves. At the head of the provement, but a great convenience title page appears two dates, one in to the farmer as well as to others. Di- each upper corner, which express volrect nomination of United States umes in the matter of Club experi-Senators is also a great improvement ence. The first of these is 1872, the reserve, time will serve to show among Michigan Farmers' Clubs. The whether it is an improvement or other is the year for which the program serves. At the bottom of the The brother to whom was assigned title page is the announcement that the topic, "Father's Example in Citi- the regular meetings of the Club oczenship,' not being prepared, E. A. cur on the second Saturday of each Holden, of Capitol Grange, and com- month. The next page is devoted to missioner of Schools T. H. Townsend, a list of the officers and directors of of Clinton county, were asked to make the Club, while the page following some remarks along this line. Mr. gives a list of the standing commit-Holden said that more and more we tees of the Club which, besides the are learning that the prime object of usual committees on program, locaeducation is to make better citizen- tion of meetings and music, includes ship. The churches, the schools, the a floral committee, a memorial com-Sunday schools, the Y. M. C. A. are mittee, a corn club committee and a teaching people to be better citizens, committee on domestic science. The are training them for a life of useful-balance of the booklet is devoted to ness. Today we are measuring men the presentation of the monthly proand women, not by their wealth but grams for the year, one to each page. by what they are doing to raise the At the head of each of these appears standard. The father's acts and words the date including the day of the have a vast influence on the citizen- month on which the meeting will ocship of the future. The father's in- cur, the name of the host and hostess fluence in the home goes forth' and who will entertain, and the farm name extends to the community, the state of the place of meeting, in most inand the nation. A father's good name stances. Next follows a quotation apis a better legacy to his children than propriate to the season or the occaa bequest of gold or silver. Our lives sion. Then comes the program propare rendered more valuable, as we are er, in which the subjects for discusable to uplift and build up the lives sion and the titles of addresses or paof others. Our farms are far more pers are given. The musical numbers valuable if the boys and girls of the are arranged by a special committee community are educated, refined and of one for each meeting, whose name industrious. The most valuable asset is given on the program for the of the community, state and nation is month. An announcement of the personnel of the table committee for the

visiting a Grange meeting in his old Temperance meeting in March, Dairy home town, and urged co-operation meeting in May, Young People's Day between the Grange, the Farmers' in September, Women's Day, in No-Clubs and kindred organizations, they vember, and a meeting devoted to the should go hand in hand, side by side, Boys' and Girls Agricultural Clubs, in all working with the same high and November, which meeting is held at worthy motives. It is good to be here the Court House at the county seat. and catch the spirit of the day and Meetings are held every month in the carry it back with us. He paid a high year with the exception of July. The tribute to "Mothers' Day," and the Boy and Girl Club work was inaugusplendid proclamation of Governor rated by this Club last year with such Ferris. The language used, and the success that it was made a feature of thoughts expressed. The man is not Associational work this year through a good man, not a good citizen, we the influence of the Ingham County might say, who is not willing to sac- Club. On the last page of the prorifice some personal pleasures to gram appears the motto of the Club, please the home—to build up the "Growth is better than permanence, home. Fear was expressed that there and permanent growth is better than is a gradual drifting away from ex- all." The spirit expressed in this The spirit expressed in this ample set by fathers and mothers in motto no doubt explains the notethe pioneer homes; where the family worthy growth and permanence of were wont to gather by the fireside. this pioneer among Michigan Farm-There was then an hour set apart, ers' Clubs during the 42 years which

While Michigan is the pioneer state Club workers themselves. Some sta-Mr. May next gave a few remarks tistics recently compiled show that each month, having similar meetings with a similar program to those usually held by local Farmers' Clubs in Michigan. A review of published reports of many of these meetings shows, however, that the members are making their work broad from the standpoint of education as well as entertainment. During the winter season, considerable attention was devoted to co-operative work, and egg selling associations and other similar organizations were built up from the Club memberships, while in some Clubs co-operative buying was made a factor of the work. With the coming of spring, bird study clubs have been organized in several localities, while as entertainment features, the old spelling contest was reinstated in many Minnesota communities through the medium of the Farmers' Club.

We shall be glad from time to time to publish little features of interest relating to Farmers' Club work in Minnesota, as these may be helpful by way of suggestion to Michigan Club workers.

