

MICHIGAN FARMER

AND LIVE STOCK JOURNAL.
PUBLISHED WEEKLY.
ESTABLISHED 1843.

DEC 10 1910

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

VOL. CXXXV. No. 24.
Whole Number 3525.

DETROIT, MICH., SATURDAY, DEC. 10, 1910.

75 CENTS A YEAR
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THE INTERNATIONAL.

The recurrence of the season for the holding of this premier live stock show of America has this year seemed to inspire an increased number of stock breeders and feeders, from all parts of the country, to attend the show and gather all the knowledge possible from a comparative study of the grand specimens of the improved breeds and the finished products of the feeder's art which are always to be found among the entries in the various departments at the International. A study of the crowd in attendance at the show made it apparent that the proportion of those in attendance who were personally interested in the live stock business was larger than usual at this show, which would seem to assure that the benefits of the exposition to the live stock industry of the country will be correspondingly great. As for the show itself, it was fully up to if not superior to the high standard of previous years in quality, while in the number of high-class exhibits it excelled last year's show in most departments.

The Fat Cattle Classes.

As usual at this show the public inter-

the third time in the period that they have been won by an entry of the Iowa Agricultural College. The selection of this steer as the Grand Champion of the show has again demonstrated the ascendancy of baby beef in the favor of our best judges of quality as well as of the consumers who favor the tender, juicy meat of the well finished calf or yearling. The weight and quality of the grand champion were little short of marvelous when his age is considered. Upon this point the great, Irish judge said: "I never in my life saw such a ripe steer for his age. The weight of 1,100 pounds at ten months and the wonderful firmness of flesh gave him the place over the Canadian steer, Roan James, a great steer, but a trifle softer in flesh."

The steer referred to by the judge as a close second to the grand champion was a yearling Shorthorn, champion in his class, bred and fed by James Leaske, of Ontario, who won the grand championship of the show in 1907 with Roan King, a half brother of Roan James who came near to landing a second championship for his owner.

The story of this calf's selection and the method of feeding which resulted in his

year, it was the unanimous opinion of the best judges that the quality of the exhibits averaged the best of any ever shown at the International.

Again, in the selection of the grand champion car load, the modern tendency toward the baby beef type was evidenced, the yearlings being the favorites of the judges as well as of the spectators at the show. The final winners of the grand championship in this class were a load of 1,200-lb. Angus yearlings exhibited by E. P. Hall, of Illinois.

A notable thing about these cattle is that they were never housed during the feeding period. Mr. Hall picked these cattle up as calves from the best herds in six Illinois counties during October of last year. He purchased 46 head of the best he could find, some of which were pure-breds, but most of which were high-grades. These were all fed until about two months ago, when Mr. Hall reduced their number by elimination to 37 head, and fed the balance to finished condition, selecting his steers for the International exhibit only a few days ago. To his foresight in this regard he probably owes his success in the ring, as Judge Ingwersen placed emphasis on the even quality of

ration, and during the last six weeks of the feeding period oil cake has been made a factor in the ration.

Mr. Hall is an extensive feeder of cattle, and has been a frequent exhibitor at the International. In 1904 he won first premium on a load of Angus steers, from which one steer was selected as an outstanding individual and a possible future winner by the Iowa Agricultural College experts. The steer was purchased by them, and their judgment was verified by his future development and by the fact that he won the grand championship in the individual fat steer class the next year. The steer was Blackrock, the 1905 winner of this coveted prize.

The grand champion car load sold in the ring to a Pittsburg firm at 13½ cents per pound which, while not a record price for winners in this class, is about a fair average of values reached in previous years. They crossed the scales at an average weight of 1,156 lbs., and brought their owner \$2,340.90 after winning prizes totaling \$1,125.

The championship in the Shorthorn special class was won by a load of Shorthorn yearlings over other steers of the breed of all ages, shown by J. D. Waters,



Grand Champion Car Load of Fat Steers at the International for 1910. Baby Beef Fed in the Open, Fittingly Pictured with Snow Covered Backs.

est centered around the picking of the grand champion steer from the large number of entries in the several classes of fat steers by the process of elimination which preceded the judging of the several champions in these classes and the final selection of the grand champion fat steer of the show. The celebrated Irish judge, Richard G. Carden, who was the expert secured to make this final selection, performed his work rapidly but thoroughly, and from among the eligibles for the grand championship selected Shamrock II, a grade Angus calf shown by the Iowa Agricultural College, making the seventh time in the eleven years which this show has been held that the first honors have gone to the Angus breed and

winning the high honors are most interesting, but will be deferred until the next issue, in which cuts of both steers will appear. In the sale ring Shamrock II was sold for 60 cents per pound, which is the highest price for which a champion has been sold since the first year of the International show, when Advance, the winner in 1900, sold for \$1.50 per pound.

In the car load classes for fat steers the leading beef breeds were all well represented, there being 73 loads to be judged after the eliminating process, against 53 last year. These were divided among the breeds as follows: Angus, 30; Shorthorns, 21; Herefords, 20; Galloways, 1, and grades 1. Notwithstanding the greater number of exhibits as compared with last

the load in comparison with two and three-year-old Angus steers which won the championship in the older classes and with which these yearlings competed for the grand championship honors. As above noted, these yearlings were fed in an open yard, not a shed being available for their shelter, which shows the possibilities of cattle feeding in the open. After the purchase of these calves Mr. Hall fed them a light ration of corn and oats, with clover hay as roughage. The feed was gradually increased until the calves were gotten on full feed about March 1, when they were crowded with ear corn, half of which was shelled. During the summer they had the run of a blue grass pasture and were given a supplementary grain

of Illinois. This load of cattle won a total of \$1,200 in prizes for their exhibitor and sold in the ring at \$9.15 per cwt.

In the other breed specials no championship awards were made, the awards being allowed to stand by ages without competition in a class for all ages.

From the above summary of the championship results at the Eleventh International, the supremacy of the well finished young animal would appear to be well established in the minds of the expert judges employed to pick the winners at this great show, a lesson which should not be allowed to pass unnoticed by the feeder who is in the business of producing high-class beef, either on a

(Continued on page 506).

Subscribe for the Michigan Farmer while the subscription price is 75c a year; \$1-20 for 2 years; \$1.50 for 3 years; \$2 for 5 years. After January 1 the price will be \$1 a year; \$1.50 for 2 years; \$2 for 3 years; \$2.75 for 5 years.

FARM NOTES.

The Joint Rot of the Bean Stem.

This last season our beans were cut off at the first joint above ground by some insect. Probably one-eighth of the beans in the field were affected. The beans were cut just after they commenced to fill. Can you give the cause and a remedy for the same?

Montcalm Co.

E. B. W.

It is probable that this inquirer is mistaken in the cause of the trouble in his beans. Unless he has actually found the insect at work and knows that the trouble was caused by an insect, it is a reasonably safe conclusion that it is a fungous trouble, little known and not very prevalent in this country, but designated as the joint rot of the bean stem. Attention was first called to this trouble in 1901 when the New York Experiment Station received many reports relating to a trouble of this kind. At about that time this difficulty was also noted in many Michigan bean fields, but the writer has never heard of it since until the receipt of the above inquiry. Observations made in New York at the time of its appearance, as above noted, failed to reveal the real character or cause of the trouble, which was at that time attributed to excessive rains but later in Michigan was said to be due to a fungus which attacked the plant at the first joint above the ground, although this was not satisfactorily determined. At any rate, it could hardly be caused by exceedingly wet weather in Michigan this year. It has been considered of little commercial importance for the reason that it did not prevail to any extent following the season in which it was rather common, as above noted, in the early years of the last decade.

A Winter Cover Crop for the Alfalfa.

I sowed a piece to alfalfa the last of August and sowed one bu. of barley per acre to protect the seedling through the winter. The barley has grown to be a foot high. I would like to know if the barley will be likely to smother the alfalfa and if I ought to pasture it down.

Lenawee Co.

A. B.

In the writer's opinion there will be no danger of the alfalfa smothering out under the growth of barley during the winter. In fact, this cover should be a material aid in bringing the alfalfa through the winter without damage from the effects of cold weather. Of course, we do not know all about alfalfa yet in Michigan, but this is a reasonable theory, and is substantiated by the fact that in all sections where alfalfa is successfully grown it is the common practice to let the late growth stand over winter as a protection to the plants, and most authorities contend that there should be a growth of at least one foot left standing for this purpose when the alfalfa goes into the winter. It is probable that the barley will make a rather more dense covering for the surface of the ground than would the foot growth of alfalfa, since the stems of the latter are stiffer and not so quickly killed by freezing, but it would not be likely to mat down so closely as to smother out the alfalfa. As between leaving and removing this covering, there would seem to the writer to be no possible choice for its removal.

THE PRACTICABILITY OF THE CONCRETE BLOCK BARN.

In some future issue I would like to have someone discuss the "pros and cons" of a cement block barn, with the horses and cows in the bank or basement part, open on three sides, north, east, and south. Some claim is made that hay does not cure well in a barn so tight as cement blocks would make it. I want to build as permanently as possible and don't want to go wrong.

Berrien Co.

R. G. B.

In reply to this inquiry would say that experience has fully confirmed the idea of concrete block work for farm buildings by a positively favorable conclusion. I have already described this barn, but for the benefit of more recent readers will again go into some details. The barn is 40x80, with a stable on the side 22x100. The stable is attached to the barn and has 8-foot concrete walls to the plate. The walls of the barn are 18 feet high, the gables being frame. The reason for frame gables is that these lend themselves to the modern ideas of architecture in being lighter appearing. Concrete block gables would look too much like a jail. Further, the frame gables are cheaper and more easily supported.

Moist mixed concrete is porous as compared to wet mixed and, under the microscope, looks like a loose stone pile. The complaint of spoiled hay against concrete blocks might possibly come from a high block gable of porous material. The frame gable and block walls have never given

me anything but the best results in this respect. The first eight feet of wall is of 12-in. blocks and the last 10 feet of 10-in. blocks. This makes a 2-in. offset to receive the joists which support the mows.

At this point of wall making a form is built to mold the water table of 4 inches and projecting 3 inches beyond the wall. Plaster columns are built at each corner with two in the front center and one in each end center. These columns add to the appearance and give great strength to the walls. No farm building of blocks of any considerable size should be built without the plaster columns. These columns may be made afterwards of solid poured concrete, if well finished forms are used, and are built at less expense than where made of blocks. Since the blocks are hollow and these spaces superimposed, by leaving an opening at the bottom on the inside about one inch square, leading to this space, and a similar opening on the outside at the top of the wall, a good degree of ventilation is secured and the objection of dampness, so often urged, is obviated. The somewhat usual ventilation in frame barns, of the cold air rushing in between the siding, through knot holes and through the floor, which seems to meet with general approval by those fearful of concrete construction, is obviated and in its place is really the King system of ventilation. Solid concrete walls can be improved by superimposing drain tile in a similar manner.

The plate is secured to the wall by bolts being inserted in the last row of blocks when making the blocks, and thus bolted firmly to the wall. The wall is tied with timbers in the center above the driveway at 32 feet from each end. The roof is self supporting, so the walls, with the plaster columns, stand for any possible side thrust. The stable floors are smooth-finished concrete. In case it developed that the hard floors were injurious to horses' feet, precautions were taken that the floor might be planked over. One stall has been planked but there seems to be no reason for planking any more. A concrete floored hog pen, 20x60, was provided with boarded floors for nests, but use has determined that, when well bedded, a plank floor is a superfluity and unnecessary. A great many of the precautions in regard to concrete as building material were theoretical and passed for wisdom until experience has proven different.

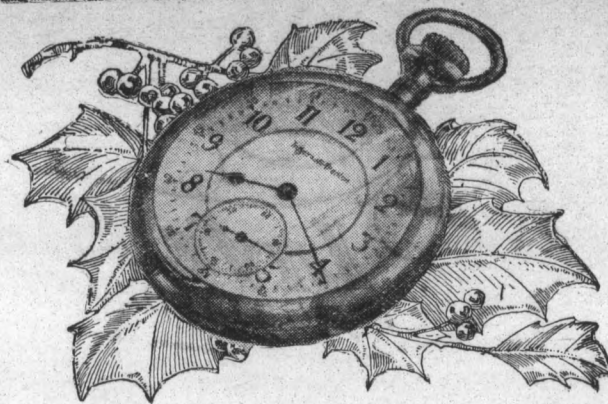
Every person has some peculiar idea of stable construction. My idea is an attached stable to the side of the barn, with the roof constituting the ceiling. This prevents dirt from mows overhead and allows the maximum of light from the windows. By placing the horses at one end of the line and using a litter carrier the manure is mixed and the horse manure prevents the pile from freezing in winter, and the cow manure prevents the overheating of the horse manure and consequent loss of nitrogen. The main body of the basement can always be utilized for sheep, colts or dehorned cattle.

The barn described has been in use five years and has fulfilled every expectation. It is cool in summer time, warm in winter. When the storms are raging outside it is calm inside.

The show farm buildings in the east, giving monolithic or solid concrete effects, are usually low and conform to the European models of farm buildings. Concrete block barns, medium to high, with frame gables, are more the Middle West style of farm building. Since architecture in a measure reflects the taste and the spirit of the times, concrete block work will be one of the features of the great farm belt, just as the red barn is at the present time. There are numerous tricks of the trade which enable one to change the somewhat objectionable monotony of the gray colored concrete. Face down block machines enable one to use an addition of lime to the mixture, which makes the blocks a pleasing white on the face. If more expense is permitted a special cement and silica, i. e., pure white sand, makes almost a marble face. Iron ore paint or venetian red, bought in quantities, are effective for coloring to resemble reddish sandstone at a very small expense.

As to the cost of concrete block buildings, as compared with lumber, local conditions determine this largely. Proximity to sand and gravel is an important item, also distance from point of haul for cement. On general principles, with the ability to do much of the work with ordinary labor, and with the lessened cost of painting, the difference is in favor of concrete work.

Shlawassee Co. JAS. N. McBRIDE.



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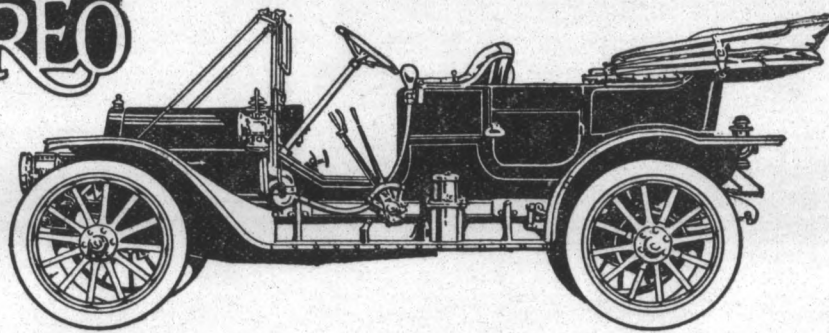
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NOTICE.

At the annual meeting to be held in the City of Hastings on January 3rd, 1911 at one o'clock, P. M., the members of the Michigan Mutual Tornado, Cyclone and Wind-Storm Insurance Company will vote on amendments to and revising the charter of the said Insurance Company. Dated Hastings, Mich., Nov. 28, 1910. D. W. ROGERS, Sec.

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THE POTATO CROP.

With Accounts for 1909 and 1910.

While we do not make a specialty of potatoes we have, in common with a number of farmers, grown from two to five acres for several years past. We have not always used the best ground for the purpose, but rather that which was most readily available; for instance, the 1909 crop was grown on a wheat stubble where the seeding had failed, and the other crops have for some time been grown in young orchards as a suitable catch crop. This year's crop was grown in this way, on a timothy sod which was plowed up for a young orchard. We feared to plant corn here on account of the grubs and cut worms, and did not care to plant beans after our experience with flea beetles last year, neither would strawberries be suitable after the sod, and grain crops would not be allowable in the young orchard; so we tried potatoes.

In addition to the soil not being in ideal condition for potatoes so far as the rotation is concerned, (it is usually advised to have them follow clover), the soil on which the two crops mentioned were grown is somewhat run down, it having been recently purchased from a party who had rented the fields for many years, and had put little back in the way of fertilizer. Consequently the soil was deficient in humus, and being on the clay order was too hard and compact for good potato soil. This explanation will help to explain several things which will appear in the accounts, for instance the light yields notwithstanding the heavy coats of manure and the abundant culture given, also the large number of sunburned potatoes in the crops, the ground being so hard that the tubers lay near the surface. This might have been partially prevented by hilling with a shovel plow, but we feared to do this during the very dry weather, and in general we prefer level culture; however, under these conditions I believe it would have been better had we hilled them up slightly after the rains in late August.

Potato Account, 1909, Four Acres.

Expenditures.	
Mar., Apr. and May, 4 1/2 loads manure at 50c on ground.....	\$ 20.75
May, Plowing	5.00
June 2-19, Harrowing six times....	6.55
43 bu seed potatoes at 85c.....	36.55
Treating seed and cutting.....	3.50
Marking ground, both ways.....	.75
June 21-24, Planting with hand planters	6.75
June 30, harrowing	.85
July 10 to Aug. 19, cultivating four times	6.25
Aug. 7, spraying for blight, 3 bbls. Bordeaux and labor	2.90
Aug. 21-23, pulling weeds	2.00
Oct. 26-30, digging (by hand) and putting in cellar 485 bu. unsorted potatoes	27.06
Nov. 16 to Dec. 8, sorting out frozen, rotting and small potatoes	9.50
Total	\$130.91
Receipts.	
100 bu. at 12 1/2c.....	\$ 12.50
49 bu. for planting, credited at 12 1/2c	6.12
33 bu. sold at 10c in cellar.....	3.30
278 bu. used and fed to stock, credited at 10c	27.80
25 bu. frozen and rotted, loss.....	
Total receipts	\$ 49.72
Net loss on crop	\$ 81.19
Net loss per acre	\$ 20.30

It will be noted that the seed, most of which was purchased from a neighbor, cost 85 cents per bushel, or more than was realized from the part of the crop sold, and within \$13.17 as much as was credited to the entire crop. True, we might have sold in the fall at 25 cents and come out with a loss of ten to fifteen dollars, but we were in a hurry and did not wish to take the loss to our car, besides we agreed, in common with others, that the price was too low, so we kept holding them. Buyers purchased many frosted potatoes during the cold weather, then when warm weather came on and the frost came out of them they were a sorry sight. We had to go over our entire lot in the cellar. I think this is about the worst showing we have ever made on any kind of crop, but I believe that we will do well to study some of these failures, as well as the phenomenal successes that are paraded by white-shirt writers and land agents in catalogues, newspapers, and some farm papers. It may be worth more to us to know where we have failed than to know how others have succeeded, and it may be worth still more to us to know how others failed.

Potato Account, 1910, Five Acres in Young Orchard.

Expenditures.	
Fall and spring 35 loads manure at 50c on ground	\$ 17.50
Plowing	7.50
Harrowing, four times	5.60
49 bu. seed potatoes ready for	

cutting, at 15c	7.35
May 16-21, marking ground, cutting and planting	15.00
May 23 to June 23, harrowing five times after planting	7.00
June 29 to Aug. 20, cultivating five times, seven next trees.....	14.10
July 4-14, spraying with knapsack sprayer, 18 lbs. arsenate of lead at 8c	1.44
Labor	3.08
July 27, hoeing and pulling weeds..	1.75
Oct. 24-26, digging potatoes by hand, and putting in car and cellar..	33.25
Commission	14.11
Freight, (part of car was apples)	23.00

Total

Receipts.

Nov. 8, 336 bu. potatoes sold in Chicago, 42c	141.12
75 bu. unsorted in cellar at 25c..	18.75
75 bu. small, green and sunburned at 10c	7.50

Total

Balance, net profit on crop..\$ 16.69

These potatoes followed a sod, mostly timothy, which was kept over on account of a failure of the clover seeding. They were planted in hills 2 1/2 x 3 feet, with a 4 1/2 foot space on each side of tree rows both ways, which would take up about one-fourth of the ground. These strips next the trees were sowed to oats in August to hold the snow and protect the trees. The culture given was also somewhat different than would have been given had they not been in the orchard, and a certain part of it should really be charged to the orchard account. However, this account will close into the orchard account, in common with other crops grown in the orchard. Where trees are the main crop other things are made subservient to their needs.

It will be noted that there are a large number of "small and sunburned potatoes." These were mostly sunburned ones. The ground was so hard that the tubers were forced up, the rains washed the soil above them off and quite a number of tips were left bare. We thought some of hilling slightly with a shovel cultivator, but it was so dry at the time that we feared it would do as much harm as good. However, I believe if this had been done after the August rains, it would have saved some of this loss. The tubers were too large and not ripe enough to be first-class stock, so they did not bring a top price, but we cleared 31 cents, or one cent per bushel more than we could have sold them for here, and did not sort them as closely; besides it saved freight on some Ben Davis apples that were sent at the same time.

Although this is not a very encouraging outlook for potato growing, I believe we shall try about the same amount next year, and if possible give them a more congenial location. If our new seeding looks well enough in the spring we will have some good clover sod on a field more loose and sandy, which should be an ideal location for potatoes. S. B. HARTMAN.

GROUND PHOSPHATE ROCK.

I understand that you have used ground phosphate rock. Will you please tell me what it costs per ton and is there a dealer near who handles it? I would like to get some but am not ready just yet to buy it by the car load.

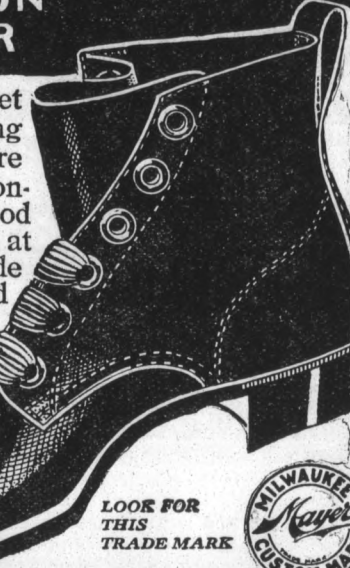
Charlesvoix Co. I. W. B. I have used ground phosphate rock as an absorbent in the cow stables and other stables. I have applied it as a top-dressing on different crops, I have put it on at the rate of 1,000 lbs. per acre on clover sod and plowed it down for corn, but I know very little, after all, of its real worth or the benefit of it. It does not act quickly like commercial fertilizer. You cannot put it on and see the results at once. You have got to have faith and wait for results. It is a good absorbent in the cow stable, but chemists now tell us that very little of it is made available by the manure, and also that it does not serve as a trap for volatile nitrogen, therefore, it would be no better to use in cow stables than dry fine earth.