#### CLUB DISCUSSIONS.

New Club will Hold Corn Contest.—
The May meeting of the East Nankin Farmers' Club was held at the home of Mr. and Mrs. Christian Jorgensen, Tuesday evening, May 5. Mrs. O. N. Webb, of Grosse Ile, gave an interesting talk on the Farmers' Club proposition. She advised holding of monthly meetings, holding no meetings through the summer, but having a Fourth of July celebration and a Club picnic. She considers the question box a great help in promoting in-New Club will Hold Corn Contest .-Club picnic. She consuers the quantion box a great help in promoting interest and helping the farmers buy and sell their produce, etc. After the terest and helping the farmers buy and sell their produce, etc. After the talk by Mrs. Webb, an interesting discussion was held on her subject, and she gave many valuable pointers. The Club voted to hold a corn contest this summer, taking into consideration the best ten ears selected from a measured acre, the total yield on one acre, and the cost of production. The Club voted to join the State Association of Farmers' Clubs. After adjournment Farmers' Clubs. After adjournment a bountiful supper was served, which was enjoyed by all. Cyrus Lathers,

was enjoyed by all. Cyrus Lathers, Secretary.

Discuss Farm Topics.—Fifty members of the Hadley and Elba Farmers' Club met in April with Mr. and Mrs. Harvey Phelps and had a very pleasant time. Bert Bullock and Mr. Hutchings gave a fine paper on potatoes and alfalfa raising. Reading by Jennie Phelps, music by Harland Phelps.—Flora Pierson, Cor. Sec.

# Veterinary.

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

Bronchial Asthma.—For the past six months one of my oxen has breathed heavily, and I am at a loss to know what to do for him. He slavers some and breathes with difficulty; he was troubled with lice and I applied zenoleum a few times, which has killed most of the lice. J. E. A., Rosscommon, Mich.—Give I dr. fluid extract lobelia, 30 drops fluid extract stramonium, ½ oz. Fowler's solution at a dose three times a day.

Blood Poison.—I have a sow that had chills and fever which lasted for

a dose three times a day.

Blood Poison.—I have a sow that had chills and fever which lasted for four or five days; three days later she aborted; now her hind legs are swollen and she walks lame. I gave her epsom salts, but no other medicine; now I would like to know how to remove swelling and soreness from hind leg. C. Y., Fort Wayne, Ind.—Give your sow 30 grs. of hypo-sulphite of soda and 10 drops of Donovan's solution at a dose three times a day.

Rheumatism.—I would like to know what can be done for my lame chickens. The first symptoms they show is lameness, then they droop for a few weeks or a month or two, then die. Some of our roosters' combs turn black. We keep White Leghorns and the hens refuse to set. S. S., Silverwood, Mich.—It is perhaps needless for me to say that their coop should be thoroughly cleaned, whitewashed, and if damp and drafty, some changes should be made to remove these causes. Give each chicken a ½ gr. sodium salicylate, ½ gr. powdered nitrate of potash and 5 grs. of ground gentian at a dose two or three times a day. Also dissolve 1 dr. nowdered sulphate iron in each gallon of their drinking water. Change their feed and let them run on grass in sunlight.

Wart on Eyelid.—My cow had a wart on under eyelid, which dropped off, leaving a raw sore which has a bad odor. S. R., Trilby, Mich.—Apply peroxide of hydrogen twice a day, 10 minutes later apply powdered alum or salicylic acid.

Mange.—I have a calf that has skin disease which seems to start on head and extend to different parts of the body. Several months ago some of my calves were troubled with it and it continued to bother them until they died. J. M., Algonac, Mich.—Apply one part sulphur, one-half part carbonate of potash, and five parts of vaseline to sore parts of skin every day or two.

Rheumatism.—My sows have been kept in a small pen for the past two months and now they seem to be stiff and weak in legs. J. J., Croswell, Mich.—They should be kept in a dry comfortable place nights, allowed to run on grass during the day, and

Weak Back.—I bought a good-looking horse some time ago and soon found out why I got him; when down has trouble in getting up. He is a good traveler and a good worker. P. A. R., Dearborn, Mich.—Give him 1 dr. ground nux vomica and 2 drs. of potassium iodide at a dose in feed three times a day. Keep his bowels open and don't overfeed him when idle.