Ground phosphate rock or floats, costs about \$10 or \$12 delivered in bags here in Michigan. I do not know where you could get it. I coaxed our dealer at Coopersville to buy a carload a couple of years ago, because I wanted to try it. Upon my guaranteeing to take all that he could not sell to somebody else, he ordered it, and I think I have used the whole carload with the exception of a ton, or a ton and a half. He did not seem to be successful in selling it to anybody else. I still have a small amount of this left and we are using it as an absorbent in the stables. I know of no one handling this product and do not think it would be profitable to use it unless it could be purchased in car lots, because in less than car lots the freight would be prohibitive.

COLON C. BILLIE.

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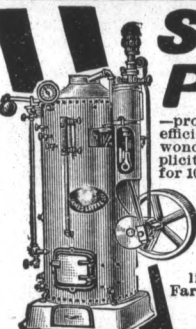
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LIVE STOCK

THE INTERNATIONAL.

(Continued from first page).

commercial scale or as a side issue in his general scheme of farming.

In this connection the opinion of Richard G. Carden, the noted Irish judge who placed the championship award in the fat steer class, will be of interest to our readers. Before his departure from Chicago he said.

"The car load lots were beyond all belief in quantity and uniform quality to people across the water, who run live stock on grass the year round. The American stockmen have the right idea in finishing their stuff early, making 'baby beef.'"

The grand championship in the feeder class was won by A. A. Neale, of Colorado, on a fine load of Shorthorn calves.

The Fat Sheep Classes.

In this department of the show the car load exhibits naturally attracted more attention than the display of individual fat sheep. The entries of car load lots of both sheep and lambs were more numerous than for some years and the average quality was very good indeed. Michigan has the honor of providing the material for the grand championship in this department. The grand championship car load of fat sheep was exhibited by Benj. Conley, of Marshall, Mich., who has been an exhibitor in the car load classes since the International was first organized and has previously won some important prizes. His exhibit at this year's show was a very well finished load of native, grade, Shropshire clipped lambs. This was the only load of clipped stock in the show but there was strong competition in the range lambs shown by A. J. Knollin, grade Shropshires bred in Idaho, and the range and native bred champion yearlings, the first of which were Idaho crossbreds exhibited by J. O. Finley, and the second, grade Shropshires shown by McFadden & Claxton, of Illinois. It is a credit to the Michigan sheep industry that the grand championship car load of the 1910 International were not only fed but also bred in our state.

The grand champion fat wether of the show was a Southdown yearling exhibited by Huntlywood Farm, which is a part of Sir George Drummond's estate. The cut of the winner, presented on this page, shows him to be of a rugged type for the breed. His chief competitors from among the ring of thirteen champions in their respective classes from which the winner was to be picked were a yearling Hampshire shown by Renick Bros., and a Shropshire shown by J. Lloyd Jones, the Hampshire winning the reserve championship. The winning of this award by the Huntlywood farm exhibit is notable from the fact that at the last seven Internationals exhibits from the same farm have won five championships and two reserves with their highly bred and perfectly fitted Southdowns.

The Southdown breed won another testimonial to its quality in the championship award in the class for fat wethers shown by agricultural colleges, the award in this class going to the University of Wisconsin on a Southdown, while the reserve championship was won by the University of Wyoming on a Shropshire-Leicester crossbred wether.

Altogether the individual fat classes in the sheep department were filled with animals of high quality, and the exhibit was a most interesting and profitable one to study.

The Fat Hog Classes.

In the car load hog classes for fat hogs, J. D. Waters, of Illinois, won the grand championship of the show on his first prize load of Poland Chinas, averaging 290 lbs. and under 250. Other competitors for the honor were the Hampshires that won first in the class for hogs averaging 250 lbs. and under 350, shown by L. R. Rollman, of Illinois, and the Chester Whites that won in the class for loads averaging 150 lbs. and under 200, exhibited by J. W. Crabb, also of Illinois.

In the fat barrow classes the Berkshire breed won the grand championship on the first prize barrow in the class for barrows under 18 months of age, shown by Sheffield Farms, of Ohio. This barrow was a fine specimen of the Berkshire breed and tipped the scales at 440 lbs. His hottest competitor was a Poland China weighing 175 lbs. more than the winner, but lacking his smoothness. This was the breed champion in his class, ex-

hibited by John Francis & Sons, of Illinois, who also won the grand championship on a pen of barrows with a selection of Polands.

The Breeding Classes.

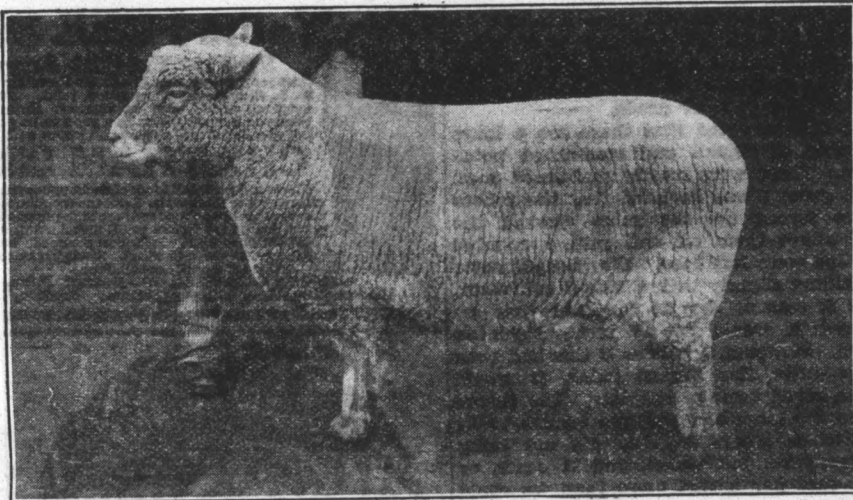
It is a significant fact that this year's International excelled in the exhibits of breeding stock in all departments of the show, as well as in the number and quality of the fat animals shown. Space is not available in this issue to give an adequate description of the exhibits in this department of the show. It was, however, conceded by many good judges among those present that the exhibits were of better average quality than in previous years as well as more numerous.

In the cattle department, while all of the beef breeds were strongly represented, the Shorthorns carried off premier honors in the final competition, in the winning of the grand championship of the show for a bull of any breed or age, by Ringmaster, a two-year-old entry owned by White & Smith, of Minnesota. This department of the show is worthy of more extended comment than space will permit in this issue and will be touched upon in the following number.

The display of horses, especially of the draft type, exceeded anything ever seen at Chicago, and in some of the classes the largest and best rings ever shown in America were brought together in the closest competition for honors, a descrip-

tion of which contests must also be deferred. Altogether the eleventh International may be considered to have recorded the greatest success of any similar event in the history of the show, and its beneficial influences should be widely felt throughout the stock producing sections of the country, if a study of the crowd in attendance is any criterion of results.

In the first place, it is the writer's



Grand Champion Fat Wether at the International. A Yearling Southdown of Rugged Type and Full Quality.

FEEDERS' PROBLEMS.

How Many Sheep Per Acre?

Will you kindly state in the Michigan Farmer how many sheep I can successfully keep to the acre, and their increase? Can I pasture and raise feed for 600 head of sheep to 100 acres of land? By starting with 100 sheep and 120 acres of land, can I keep all the increase for ten years, by just selling the old ewes and the wethers? I mean, will the wool and the wethers keep me with money enough on hand to keep buying land enough to pasture and raise feed enough to keep them for ten years, at about \$22 an acre, which is the average price I can get food for? I have figured considerably on it, but would like your opinion on the subject. It seems to me that the wool and the wether lambs would buy my land as fast as I needed it to take care of my increase for a period of ten years, after about the second or third year starting with 100 head of sheep and 120 acres of land.

Genesee Co.

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The inquirer has the right idea of going into the sheep business. The best way to go into any department of the live stock business is to grow into it. Those who go into the sheep business on a large scale, without any previous experience, depending upon wild lands for pasture during the summer and with inexperienced help to care for their flocks, generally go out of it with a smaller bank account, but richer in experience. In fact, when they get their bitter experience and go out of the business, they have gained just the knowledge that is essential to success in the business. Experience is always better than theory as a basis for any business enterprise, and to attempt to answer the questions asked in this inquiry would be theorizing pure and simple. It is impossible to set the limit of production or of maintenance for live stock per acre on good land. It is certain that we American farmers are far from

having reached the limit in this regard. Under ordinary conditions it is a safe conclusion, however, that one could not pasture and grow winter feed for 600 sheep on 100 acres of land. If the coarse or middle-wooled breeds are kept, 600 sheep would be about equal in live weight to 100 cows, and would require about the same amount of feed for their maintenance. Most farmers think it is impossible to keep one cow per acre, yet there are individual examples of cases in which two cows have been kept per acre of land and all the rough feed produced which was required for their maintenance. This was probably approaching closely to the limit of production in this line. But the cattle were not pastured, and cattle are better adapted to maintenance by soiling than are sheep. It must be remembered that sheep graze closely, and that one should not overstock with them to an extent which will make too close grazing necessary at any season of the year, else the production of the pastures will be impaired, and the object sought to be obtained of making the land carry as many sheep as possible will be defeated. Of course, a great deal will depend upon the character of the land, which is not mentioned in this inquiry, but in order to help this subscriber and others who have similar schemes in mind let us do a little figuring.

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COMMUNITY BREEDING.

In the issue of the Michigan Farmer of November 9, page 4, Clyde A. Waugh introduces an important matter in connection with live stock breeding, and live stock improvement, under the head of "The Neighborhood Boar." The suggestion of a few men buying a boar and all sharing in the benefits derived therefrom points to the matter of community breeding.

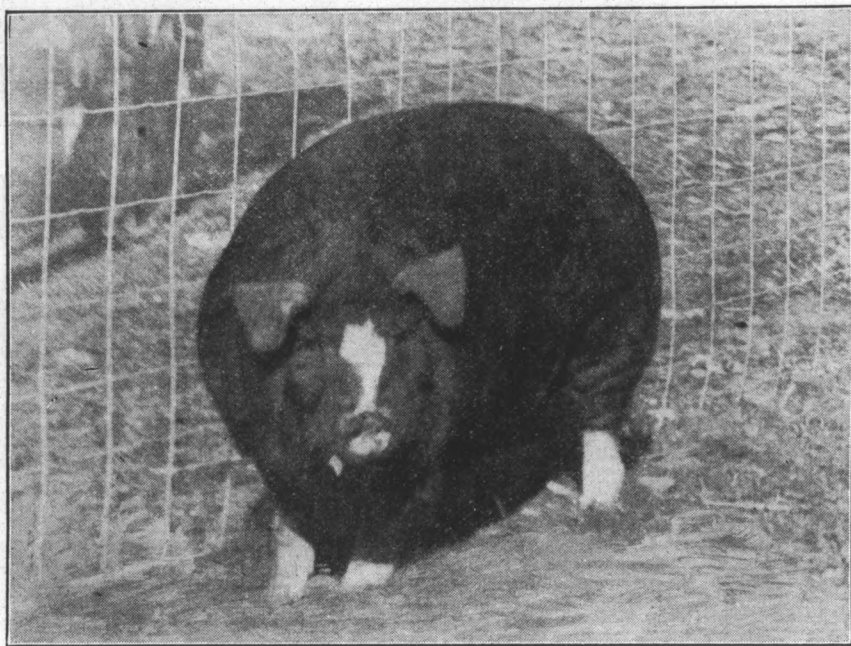
The subject is one that has attracted considerable attention, and is being tried under the able guidance of the live stock department of the M. A. C. From the point of theory it appears to promise excellent results. It will certainly aid in disseminating good blood, through the sires, in many communities. The longer the plan is operated the better will be the results. But if the experiment were to be discontinued after the sires had been used only one term of years, the benefits would be so pronounced that the lesson would remain in the minds of the farmers of each community where a sire has been introduced, for many years after.