Worms.—I have a horse that is thin Worms.—I have a horse that is thin in flesh and occasionally passes a worm; therefore, I think worms may be keeping him thin. R. M., Marlette, Mich.—Give your horse 6 drs. of aloes, 2 drs. santonine, 30 grains of calomel, 2 drs. of ground ginger at one dose once a week; also give 1 dr. fluid extract nux vomica, ½ oz. fluid extract gentian and a dessertspoonful of salt at a dose in feed twice a day.

Barren Mares.—I have a pair of

Barren Mares.—I have a pair of mares seven and eight years old; both raised colts when five years old and I have been unable to get them with foal since. They appear to be in heat most of the time. W. C. G., Chilson, Mich.—You had better have them examined by a Vet. or an experienced horseman who keeps stalling. Prugg danmed by a vet. or an experienced horseman who keeps stallions. Drugs given to such mares have little or no effect and I am inclined to believe they are perhaps barren. You might try injecting them with a soda solution or the yeast treatment which I have repeatedy prescribed in this department. partment.

partment.

Roarer.—When our five-year-old horse gets excited or is over-exerted he breathes like a broken-winded horse and the glands of throat are swollen. J. F., Marion, Mich.—Apply one part tincture of lodine and three parts camphorated oil to throat once a day. Gice ½ dr. fluid extract nux vomica, ½ dr. fluid extract lobelia and ½ of stramonium leaves at a dose in feed three times a day.

# Are You Fattening Lice or Hogs?

Neglect of pens, runs and troughs makes hog lice—and disease—a probability.

The feeder who thinks unwholesome conditions harmless is, therefore, throwing away good money. The one sure road to profit in hog raising is by way of cleanliness and sanitation through use of

# Dr. Hess Dip and **Disinfectant**

It destroys lice, the cholera germ, in fact, all germs of infectious diseases, when sprinkled about the premises. Powerful, harmless, easily applied. Make a solution, one gallon of dip to 70 or 100 gallons of water. Spray with this thoroughly. Prepare a plank-sided wallow and let the hogs roll in the dip solution. This treatment will end lice and, in addition, render hogs immune to cholera and other infectious diseases.

Dr. Hess Dip meets the Government requirement for sheep scab. Best thing known for sheep ticks and for spraying horses and cattle. Also a valuable agent for disinfecting sewers, sinks, drains and outbuildings. Write for a free dip booklet.

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DEADLY SCOURS
Sefentific, Tested, Safe and SURE CURE
FOR 75 CENTS
we will send prepaid bottle to last a year. Money
refunded if it fails.
ROUGEMONT FARM REMEDIES, Detroit, Mich.

WHOLESALE FEED Ask for price list. Everything in Feed, THE BARTLETT OO., 100 Mill St., Jackson, Mich.

BREEDERS' DIRECTORY.

CATTLE.

# **Aberdeen Angus Cattle**

We have just received a wire to ship all our surplus young bulls of serviceable age to Minnesota, With grade Angus, yearlings is sling at \$12.00 to \$150.00, these young bulls, closely related to five international Grand Championa, should be worth \$200 to Michigan farmers with a dozen or more grade cows. Wire, phone or write at one for reservation.

GEO. B. SMITH Addison and Somerset, Mich.

# **ABERDEEN-ANGUS**

HERD FOUNDED IN 1900,
Strains represented consist of Trojan Ericas, Blackbirds and Prides, only, Black Quality Ito, a bull of
rare individuality and merit, heads the herd.
WOODCOTE STOCK FARM, Ionia, Mich.

FOR SALE -2 Reg. Guernsey bulls 2 and 4 years old spring show. Berkshire swine either sex. JOHN EBELS, R. R. 10, Holland Michigan.

GUERNSEY BULL CALF, nicely marked, 3 weeks old, great grandson of Gov. Chene, \$50 takes him, AVONDALE STOCK FARM, Wayne, Michigan.

HEREFORD BULLS 2 six months old, allen Bros., Paw Paw, Michigan.