Although the neighborhood sire, as far as cattle are concerned, has attained a considerable headway, I am not aware that the neighborhood boar has been tried to any great extent, yet it seems that the neighborhood hog improvement proposition looks as feasible as the improvement of any kind of farm stock. The article by Mr. Waugh has awakened in my mind some important facts gained by many years of experience in breeding hogs and handling boars, and I will venture to give some of them, so they may

The boar should be kept away from the other hogs. If he has been properly raised and handled, he will be contented in a yard, or small field by himself, and enjoy a comfortable nest by himself. It is certainly a great mistake to turn a young boar in with a lot of larger hogs and compel him to fight his way. The improved hogs are not produced for that purpose. It is for the character as to docility, and the blood they carry that the boars are purchased. A young boar is easily ruined by being turned in with other boars. Those who do not understand the difference between a well-bred pig that has a tender skin, and a rough-and-ready mongrel will not appreciate it, but the former has a superior value as a breeder, and will prove it if given a fair chance.

Another thing should be insisted on, and that is that a sow should have but one service. It is as good as, and often better, than more. It saves the boar, and he will be a valuable sire much longer, than if allowed to remain with the sows longer. Every breeder who has had experience understands this very well. I have had neighbors, who wanted to run my business, demand that their sow be allowed to lay with my boar during the night, and, when refused, go away and say they would never come near again. If I had acceded to such demands, my boar would not have been in proper condition when I wished to breed my own sows. A few good litters from my pure-bred sows were worth much more to me than the patronage of one man.

As to charging a neighbor for the use of a sire, I see no reason why it should not be done. The service is a commodity



"High Pocket," Grand Champion Poland China Boar at Michigan State Fair, exhibited by M. T. Beatty & Son, of Ohio.

benefit those who may undertake the community proposition without having had much experience.

The first step is to agree on the breed that will be adopted, and then select the boar. The selection is an important step, for all boars that are from registered stock are not up to a high standing of excellence. If the breed chosen is one of the lard type of hogs, then by all means get a growthy, compact animal, with good, heavy quarters. Every sire to be used extensively should be of a good type of the breed represented. If it is of the bacon type, then get good depth of chest and sides, together with the thriftiness that should accompany all meat animals. In the second place, the boar should be kept at once place. Changing places "breaks him up," as we express it, and he will not be as quiet and contented, or do as good service, if compelled to change abiding places often. Sometimes a change in farms with a boar will make him uneasy, and frequently irritable, bordering on, and often approaching, viciousness. It is better to pay a man for keeping a boar a whole year than to have the animal get cross.

In the third place, it is by far better to have one man attend to, and care for the boar, than to change hands. The boar knows his keeper, and if he is kind to him he will become attached to him and will show his appreciation of kind attention. A change in keepers makes the boar suspicious, and will often be shy when called upon for service, while with his regular attendant he will appear free and easy, doing his bidding with apparent pleasure.

of real value, as much so as a bag of wheat; and if one neighbor were to ask another for a bag of wheat, and expect that it be given him, the neighbor asking such a favor would be set down as a beggar. A reasonable consideration of such matters ought to set them right, and satisfactorily adjust them.

The community proposition has much to commend it. It gives each individual farmer in that community an opportunity to get improved blood from a pure-bred boar at a very small outlay in costs. It will produce a uniform class of stock in the whole neighborhood, which will enhance its value. By the use of a good, pure-bred sire, all the hogs in the neighborhood will have an enhanced value, because better gains can be secured from the same amount of feed than can be realized from the mongrels or haphazard bred animals. It will do away with opposition and competition often met with, and enable neighbors to work harmoniously and for each other's best interests.

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To stimulate the production of Christmas lambs the United States Bureau of Animal Industry has imported a flock of sheep from the Barbadoes Islands. These sheep are said to be the most prolific breeders known, but are not very good mutton sheep. It is planned to cross them with a good breed of mutton sheep, such as the Southdown, and the fact that they will breed almost any month of the year lends hope to the plan. This is the first experiment of the kind ever made and the first time Barbadoes sheep, which have a hair covering instead of a wool coat, have been brought to this country.



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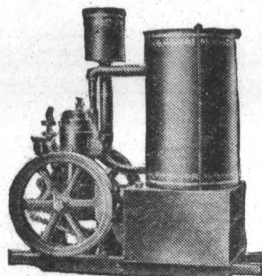
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VETERINARY

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

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

Indigestion.—I have a five-year-old horse that is just as well fed as his mate, but he is thin and the other horse fat, both eating the same amount of food. G. R. F., Brown City, Mich.—Mix together equal parts ground nux vomica, ground gentian, cinchona and powdered rosin and give him a teaspoonful at a dose in feed three times a day.

Sore Eyes.—I have a young mare that is troubled with sore eyes. She seemed to be all right up to six weeks ago when one of her eyes became sore and some time later the other one commenced discharging. I have applied weak brine and warm milk, but she is no better. L. D., Frederick, Mich.—Apply some finely powdered boric acid to sore eyes twice a day and give 2 drs. Fowler's solution at a dose in feed two or three times a day.

Laryngitis.—I would like to know what can be done for our pigs that are troubled with a cough. C. F. M., St. Johns, Mich.—Give them some ground ginger and powdered licorice in their feed. It would be no mistake to increase their food supply.

Chronic Looseness of Bowels.—I have a 13-year-old mare that is troubled with diarrhoea and I would like to know what to give her. F. F. L., Dammagville, Mich.—Give her a teaspoonful of powdered sulphate of iron and two table-spoonfuls ginger at a dose in feed two or three times a day.

Sore Scrotum.—Have a yearling bull that has a sore in sheath which hurts him at time of service, and I would like to know what can be done to remove a growth of this kind. W. C., Maple Rapids, Mich.—Either remove it with a knife or burn it off with a hot iron or caustic.

Diarrhoea in Pigs.—Ever since weaning time my young pigs have been troubled with looseness of the bowels. F. H. D., New Boston, Mich.—Perhaps cooking their food would help correct their trouble; also add some lime water to their feed and give some ginger in every feed. The food supply is what causes most of the trouble.

Pin Worms.—I have a five-year-old horse that is troubled with pin worms and have given several kinds of treatment; none of them seem to have done him much good; I have also given him condition powders. A. C., Bedford, Mich.—Dissolve 1 oz. of powdered sulphate of iron in three or four quarts of water and wash out bowels daily for four days.

Obstructed Teat—Colt Scours.—I have a heifer that has a movable bunch in lower part of quarter, which seems to obstruct the free flow of milk. I also have a five-month-old colt that has been troubled with a looseness of the bowels since birth and I would like to know how to treat him. W. A. G., Lansing, Mich.—Apply iodine ointment to bunch once a day and perhaps you had better use a milking tube. Give the colt two or three drops oil cinnamon, 5 drs. beechwood creosote and 15 drs. tincture opium at a dose twice a day until his bowels tighten, then give less medicine.

Navel Disease—Swollen Sheath.—Cattle Cough.—I have a 1,300-lb. horse that is about 13 years old which I have owned for about three years which has been treated by two different Vets. for navel disease, but is still lame. I also have a gelding whose sheath swells when standing in the stable. My cows were troubled with a cough last winter but got over it in summer; lately they cough some, but are apparently healthy and doing fine. F. R. M., Fennville, Mich.—Mix one part red iodine mercury and 10 parts cerate of cantharides together and apply to coronet every 10 days. Navel disease is very often incurable and in order to make the horse go sound it may be necessary to take out a section of his fore leg. Shake the dust out of your cow's fodder, let more fresh air into the stable and wet their feed with lime water, is all you need to do. The sheath of a horse often swells for want of exercise. Give him a teaspoonful of powdered nitrate potash at a dose in feed twice a day for a few days, then give the medicine once a day or as often as you think it necessary.

Rheumatism—Impure Blood.—Several of my 10-week-old pigs are sore and stiff in hind quarters; for the past three weeks they have been troubled with lameness and appear weak in hind quarters. I have thought that the right hind leg was most affected. I also have a mare that must have impure blood on account of having raw sores on her side and belly. G. H. M., Orchard Lake, Mich.—You failed to state whether your pigs are weaned or not and what you have been feeding them. Their ailment is no doubt the result of improper feeding, or else keeping them in too damp and ill-ventilated a place. Feed your sow very few vegetables if they are still nursing; however, I presume you have weaned them ere now. Give the pigs some air slaked lime and powdered saltpeter in the feed, 1 gr. of air slaked lime to every two or three lbs. of their weight at a dose, and 1 gr. to every five or six lbs. of nitrate of potash (saltpeter). They should be treated twice a day, kept in a dry place and fed a balanced ration. Also kept dry and warm.

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NOTHING BUT HOLSTEIN BULLS FOR SALE. Sir May Hartor Posch No. 37604. A. R. Three Nearest Dams Average 26 2 lbs. butter in 7 days. Sound, Sure, Gentle, and one of the finest individuals of the breed. If you want a Herd Header come and see this one. I can place any breeder with a bull calf two to ten months old. I want to sell TEN before Nov. 1st. Help me do it by buying one. I. E. Connell, Payette, O.

Holsteins—Cows, Heifers, Bulls. If we have what you want we are bound to please you. LONG BEACH FARM, Augusta, (Kalamazoo, Co.).

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

HEREFORDS—Both sexes and all ages. Poland-China hogs. ALLEN BROS., Paw Paw, Mich.

HEREFORDS—3 yearling thoroughbred bulls for sale. Also one 2-yr.-old that is recorded. H. D. HALL, Martin, Mich.

Register of Merit Jerseys. Official yearly record of young bulls from dams with official records of 433 pounds and upwards of butter. T. F. MARSTON, Bay City, Michigan.

LILLIE FARMSTEAD JERSEYS. We have some splendid young bulls for sale. Some of them are old enough for service. They are from cows with records of 300 to 425 pounds of butter last year. Write for description and prices. COLON C. LILLIE, Coopersville, Michigan.

TO the highest bidder. 2 Jersey Bulls, tuberculosis tested. One a first prize winner as calf and yearling at Michigan State Fair. Dam, a Register of Merit Cow. Send bids to ROBERT BARNEY, R. No. 3, Traverse City, Mich., before December 23, 1910.

For Sale—Registered Jersey Cattle, either sex. Also Reg. O. I. C. hogs. C. A. BRISTOL, Fenton, Mich.

For Sale—Four registered POLLED DURHAM BULLS, 10, 12 and 18 months old. All Reds. J. E. CLARK, Milford, Mich.

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

SHEEP.

For Sale—40 Young EWES and 20 EWE LAMBS. Sell cheap if sold at once. J. B. GARDNER, L. Box 437, Cadillac, Mich.

Hampshire, Southdown, and Cotswold Rams and THE CLOVER BLOSSOM FARM, Port Austin, Mich.

HAMPSHIRE—Ram lambs ready for service; also 2 yearlings cheap. C. D. WOODBURY, Lansing, Michigan.

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

DELAINE RAMS, also 50 registered Delaine ewes which must be sold before Dec. 1. Great bargain for some one. S. J. COWAN, Rockford, Michigan.

Cooper's English Sheep

won 420 prizes this year at State Fairs. Shropshires, Oxford, Hampshires, Southdowns and Cotswolds—the best of each—several hundred to select from. We import more than all others combined, thus can offer the most attractive prices and terms. Sheep shipped on approval—see them before you buy. Write for our handsomely illustrated Book of Winners. It's FREE for the asking.

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

Oxford-Down Sheep and Polled Durham cattle for sale. A. D. & J. A. De GARMO, Muir, Mich.

Oxford Down Sheep—Good Yearling Field for sale. L. R. WATERBURY, Highland, Michigan.

OWING to heavy storms and blocked roads the sale advertised for Nov. 30 came near being a failure. I sold 5 pens, a total of 25 aged ewes at prices ranging from \$8.25 to \$12 per head. The balance are still for sale. I have a few 4 and 5-year-old rams I will sell for less than half price, viz.: \$10 and \$12 per head. They are good ones. J. Q. A. COOK, Morris, Mich.

Reg. Rambouillet Ewes for sale or exchange for Holstein heifers. C. E. Burlingame, Byron, Michigan.

Shropshire Rams all sold. Eight aged ewe \$65. Five ewe lambs \$40s. WILLIS S. MEADE, R. F. D. No. 3, Holly, Mich.

FOR SALE—Ten bred registered Shropshire yearling and two-year-old ewes. Prices right. Jones & Morrish, Flushing, Michigan.

CHOICE Registered Shropshire and Cotswolds, yearling ewes, ram and ewe lambs, Yorkshire and Berkshire hogs, Clyde Stallions and Fillies and Welsh ponies. Write for prices. Arthur L. Milne, Green River, Ont.

SHROPSHIRE HALL STOCK FARM Has for sale twenty-five (25) very choice bred yr. ewes, a few good aged ewes, one choice two-year-old ram, also three good ram lambs.

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

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Durocs & Victorias—Growthy Spring Boars & Gilts. Winners. M. T. STORY, R. 28, Lowell, Michigan.

BERKSHIRES of individual merit and best known lines of blood at moderate prices. M. D. & G. B. Johnson, Plymouth, Michigan.

HUPP FARM BERKSHIRES! WON 189 PRIZES IN 1909.

Stock of both sexes and all ages for sale. Breeders of Guernsey Cattle, M. B. Turkeys, Barred Rock Chickens, Pekin Ducks. GEORGE C. HUPP, Manager, Drawer A, Birmingham, Michigan.

BERKSHIRE Boars ready for service. Combines blood of MASTERPIECE and PREMIER LONGYELLOW. Best on earth. C. D. WOODBURY, Lansing, Michigan.

Berkshires—Two yearling sows bred for spring farrowing. A few choice July gilts & boar pigs for sale. A. A. Fattullo, Deckerville, Mich.

BERKSHIRES Unexcelled in breeding. Selected boars, sows and gilts. Choice fall pigs. T. V. HICKS, R. No. 11, Battle Creek, Mich.

A DAMS BROS. Litchfield, Mich., breeders of Imp. Chester White and Tamworth swine, service boars, sows bred or open, of either breed. Shorthorn Cattle, Buff Rock, Buff Wyandotte, W. Orpington, Chks. all breeding stock leading winners.

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A FEW first class Duroc Jersey Service Boars FOR SALE. M. A. BRAY, Okemos, Ingham Co., Mich. Indpt phone

Capitol Herd DUROC-JERSEY Swine, established 1888. Yearling sows bred, and pigs for sale. J. H. BANGHART, Lansing, Mich.

IMPROVED CHESTERS—Young boars ready for service, orders taken for sows bred for spring farrow. Also Holstein Bull Calves of the best of breeding. W. O. WILSON, Okemos, Mich. Both Phones.

O. I. C's—Hogs all ages for sale, sows bred or open, boars any age or size. Shipped on approval. HARRY T. CRANDELL, Rolling View Stock Farm, CASS CITY, MICHIGAN.

Thoroughbred Duroc Jerseys for sale at reasonable prices. Gilts, seven months old, fashionable breeding at exceptionally low prices. GILTS and BOARS, ten weeks old, fashionable breeding at exceptionally low prices for immediate delivery. Address, IRWIN & BERKEY, 208 East Lincoln Avenue, Goshen, Indiana.

O. I. C. Hogs all ages. Sows bred, Males weighing 195 lbs. and more. H. H. JUMP, Munith, Michigan.

O. I. C.—Sows bred for spring farrow, fall pigs either sex. A. NEWMAN, R. No. 1, Marlette, Mich.

O. I. C.—Bred Sows. Boars ready for service, vice, from World's Fair Winner. Glenwood Stock Farm, Zeeland, Michigan. Phone 94.

O. I. C. Swine—Spring farrow, of both sexes, right type and breeding. Boars \$20 each. E. E. BEACH & SON, Brighton, Mich. R. No. 3.

O. I. C.—Sow pigs all sold, but offer some extra good boar pigs for sale, Sept. farrow, at reasonable prices. FRED NICKEL, Monroe, Mich. R. No. 1.

O. I. C. Swine—Spring, summer & fall farrowed, both sexes, breeding and type right. Geo. P. Andrews, Dansville, Ingham Co. Mich.

O. I. C. Early Fall Pigs Low prices. Only 4 bred gilts for sale. C. J. THOMPSON, Rockford, Michigan.

O. I. C's FOR SALE—An extra good lot of last spring pigs, either sex, weighing from 150 to 300 lbs. 1 yearling boar and 30 fall pigs. OTTO B. SCHULZE, Nashville, Mich.

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

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

Poland-Chinas—Boars ready for service; spring pigs, either sex. Write L. W. Barnes & son, Byron, Shiawassee Co., Mich.

Poland-Chinas The home of the Michigan State Fair-winners. We won 24 prizes at Detroit in 1910. Pigs of both sexes for sale, sired by our prize-winners. M. T. BEATTY & SON, West Unity, Ohio.

P. C. BOARS, GILTS, WEANED PIGS at Right Prices. Shipped c. o. d. with pedigree. WM. WAFFLE, Coldwater, Michigan.

Large Type P. C's—largest in Michigan. Spring pigs all sold. Order a fall pig early from my great herd and get choice. None better. W. E. Livingston, Parma, Mich.

POLAND-CHINAS either sex, all ages. Something good at a low price. P. D. LONG, R. F. D. No. 8, Grand Rapids, Mich.

Poland-Chinas—Large styled, growthy spring pigs, also fall pigs. Send for snap shot photos and lowest prices. Robert Neve, Pierson, Michigan.

P. C. BOARS—Big growthy fellows. WOOD & SONS, SALINE, MICHIGAN.

12 P. C. Boars ready for service, sired by a Son of the undefeated Lady Louise. Z. Kinne, Three Oaks, Mich.

Poland-China Gilts bred for spring farrow. Fall Pigs \$1 each. B. M. Wing and Son, Sheridan, Michigan.

Our P. C. Boars were sired by "Victor" by "Out-Fair" dams by Medley Second, Outwood Medley and others. A few large Minorca Cockerels. Satisfaction guaranteed. R. W. MILLS, Saline, Michigan.

BEST BIG TYPE POLAND-CHINA PIG in Michigan, March farrow litter 13 ft to head any herd. Price \$50; bred sows \$85; Aug. pigs, \$15; Sept. pigs, \$10. Pairs and trios not akin. Bell phone. J. C. BUTLER, Portland, Mich.

FOR SALE—Yorkshire Boar Pigs August farrow. Fine, thrifty fellows. \$15, registered. THE MURRAY-WATKINSON CO., R. 6, Ann Arbor, Michigan. Bell phone.

Watch this Ad. and order a registered YORKSHIRE BOAR of A. McKAY & SON, R. F. D. No. 1, Hersey, Mich. Bell Phone.

Large Improved English Yorkshires. The hog that makes good. Boars ready for service. Gilts bred for next spring farrow. A choice lot of fall pigs, pairs not akin. Satisfaction guaranteed. COLON C. LILLIE, Coopersville, Michigan.

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THE PERFECT AMERICAN SADDLE HORSE.

The most desirable points in American saddle horses are what are known as saddle gaits, therefore the most important of which is the walk.

The gaits, although not common to all horses, are what are known as the saddle gaits, in the most important of which there is as wide a range of excellence as at the faster gaits of trotting and running. The average rate of speed at which horses walk in harness or under saddle is probably no more than three miles an hour while a really good walker can cover five, and in rare cases, six miles under the saddle. Bring the easiest gait on both horse and rider, such horses will make wonderful journeys without distress. What is known as the fox-trot is also a very desirable gait, and easily taught most horses by urging them slightly beyond a walk, and when they strike the right gait hold them on it; it is a trifle faster than a walk, and a near approach to a single foot.

Nearly all saddle horses will take a few steps to this gait when changing from a walk to a trot, but will not keep it unless trained to it. The speed differs from seven to eight miles an hour. Horses will learn to like the gait, and it is an easy one for the rider, and next to the walk the best long distance gait. Single-footing is nearly the same as the fox-trot, and is an exact intermediate between the walk and the trot, each foot appearing to move in a sort of go-as-you-please manner, and considering that it is an exceptionally easy gait for a rider, and that an average single-footer will cover nine or ten miles per hour, it is worthy of cultivation. The rack and pace are nearly alike, the only difference being in the former the hind foot reaches a trifle in advance of the fore foot on the same side while at the latter gait the feet on each side move exactly together—a purely lateral motion. Either the rack or the pace is much more desirable than the trot under the saddle, and the pace is at least as fast, if not faster, than the trot. In addition to possessing all the above saddle gaits the model saddle-horse should be level headed, courageous and kind and should be an active and easy mover at any gait, and have a sensitive mouth, respond readily to the touch on the bridle rein, be sure-footed, able and willing to trot, gallop or run, as required, and, above all, sound upon his legs and perfect in the wind.

St. Joseph Co. W. J. GRAND.

SALTING PORK FOR HOME USE.

Kindly advise the best method of salting down pork for home use. I have not had very good success in keeping it. Does shooting the hog have anything to do with it? Some claim that it does.
Antrim Co. A. W.

There are a number of different methods of salting pork for home use upon the farm but in the writer's opinion the easiest and most satisfactory way is to put it down in a brine with plenty of salt, as it will require less attention when packed in this way than when preserved in any other manner.

The first essential in the keeping of pork so that it will come out sweet and wholesome is the absolute cleanliness of the vessel in which it is packed. The old system of using a wooden barrel has been largely superseded by the use of large earthen crocks, and with much better satisfaction as when a wooden barrel commences to become tainted it is a very difficult matter to get it in perfect condition for the keeping of pork, and in any event it requires very much more care than the earthen crock, which has a glazed surface and which can be easily sterilized by the use of hot water.

The writer's method of putting down pork is to use plenty of the best packing salt, putting in a thin layer of salt in the bottom of the crock then packing in a layer of pork tight, placing the pieces on edge and wedging them in as closely as possible, then put on another layer of salt and one of pork until the whole is packed down; then put a clean board or large plate with a heavy stone on top to weigh it down and pour strong brine over the whole. Of course, if pork has been salted in this manner in previous years the old brine will be available, and if this is used, it should be thoroughly scalded and skimmed to remove any impurities which may be in it. Pork which is packed in this manner will seldom need any further attention but in case the brine should appear to be bloody or contaminated in any way it should be promptly removed, scalded, skimmed and then replaced as soon as it is partially cooled.