**HOLSTEIN BULLS AT FARMERS PRICES** Sired by one of the best bulls of America. LONG BEACH FARM, Augusta, Kalamazoo Co., Mich

# OPPORTUNITY!

born Dec 25-13 from a daughter of Sir Johanna Friend Clothilde, 20 A. R. O. daughters. Price, \$70. Bull calt, born Dec. 22-13, from a daughter of DeKol 2nd Paul DeKol No. 2, 34 A. R. O. daughters, Price, \$85. Heifer calf born Oct. 19-13, from a grand daughter of Sir Johanna Friend Clothilde. Price \$100. All well marked, heifer more black than white,

HOWARD EVANS, Eau Claire, Mich.

HOLSTEIN FRIESIAN CATTLE BREEDERS of high record cows. Young bulls at farmers prices. JONES & LUTZ, Oak Grove, Michigan.

### ESPANORE FARM. LANSING, MICH.

**Kegister'd Holsteins** Bull Caives \$50 to \$200.

An absolute guarantee with each purchase. CHASE S, OSBORN, Owners, L. M. HATCH. Supt \$225 Buys a registered heifer 8 mo, old and registered bull 7 mo, old, both % white, no not akin. B. B. REAVEY, Akron, Michigan

Opsiland ford—Offer (bull calves, choice A B. O. breeding, \$100 and up COLE BROTHERS COMPANY, Ypsilanti, Michigan

HOLSTEIN REGISTERED HEIFERS—6 mo. old priced to sell. Write for pedigrees and prices NETHAWAY BROS., Burton, Michigan.

Holsteins II High Grade Holstein heifers from Heavy Milkers. Also Registered Bull. Price for the bunch \$1000 F. O. B. J. C. BARNEY, Coldwater, Mich.

Handsome Thoroughbred Holstein Bull Calf O. I. C.—gilts bred for June and July farrow. Also for sale. My 25 lb. Butter bull: out of grand A R. O. dam. Seven-sights white. Splendid individual. ROUGEMONT FARMS, Detroit, Michigan.

#### **BIGELOW'S HOLSTEIN FARMS** Breedsville, Michigan, Breeder of high class Registered Holsteins.

A. R. O. HOLSTEIN COWS FOR SALE. 6 very fine A. R. O. cows, bred to Johanna Concordia Champion, and Duke Ormsby Pietertje DeKol. Price \$1859. Service bulls and bull calves. Kindly write me just what you want L. E. CONNELL. Fayette, Ohio.

MICHIGAN HOME AND TRAINING SCHOOL LAPEER, MICHIGAN.
Breeder of High Grade Holstein Cattle. Lists and
prices upon application.

A FEW CHOICE Holstein Friesian Bull Calves for Sale. A. R. O. Stock, GREGORY & BORDEN, Howell, Michigan.

Registered Holstein Bull—271b. dam, 31-lb. granddam, His 5 nearest dams have butter records that average 251bs. in 7days, 2 years old. Write for pedigree. Hobart W. Fay, Mason, Mich.

Holstein Friesian Cattle Herd Headed by Albina Bonte for dam and sire's dam A.R.O. at 4 yrs. butter 7 day 23.37 lbs. No stock for sale. W. B. Reader, Howell, Mich.

#### "Top-Notch" Holsteins.

Choice bull calves from 1 to 7 mo, old, of fashionable breeding and from dams with official milk and butter records for sale at reasonable prices.

MOPHERSON FARMS CO., Howelf, Michigan.

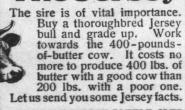
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The Greatest Daley D The Greatest Dairy Breed
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JERSEYS—Bull calves nearly ready for service.
Sired by Jacoba's Fairy Emanon 107111.
SMITH & PARKER, Howell, Michigan.

If you are JERSEY BULLS write us today and we in need of JERSEY BULLS write us today and we on some grandsons of Hood Farm Pogis 9th, that will surprise you. Fisherton Farm, Pontiac, Michigan.

MAPLE Lane Register of Merit Jersey Herd-Tu-beroulin tested by U.S. Government. Bull calves from cows in R. of M. test. Heifer calves whose dams, grand-dams, and great grand-dams are in the Register of Merit. IRVIN FOX. Allegan. Michigan.