It is essential in killing hogs to have them bleed out thoroughly and if it is made the practice to shoot before sticking, it is possible that the blood vessels will not be as thoroughly drained as would otherwise be the case, but the writer has never followed that practice and would not be a competent judge upon the point raised.

Some prefer the dry salting method but if precaution is taken and the receptacle in which the pork is packed is absolutely free from germs of any kind and a good quality of salt is used, as recommended, the pork will keep wholesome and sweet, and the writer has used this method because of the good results which have been secured by it.

LIVE STOCK NOTES.

The demand for feeding lambs and sheep in the Chicago market has been checked since cold weather set in by the federal government's requirements that all feeders should be dipped before being sent to country points.

The Kansas City Stock Yards Company has increased the sheep yardage capacity to 45,000 head. Marketings of sheep there have been much heavier than ever before, and larger accommodations became necessary.

Sheepmen should stop sacrificing their short-fed, half-fat flocks and wait until their sheep and lambs are good and fat, as corn is cheap. Those who have ample shed shelter for cold and stormy weather need not fear to wait until the present glutted markets change to smaller supplies and higher prices.

Farmers were never in more independent circumstances than now and their course in holding on to their corn, with a view of feeding it largely to stock, is having its effect on the banks of the great cities of the west. To an unusual extent the farmers are borrowing money from their home banks to purchase cattle, declaring that they will not accept the low prices now offered by the country elevators for the new corn crop. They are, in fact, bidding against the packers for lean cattle. Meanwhile the country banks have been drawing down their balances with Chicago banks in order to be able to accommodate the farmer patrons.

For a long time fat little yearling steers and heifers have sold remarkably well in the Chicago market, frequently outselling long-fed heavy beefs. These are times when the popular demand is for small cuts of beef.

A great many farmers have been planning to make their young hogs fat and extra heavy, as corn is both plentiful and cheap nearly everywhere, but some of them are now undecided what to do, because of the great fall in prices and fear of further great declines. It does not seem wise to sell healthy pigs at weight under 200 lbs., and most experienced stock feeders seem disposed to make their hogs weigh as high as 225 lbs., if not heavier. The great shortage of hogs cannot be ignored by the packers, and farmers should beware of allowing themselves to become panic stricken and sacrificing their healthy growing pigs at this time. The combined receipts of hogs at the eleven leading markets of the country so far this year have been upwards of 3,300,000 head less than for the same period last year.

A great many sheep are being fed in the San Luis Valley of Colorado, the pea crop being an average one. The flocks are put on feed in October, and by December the first marketings of fed sheep are made. Shipments increasing after the holidays. Great flocks of lambs are turned into the pea fields, and they become good and fat. In addition to the feeding of several hundred thousand sheep each year, farmers in that region are now raising a great many hogs, this having grown to be an important industry in recent years. Peas are a fine feed for both hogs and sheep, and both get fat fast on them.

Missouri farmers are in numerous instances storing their corn rather than accept ruling low offers. They plan to have an abundant supply of feed on their farms and thus be prepared to seize any opportunities at a late time to get cheap stock for feeding. Present prices for feeding steers are regarded by many farmers as too high. There is a widespread impression that there will be greatly excessive marketings of short-fed steers up to the close of February, and experienced stockmen think better returns will be derived from later feeding. A large farmer and stockman owns several car loads of calves which he will feed with the view of having them in marketable condition between May and June.

Throughout most parts of Illinois, Indiana and Iowa stockmen are slow about marketing their last spring's pigs, as they reckon on making much larger profits by making them fat and heavy, with cheap corn, even if hog prices go still lower. This has resulted in higher prices being paid for hogs at points west of Chicago than in the markets of the east.

There has been a good demand recently in the Chicago live stock market for good light-weight stock steers, buyers taking them with a view of allowing them to roam in pastures or cornstalk fields during the winter months and fatten on corn at a later period. It is generally believed that early feeding is being overdone and that cattle marketed in the early spring will sell better than those shipped in previously. Prices for both stockers and feeders have undergone a great decline in recent weeks, and late buyers have been in a position to secure exceedingly attractive lots very much cheaper. Farmers have been sacrificing a great many short-fed cattle, the decline in prices being sensational in the extreme, and feeders have sold off along with better cattle.

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the same as babies. Babies can't take care of themselves, nor can nerves.

Babies cry for attention—so do nerves. Probably both are half-starved for proper nourishment.

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Used as a Blister or Lotion.

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As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address
THE LAWRENCE-WILLIAMS COMPANY, Cleveland, Ohio.

"SAVE THE HORSE" SPAVIN CURE



Read what one of the most prominent bankers and business men of Northern Ohio did with "Save-the-Horse"

Cleveland, Ohio, March 18, 1910.
In the fall of 1908, at Lexington, Ky., I bought the finest saddle and carriage horse that I was ever my pleasure to own. During the winter he threw out as large a thoroughpin as I ever saw. I had heard of your remedy and bought one bottle, with the result that the lump on both sides of the hock is entirely gone and has been a matter of comment on the part of everyone that has seen it. The hock is today absolutely clean and there is no indication of thoroughpin, and I shall be glad to show this horse to show that there is no trace of the trouble.
Very truly,
W. P. MURRAY.
Prop. Murray Stock Farm, West Mentor, Ohio.

For fifteen years our contract has been the foundation on which every customer based his confidence in making his first purchase, and it has never been misplaced or betrayed. The marvelous power alone of "Save-the-Horse" permits of such an iron-clad contract. Send for copy. Write to-day for proofs.

\$5.00 a Bottle With Signed CONTRACT.

This is a binding CONTRACT and protects purchaser absolutely in treating and curing any case of Bone and Bog Spavin, Thoroughpin, Ringbone, (except low), Curb, Splint, Capped Hock, Windpuff, Sheathitis, injured Tendons and all Lameness. No scar or loss of hair. Horse works as usual. Send for copy of contract, booklet on all lameness and letters from prominent business men, bankers, farmers and horse owners the world over on every kind of case. At all druggists and dealers, or express paid, Troy Chemical Co. 20 Com'l ave. Binghamton, N.Y.

For Lamé Horses

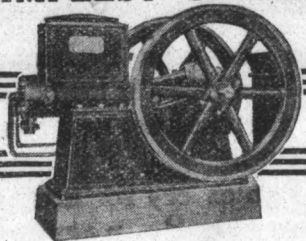
Remove All positively cures Sprains, Ringbone, Curb, Shoe Bolts, Capped Hocks, abnormal growths and lameness.

REMOV-ALL
Sold on money-back guarantee. Leaves horses sound and unscarred. Lump jaw is cured in less than three weeks with
Adams Rapid Lump-Jaw Cure
Easy to use. Guaranteed. Write for FREE TREATISE on curing these diseases.
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Death to the Stomach Worms Guaranteed.

We will send you 100 lbs. of DR. HOLLAND'S MEDICATED STOCK SALT on 60 days' trial, freight prepaid. If you derive no benefit, it costs you nothing; if you do it costs you \$5.00. Give us your order at once.
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Never Goes "Dead"

can't do it. Never balks, never refuses to go just when you need it most. Superior to all other 4 cycle engines. In other 4 cycle types if the engine misses fire the fly wheel has to make two complete revolutions before more power is created. The McVicker because of its superior principle, can explode charge on first compression stroke or always within one revolution of fly-wheel—just twice as quick as any other can do it. This means even power, more power, less wear and tear on engine, cannot possibly go "dead," and means that you can start your McVicker going, then go away and leave it without a bit of fear that it will stop. This is but one of the many points wherein the

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other farm engines. It's simpler than any—has only 57 parts where all others have 180 or more. Carries 50 per cent more sudden load, and because of being automatically regulated in every part uses less fuel than any. And yet it costs no more than bulky, complex, fancy engines—a great deal less than many of them.

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Department 7

ALMA, MICH.

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DRIED BEET PULP

this year. You can not lose but you will profit by doing so. Used by many of the best feeders of the state who find it a valuable feed, selling below its true feeding value as compared to the other feeds and grain.

Cheaper, and gives better results than bran for which it is substituted by the best dairymen.

Forms a valuable addition to any ration, being vegetable the mechanical effect is good which causes a better assimilation of the other feeds.

Especially good with cotton seed meal as it counteracts the objectionable features of this feed.

Dried Beet Pulp will cheapen any ration. Substitute it for a portion of the ration you use and you will secure better results in both production and improvement in the health of your animals.

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MEDICATED STOCK SALT

will positively expell the worms, tone up the system and promote a healthy and vigorous growth in horses, sheep, hogs and cattle. Very effective on horses, sheep and hogs, and can be obtained from all Grocers, Druggists, Feed Stores, and Elevators.

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10 " " 50c. 100 " " 4.50
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IF YOU WOULD LIKE TO KNOW:

1. More about the cow herself.
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Double row equals 20 men with saws. Pays for itself first season. 6 sizes. Also ICE TOOLS. Ask for Catalog H.

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CALVES RAISE THEM WITHOUT MILK, BOOKLET FREE
J. E. BARTLETT, Co., Jackson, Mich.

THE DAIRY

CONDUCTED BY COLON C. LILLIE.

MILKING AN IMPORTANT FACTOR IN SUCCESSFUL DAIRYING.

The quantity of milk and butter-fat produced by cows depends in no small degree upon the manner in which the cows are milked. Cows may be ever so good or ever so well fed, if not properly milked the results will be unsatisfactory.

The reason why so much depends upon correct milking is the fact that good dairy cows possess a highly developed, nervous system with which the secretion (formation) of milk is intimately associated. Whatever, therefore, reacts upon the nervous system of the cow will react in like degree upon the secretion of milk. In this connection it should be understood that the secretion of milk takes place almost entirely during the process of milking. No matter how large a bag a cow may show just previous to milking, it rarely contains as much as a quart of milk, the distention of the bag being due to blood from which the milk is elaborated.

It is owing to her high nerve development that a cow is so very sensitive to excitement, boisterousness, unkindness, rough treatment and allied abuses which always react so unfavorably upon the production of milk and butter-fat. Especially disastrous are the effects of abuses administered just previous to or during milking. Yet how frequently are dogs allowed to chase the cows to the stable, and how often are attendants seen with clubs which they use as aids in getting the cows into their stalls! The language and boisterousness that usually accompanies all this leaves no doubt that the animals are treated as offending brutes.

A change of milkers has an unfavorable influence upon the yield of milk. A cow that has become thoroughly accustomed to a certain milker will feel restless and uneasy with a new milker, which is no where more plainly indicated than in the milk record sheet. A change of milkers, furthermore, almost always means a change in the manner of milking and, therefore, a change in the stimulation of the udder. Since the stimulation of the udder by the milker is the cause of milk secretion, it is evident that a change in the method of stimulation will affect the yield of milk and butter-fat. The wise dairyman will, therefore, avoid changing milkers as far as possible.

It is undoubtedly due to the greater stimulation of the udder that fast milkers always obtain more milk than slow ones. In my experience with milkers—and I have employed many of them in the past—I have never had a slow milker that proved satisfactory, no matter how faithfully or conscientiously the milking was performed.

One of the vital things in milking is to get all of the milk at each milking, that is, to milk a cow dry. Whatever milk is left in the udder is not only lost to the milker but acts as a check upon further secretion, so that the habitual practice of not milking cows clean or dry results in a gradual shrinking of the milk flow and in an early drying up of the cow. Furthermore, the loss of the strippings means the loss of the very best milk. The first milk drawn from a cow usually contains less than one per cent fat, while the strippings may contain as much as 14 per cent.

To obtain the best results from a dairy—regularity must be made a watchword. Cows must be milked regularly at a fixed time morning and night. Milking an hour sooner or later than the fixed time interferes much more seriously with the milk yield than is commonly supposed. Irregularity in feeding also affects the milk flow. If, for example, cows that have been accustomed to receive their grain just before milking should receive it at times after milking, a reduction in the yield would surely be noticed. This is just what might be expected. Withholding the grain will make the cows restless and discontented which will sufficiently jar their nervous system to cause a drop in the milk flow.

Another matter to see to is to have the periods between milkings as nearly equal as possible. This is especially important with heavy milkers. If cows are being milked at six o'clock in the morning, they should preferably be milked at six o'clock at night. The more uniform the periods between milkings the more uniform the secretion of milk and consequently the

greater the production. The time between milkings also influences the richness of the milk. If the two milking periods are unequal, it will be found, as a rule, that the milk from the shorter period is the richer.

A good milker is an important asset in a dairy. The following data secured by Mr. H. B. Gurler from his own herd fully illustrate the importance of a good milker: As a result of two winters' tests, Mr. Gurler found that the cows milked by the poorest milker had fallen off 9.5 lbs. per head in three months, while the shrinkage of the cows milked by the best milker during the same time was only 1.88 lbs. This fully explains why some milkers are cheap at \$40 per month while others are really expensive at less than half this amount.

Wisconsin.

JOHN MICHELS.

MAKING SILOS SMALLER.

I have an opportunity to purchase a silo at a reasonable price from one of my neighbors who has quit the cattle business. This silo is torn down and piled up in good shape, but the trouble is that it is larger than I want, being 18 ft. in diameter and 30 ft. high. Now one about 12 ft. in diameter and 25 ft. high is what I would like. Could this silo be constructed to these dimensions? I can have the hoops cut smaller easy enough but would the staves match all right? That is what I would like to know. Also, which do you think the better, a solid concrete or a block silo?

Lapeer Co.

SUBSCRIBER.

I think it will be entirely practical to make this silo smaller. Simply leave out staves enough to give the silo the required diameter, cut your hoops off the proper length and you will have just as good a silo as the big one ever was, but I beg of you not to make your silo of less height than it was before. You say it was 30 feet high, and you propose to make it 25 feet. This will be a great mistake, and you will regret it afterward. With rather a small number of cows to feed, it is entirely practical to make the diameter only 12 feet, but I certainly would not shorten the staves. It will cost you nothing more to have the silo 30 feet high than 25. In fact, it will cost you the expense of sawing off the staves, and you will need that extra five feet. Consequently I would recommend to take the extra staves and lengthen out the 30-foot staves, and building your silo 36 or 40 feet high rather than making it shorter.

If both are properly constructed, I do not think there is practically any difference between a concrete silo and a cement silo. One is as good as the other. Both must be plastered on the inside, both have to be re-enforced to give the proper strength, and when complete both are practically indestructible.

ENSILOING BEET TOPS.

I have a farm of 120 acres of which a part is muck from one to two feet deep, with a good heavy sub-soil of clay. I raise a large amount of sugar beets. Can I place the sugar beet tops in a silo and will the stock do well on them?

Tuscola Co. W. E. T.
Sugar beet tops can be ensiled successfully and make an ensilage that is very palatable and nutritious. Cattle like it. The tops contain so much moisture that I think it policy to mix straw quite liberally in with them when they put in the silo. The straw will absorb all this excessive moisture, and its palatability will be thereby improved, so that the cows will consume much more of it. When filling the silo with beet tops, they should be evenly distributed over the entire surface of the silo, so that they will settle evenly. If they are just thrown in loosely, they will not pack as well and will settle unevenly. There is considerable loss on top of the beet top ensilage, on account of the coarseness of the material, which allows considerable space for air. Much of this loss could be avoided by placing over the top some finer material which would exclude the air and assist in helping the beet tops to settle.

WILD PASTURE TAINTS BUTTER.

In answer to C. B., of Kent county, regarding butter getting strong, would like to say, if your cows are running on wild pasture it is safe to say it is something they eat, weeds, leaves or something. We had the same thing happen to our butter, churned every three days and had milk in cool place but butter was strong. I took cow off pasture and have kept her up ever since, feeding on fodder, and will say butter is sweet and good now, have not had a bit of strong butter since.

Alpena Co.

F. G. P.

Just One Tubular Cream Separator THE SHARPLES TUBULAR



Later than, different from, vastly superior to all others. Built on the only known principle of correct separator construction. Free from troubles of common separators. Patented. Has no imitators. Put common separators out of date years ago. In world-wide use. Probably replacing more common separators than any one maker of such machines sells.

Sharple's Dairy Tubular Cream Separators contain neither disks nor other contraptions, yet produce twice the skimming force, skim faster and twice as clean as others. Make extra profit by saving what others lose. Much easiest to clean. Wear a lifetime.

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Wilder's Self Adjusting Steel Latch Stanchion. Your cattle will repay you well if you make them comfortable and keep 'em clean. Will tell you how to do it, prove to you conclusively that Wilder Stanchions are best—tell you all about the only Stanchion made that is opened and closed without removing mittens. When open they cannot swing but are held rigid for animal to enter—closed they swing freely. Only smooth, polished hardwood touches the animal—no slivers—no splinters. Blind bolted at joints—always tight there. No cast iron parts to rust out. Wilder Stanchions permit the greatest freedom of motion consistent with safety and cleanliness. They will hold anything from the strongest unruly bull to the meekest "runt" in the herd,—will hold them clean and comfortable. Save your feed—your time—your temper by starting right.

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The only thoroughly manufactured silo on the market. Full length stave. Continuous door frame complete with ladder. Triple beveled silo door with hinges. Equipped with extra heavy hoops at bottom.

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Makes winter feed equal to June grass. THE ROSS will more than pay for itself in one season. Write today for catalog which gives facts that will save you money. Agents wanted.

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Owl Brand Cotton Seed Meal

41 Percent Protein Guaranteed

Standard for 35 Years. Corn can't replace cottonseed meal. Animals need Protein. Feed a balanced ration. Write for our booklet "Science of Feeding."

F. W. BRODE & CO., Memphis, Tennessee—Established 1875

TO BALANCE A RATION.—BREAKING HEIFER TO MILK.

Will Mr. Lillie please tell me whether we should use cotton or linseed meal with carrots, clover hay and cornstalks with some corn in, or can we get a balanced ration with corn and cob meal, carrots and oats, these being cheap and at hand? How do you break Jersey heifers of kicking, without pounding them?

Genesee Co.

A. R. G.

It would not be possible to balance a ration where the roughage is composed of clover hay and cornstalks with some corn in them, and with carrots as a succulent food for roughage and then corn and cob meal and ground oats for grain. No doubt your cows would do well on a ration of this sort if you fed them liberally, but that is not the point. The point is to get the right proportion of food nutrients so that you will get enough of each for the demands of the animal and still have none wasted. Out of the ration proposed, in order to get enough protein to produce the casein and nitrogenous part of the milk the cows have to eat more of the ration, than would be possible. That is to say, if they consumed enough of it to get sufficient protein they would consume more carbonates than any need of, and this would be waste. Now the theory of a balanced ration is, to have the protein and the carbonates in the right proportion so that when they are consumed by the animal they will be economically digested and assimilated. To do this, this ration would not suffice. An addition of cottonseed meal, or oil meal or gluten feed would be very beneficial in balancing the ration, and this doesn't mean that you be to more expense. It simply means that if you would feed less of the corn cob meal and less of the oats, and a little more of one of these other foods, that you would get the same results as you would if you fed a larger amount of the corn cob meal and ground oats. I would advise mixing 200 lbs. of corn and cob meal, 200 lbs. of ground oats, and 100 lbs. of either cottonseed meal or linseed meal, or 150 lbs. of gluten feed. Now, by doing this you will feed enough less of the corn meal and oats, to more than pay for the cottonseed meal or oil meal, and thus cheapen your ration rather than making it more expensive. Now if you don't need the oats and corn for other stock on the farm, then you can sell a portion of them and buy the other feeds. The probability is, however, that you will need this corn and oats for other stock, and if you do then it would be a matter of business economy to go out and buy the other feed to mix with your home-grown food.

Breaking a Heifer to Milk.

"How do you break Jersey heifers from kicking without pounding them?" I think that the same answer would apply to any other breed of cattle. I really do not think that Jerseys are any more apt to kick than other breeds of dairy cattle. In fact, my experiences is that Jerseys are quite gentle and docile and if you use them right, you have no reason for complaint along this line. You can not break a Jersey heifer, or a Holstein heifer, or a Guernsey heifer from kicking by pounding them. That is not the way to do it. One must remember that the teats and udder of a heifer are tender, that if their udders are well developed when they drop their calves, they are inflamed and full and are apt to be caked; they are sore and ought to be handled carefully. The best way to break a heifer from kicking is to never allow her to kick, and this can be done. Several weeks, or even months, before the heifer comes fresh, occasionally rub her udder and teats with your hands, she will get used to this and like it and the friction of the hand upon the udder and teats will, in a way, toughen it and get the heifer used to having her udder manipulated. As she nears the period of parturition manipulate the udder still more. Rub it thoroughly, then be sure that the teats are not chapped. At this time of the year especially, if the teats get damp and are then exposed to a dry cold wind, they chap and get sore. To prevent this, before the heifer comes in, oil her teats and udder with raw linseed oil. This will keep them from chapping and toughen them also. When the heifer drops her calf, of course the calf ought to suck once or twice, perhaps three times. The calf ought to get the first milk of its mother, which contains the cholesterin, which is so beneficial as a laxative in cleaning out the elementary canal of a young calf. If you don't allow a calf to get the cholesterin from its mother, then it ought to have a dose of castor oil the first thing, but if you let

the calf suck the heifer do not neglect the teats, especially if she runs out in a cold wind. After the calf has sucked the heifer the teats become wet with saliva and milk. If the heifer is turned out then the teats are liable to chap and when you go to milk her by hand, it hurts and she resents it. After a calf is through sucking, strip her a little and then wipe off her udder and oil it again, don't let it chap. Again, some people are very careless in the way they take hold of a cow's teat in milking. They have their sharp finger nails come in direct contact with the teats, and when they squeeze their hands, it presses the nails right into the teats. Can you blame a heifer, or even a cow for kicking under such conditions? Take hold of the teats so that the fleshy part of the finger comes in contact with the teats and not the nails.

* * *

Now, if you will bring a heifer up right, manipulate the udder properly before she comes in, be careful about not allowing her udder to chap, and get on the right side of the heifer. If you give her to understand that you are her friend, she will not be afraid of you and you will have little or no trouble about her kicking. Do not pound or whip or punish a heifer under any circumstances. Coax her. You go to pounding her, she will resent it and kick you every time, at least she ought to, and if she has got any spirit she will. If you are kind to her and have got her confidence, there will be no trouble. I will admit, that for the sake of argument, there is a difference in heifers and it may become necessary sometimes to tie the heifer at first until she becomes accustomed to being milked. Besides, you can tie both legs together with a broad strap, you can buckle a strap around her ankle and hitch it back to a ring in the floor. Either of these will prevent her from kicking you or doing any harm. For an ordinary heifer I, however, would not give a cent for any of these devices. If you will press your head firmly against her flank, you can usually prevent her from kicking at all. Once in a while it may be necessary to reach in front of her right leg with your left hand and grasp the gambel cord of her left hind leg. With any ordinary heifer, this will prevent her kicking.