# The Jersey



AMERICAN JERSEY CATTLE CLUB 324 W. 23d St., New York

Lillie Farmstead Jerseys (Tuberculin tested, Guaranteed free from Tuber-culosis,) Several good bulls and bull calves out of good dairy cows for sale. No females for sale at present. Satisfaction guaranteed. COLON C. LILLIFE. Coopersville, Mich.

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

Jersey Bulls Yearling and two-year-old. Eligible to register. Splendid breeding. Priceright. Address LEWIS RILEY, Metamora, Mich-

JERSEYS—Bull calves bred for production, Also cows and heifers, Brookwater Farm. R. F. D. No. 7, Ann Arbor, Mich.

FOR SALE-14 Polled Durham & Shorthorn Bulls from 4 to 24 months old. C. CARLSON, LeRoy, Mich.

Shorthorn Bulls For Sale—One roan 3-yr-old weighing aton. Price \$250. Also 3 calves 6 mo. old, from good milking cows. M. A. BRAY, Okemos, Mich.

DAIRY BRED SHORTHORNS of best Bates strains, all sold. J. B. HUMMEL, Mason, Michigan.

SHORTHORN CATTLE W. W. KNAPP, Howell, Michigan,



TPAYS TO BUY PURE BRED SMEET OF PARSONS "The Shespman of the East."

I sell and ship everywhere and pay express price for cith offer and price list, Oxfords, Shropshires and Polled-Dolames.

PARSONS, GrandLedge, Mich. R1,

Loicesters Yearling and ram lambs from Champion flook of Thumb of Mich. Also select Bekrshire swine. Elmhurst Stock Farm, Almont, Mich.

Durocs & Victorias A few extra Sept. Boars and bunch of Gilts for 1st of April farrow. M. T. STORY, Lowell, Mich., Citizens Phone 55.

BERKSHIRE—Choice fall Boars and Gilts of select breeding, also spring pigs. Priced to sell. WHITE OAK FARM, R. No. 4, Brown City, Mich.

Chester Whites Reg. Bred Gilts-Orders taken for spring pigs and Collie pups. Holstein Bulls at Bargains. PAY B. PARHAM, Bronson, Mich.

CHESTER WHITES—The long type, prolific kind.
A nice lot of spring pigs.
MEADOW VIEW STOCK FARM, Helland, Michigan,

O, I. C'S-Spring pigs, get my price before you buy elsewhere. CLOVER LEAF STOCK FARM, R. No. 1, Menroe, Michigan. O. I. C'S. I HAVE A NICE LOT OF HAND. OTTO B. SCHULZE, One-half mile west of Depot, Nashville, Michigan.

O. I. C. Take orders for spring pigs. One 8 mo. fine N. H. Weber, OakView Farm, Boyal Oak, Michigan. O. l. C-16 sows bred for spring farrow, 30 fall wants. GLENWOOD STOCK FARM, Zeeland, Mich.

O. I. C. Sows bred for June farrow. We are John BERNER & SON. Grand Ledge, Mich.

# THIS SOW WEIGHED 932 LBS. AT 23 MONTHS OLD IONIA GIRL

I have started more breeders on the road to success than any man living. I have the largest and finest herd in the U.S. Every one an early developer, ready for the market at six months old. I want to place one hog in each community to advertise my herd. Write for my plan, "How to Make Money from Hogs." G. S. BENJAMIN, R.No. 10 Portland, Mich.

O.I. C's All sold. Would be pleased to book your order for spring pigs, C. J. THOMPSON, Rockford. Michigan.

O. I. C. Three September Boars, four September Gilts. Am also taking orders for spring pigs, they are extra good ones. NEWMAN'S STOCK FARM, R. No. 1, Marlette, Mich.

O. I. C. Boars six months old, spring pigs.
A. R. GRAHAM, FLINT, MICHIGAN.

O. I. C. Swine—May I have the pleas-order for a pair or trio, not akin, of April and May farrow, They are bred right, Satisfaction guaranteed, A. J. GORDEN, R. No. 2, Dorr, Mich.

DUROC JERSEYS—Fall gilts of the large, heavy boned type, bred for Aug. and Sept. farrow. Also spring pigs, not akin. F. J. Drodt, R.1, Monroe. Mich.

DUROCS—A good growthy fall pig immuned and bred for August farrow will make you money, Give me your order now for May shipment. Also fall boars ready for service, KOPE KON FARM, Kinderhook, Michigan.

FOR SALE DUROC JERSEYS-College Boy 138577 farrowed Sept. 7, 1911. Spring pigs after June 1, 2914. J. H. BANGHART, Lansing, Michigan.

Rancy bred Duroc Jerseys—Boars & Gilts of spring & summer farrow. Good individuals at reasonable prices. John McN icoll, Station A. R 4. Bay City, Mich.

KORN-EL STOCK FARM now offer Duroc Jersey pigs prices.

E. R. CORNELL, Howell, Michigan.

DUROC JERSEYS-A few fall pigs of both sexes for sale. CAREY U. EDMONDS, Hastings, Michigan.

DUROC JERSEYS-Spring pigs either sex at reasonable prices. S. C. STAHLMAN, Cherry Lawn Farm, B. 2, Shepherd, Mich.

Duroc-Jerseys -Spring boars from prize-win-ning strains. Sows all ages Brookwater Farm, R. F. D. No. 7, Ann Arbor, Mich.

ESSEX PIGS—From Michigan's oldest herd. Get Lyour order in for something good. You know the kind that comes from the Flint River Farm. You have heard of us before. E. P. OLIVER, Flint, Mich.

LARGE TYPE P. C.—Largest in Mich. Fall pigs all by the largest boar in the U. S., weight 900 lbs., 24 months old. Come and see. Expenses paid if not as represented. W. E. LIVINGSTON, Parma, Mich.

POLAND CHINAS—Both Western and Home Bred. Either sex, all ages. Prices right. W. J. HAGELSHAW, Augusta, Mich.

#### MY OH MY! What an Opportunity.

Starting May 1st, we are going to give to the farmers and breeders an opportunity to get started right in the breeding industry. We are going to give you a chance to get hold of foundation stock that will give you a nucleus for one of the finest and best herds in your community. We are going to show you as we have others, that you will have greater success with our big type

POLAND CHINAS

than with any other breed. We want to place at least one pig. or a pair in every community, to advar-tise our herd. We will give agency, if not already taken. If interested, write for our plan and prices. HILLCREST FARM, KALAMAZOO, MICH.

Poland China Boar; Sows Bred, All of the Big Type.
A. A. WOOD & SON. Saline, Michigan.

P. C.—Fall bears and gilts. Spring pigs. Shorthorn females, Oxford Sheep. O. W. GRUM, Secy.. Cent. Mich. Shorthorn Ass'n.. McBrides, Michigan.

POLAND CHINA PIGS—From large Prolific stock, Shorthorn Bull Calves. Eggs 41 per 15 from choice Barred Rocks. ROBERT NEVE, Pierson, Michigan. DUTLER'S Big Boned Prolific Poland Chinas. Grow big, keep easy, mature early, ready for market at 6 months. Why? Because we've bred them that way for more than 20 years. We have 25 big boned boars ready for service. Buy one and make more money on your hogs. You can't get any better at any price. P.C. History Free. J. C. BUTLER, Portland, Mich.

30 Poland China Fall Pigs—Good ones from immune sows 410 and 415 each, while they last. Bred sow sale Feb. 27th, send your name for catalog if you want to buy Big Types with Quality, Wm. Waffle, Coldwater, Mich.

350 BIG TYPE MULE FOOT HOGS—America's Champion Herd. Prolific, hardy. Best for Mich. Also Ponies. J. DUNLAP, Box M, Williamsport, Ohio

Mule Foot Bred sows, bred gilts and boar pigs, not related, for sale. Satisfaction guaranteed. G. C. KREGLOW, Ada, Ohio,

Yorkshires — Spring Pigs Of Excellent Quality. GUY J. DOTY, R. 2, Monroe, Michigan.

FOR SALE-Yorkshire boars ready for service.
Sows bred for Sept. farrow. Prices
reasonable. C. H. JOBSE, Mt. Clemens, Mich.

YORKSHIRE Swine—March & Apr. pigs ready to ship, Pairs not akin, College Princess and Cooks Bacon foundation stock. Geo. S, McMullen, Grand Ledge, Mich.

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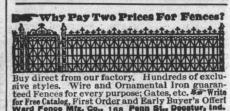
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