WHAT GRAIN TO BUY.

I would like your advice on what kind of feed to buy. With cull beans quoted at 75c cwt.; second grade wheat, 75c cwt.; second grade barley, 75c cwt.; second grade rye, 60c cwt.; cottonseed meal, \$2 cwt.; linseed meal, \$2.25 cwt. We have all the good ensilage, good clover hay, good cornstalks of our own but have to buy grain for the cows; now which of these would you advise me to buy, and is rye likely to make cows lose their calves?

Arenac Co.

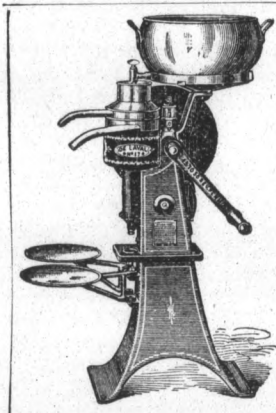
R. C. R.

If you can buy fairly good wheat for 75 cents per hundred, I am inclined to think that ground wheat, cottonseed and linseed meal would be the best food for you to buy to feed in connection with your clover hay, cornstalks and ensilage for roughage. Seemingly the price of cottonseed meal and linseed meal are high, but when we take into consideration the digestible protein which they contain, and the lack of protein in the roughage grown on our farm, then we can understand that, comparatively, these foods are not high. A ton of cottonseed meal, for instance, would be worth as much as four tons of ground rye to help balance up the ration. Cottonseed meal and linseed meal are very concentrated protein foods, and if it was not for their being so rich, I would not advise feeding them so liberally. A year ago last winter, after we had fed out our supply of home-grown oats and peas, we fed our cows, on an average, two pounds of cottonseed meal and two pounds of linseed meal, and ensilage. That is, we only fed four pounds of grain per day, and yet we got good results. Most people would not care to feed more than two pounds of cottonseed meal per day to a cow, and I would not think it advisable, and if you feed four pounds of grain, that is a liberal enough ration, then I would simply feed two pounds of cottonseed meal in the morning and two pounds of linseed meal at night. If you purchase the second grade wheat, get it ground and mix 200 pounds of ground wheat, 100 pounds of cottonseed meal and 100 pounds of linseed meal together, and then feed as many pounds per day of grain to each cow as she produces butter-fat in a week, you are sure to give your animals an opportunity to prove their worth.

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The Cream Separator by which all others are judged

For more than thirty years the DE LAVAL has been acknowledged as the world's standard.



You may hear it said of some separator that "It's as good as a DE LAVAL;" or if some competing salesman wants to make his argument particularly strong he'll say "It's better than a DE LAVAL." The concern with a cheaply and poorly constructed machine says "Just as good as a DE LAVAL and costs less."

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Louden's special electro-galvanizing process gives all Louden products a beautiful, lasting finish. Looks clean—easy to keep clean—never rusts—lasts much longer than ordinary hot process galvanizing. Our 40 years experience in fitting barns is at your service for the asking. Hand your dealer a rough ground plan of your barn, and ask him to mail it to us for price. This will entail no obligation either on your part or the dealer's. Don't accept any carriers but LOUDEN'S. There are none "just as good." Write us for complete catalog of barn equipment and valuable book on manure values.

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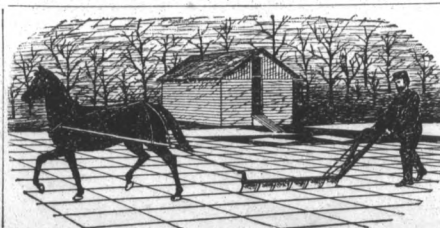
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Nothing is better that you can use;
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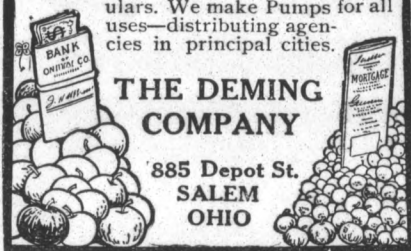
There used to be some orchards where the trees were free from scale, disease and insects; but there aren't any such today. The trees—your trees—are threatened every day of the year with dozens of different kinds of trouble, and the success of your fruit crop depends on the amount of spraying you do.

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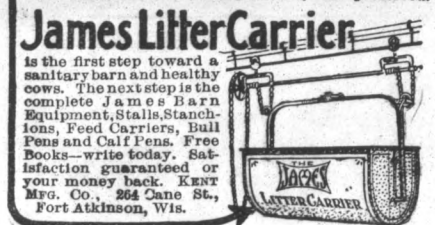
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HORTICULTURE

HORTICULTURAL TOPICS DISCUSSED.

Requirements of Different Fruit Package Laws.

To encourage greater uniformity in the packages used for the marketing of fruit legislatures of different states have passed measures stipulating dimensions of packages or contents of same, or both. Such measures encourage the use of standard packages within the state. They also foster the employment of these standard packages by parties living outside but selling fruit within the state enacting the statute. It would be impossible to learn just the effect of these measures upon the fruit industry; they are certainly a much stronger factor than the layman is likely to give them credit for. However, more efficient policing would unquestionably increase the benefits. In order that the readers of these columns may have the opportunity of learning the requirements for fruit packages laid down by the different states we append a brief statement of the important ones:

Michigan has a statute regulating the size of peach baskets which requires that they hold 7 1/2 4-5 cu. in., or one-third bushels. The requirements for apple barrels is that the staves be 27 in. long and the heads be 16 1/2 in. in diameter.

In New York state statutes require that quart measures for the marketing of fruit contain 67 cu. in., pint measures shall contain 33 1/2 cu. in., and half-pint measures shall contain 16 3/4 cu. in. Barrels in that state must have a capacity equal to 100 qts. dry measure, have a head 17 1/2 in. in diameter, staves 28 1/2 in. long, with a bulge at the center of the barrel measuring 64 in. outside measurement.

Baskets shall be of the capacity of one quart, one pint, or one-half pint standard dry measure, according to the statute of Massachusetts.

Peach baskets are required to hold 16 quarts or a Winchester 1/2 bu. and the baskets shall measure 12 1/2 in. high, 13 1/2 in. across the top, and the inside measurement shall contain 1075.1 cu. in. in New Jersey.

Missouri enacted a statute which stipulates that apple barrels be 28 1/2 in. high, have chimes 3/4 in. from the ends, have heads 17 1/2 in. in diameter and the center of the barrel with a diameter of 20 1/2 in., inside measurement.

Apple barrels in Tennessee shall contain 2 1/2 bu. and in Wisconsin 100 qts. dry measure.

The Canadian fruit package law requires that fruit of that country packed for export shall be packed in barrels. These barrels shall be 26 1/4 in. between heads, inside measure, the heads 17 in. in diameter and the middle diameter shall contain, when level full, 15 qts. or more, 11 qts. and be 5 1/4 in. deep, inside measurement, 6 3/4 qts. and be 4 1/2 deep, and 2 2-5 qts.

The Influence of a Name.

A few months ago the word passed that a certain make of automobiles was not properly designed and right away the sales of that machine began to drag and finally it became necessary to practically close up the shops until the surplus could be disposed of. In early days northern Michigan, in some way, got an outside reputation that her lands were of an inferior quality and so men refused to settle. Lands to the west were chosen instead, and the territory of northern Michigan suffered. The tide of immigration became settled in its course and was directed to the west; consequently farm lands there, that did not compare favorably with farm lands in Michigan, were selected in preference to what our state had to offer.

To stem this tide required more than the showing of equal advantages. Michigan was put to a disadvantage, she could not divert men from their western course by showing them that she had something just as good, but it was necessary to prove that she had more. The west was a mystery, it could not be defined, and that lack of definiteness about it seemed to be a lure for homeseekers. But later when men learned it better and specific information about it could be had, then it was, that Michigan's possibilities took root in the shifting element of our civilization, and now, in spite of the attractive advertising being done for the promotion of western properties, Michigan is changing the course of the immigrant. The old opinion is wavering, men are getting a right knowledge of her soil, her climatic

limitations, and her wide range of agricultural possibilities which, together with her low-priced farm values, her closeness to the great markets of the country have "turned the trick." But it has cost Michigan a lot of money and a considerable popularity to let the opinion early get out that a large part of her territory was unavailable as farming land. The natural course of affairs from now on may repay her what is due. Those who aid her in coming into her own will also be blessed by the advantages offered. Our fruit-growers are giving this aid and reaping the blessings.

FARM AND FRUIT NOTES.

The weather has been quite catchy for several weeks so it is hard to plan and execute farm work just as would be desired. We have tried to make pruning our main business the past week, but as the orchard is four miles from home and there has been so much stormy weather we have not progressed very rapidly, but have done a number of other jobs here at home. On two different days we hardly got at work at the orchard before rain came on and we had to leave. There are some trees in the orchard to be removed and we take the saw and axes along so we can work at this when the weather is not suitable to prune.

We have cemented the furnace cellar during the week, and filled up a number of hollow apple tree trunks and branches with cement. This will at least keep some of the water out and discourage decay.

Another recent job is the pulling of the stumps of the peach trees that were cut down on account of yellows during the summer. There were about 150 of these. By taking a chain and team and cutting some of the roots on one side, the stump could be pulled with most of the roots. The longer roots will be chopped off, the trunks sawed with the buzz saw, and used as furnace wood—rather expensive wood, however. I do not hear much about the yellows in the fruit belt, but here where there are only a few trees on each farm, and no inspection, the yellows are taking nearly everything. We have tried hard to keep it out of our orchard by cutting the trees as soon as affected, but with little success, as it has taken nearly the entire orchard in three years, and just as it is reaching a good bearing age, six years. I have also noticed a few touches of it in our two-year-old orchard, and I presume this will not last as long as the other one. I agree with the remarks in a recent Farmer, that inspectors should have better pay and be better qualified. It is impossible to find competent inspectors here who will do the work for two dollars per day and furnish their own conveyance, and get the ill will of some of their neighbors for their pains. Not one in ten of the farmers whose peach trees have the yellows know what is the trouble with them, and they are left to sprout up as long as they will live, and scatter the disease. Possibly the present law works out all right in fruit districts, but it is something of a farce in other places. Many of the inspectors who are appointed are not qualified for the work, and instead of attempting to throw more light on the question they make arbitrary, and in some cases, unreasonable demands, which result in much ill feeling, and often in the dropping of the inspection. We are a little anxious about this for we have a new orchard of 900 peach trees set last spring. We will do the best we can with them but we do not expect many of them to be there five years hence, but we hope that by that time they will have paid for themselves. I should like to have someone who has had considerable experience with the yellows give his opinion as to whether the virulence of the disease does not decrease the longer it is in a locality, in other words, is it not most destructive soon after entering new territory?

Another job that we have completed at odd spells when the weather was favorable is the putting on of 1,000 tree protectors. These were wood veneer, and were moistened, bent around the trees and tied with twine. We used a bicycle pant guard to hold the protector about the tree while tying, and tied with two strings, one near the top and one near the bottom, unless there was a mulch to hold the base. A slit was made in the edge of the protector to prevent the string from slipping down. We put them only on the apple trees, the peach trees being so low they could not be applied very well, and we will chance their being injured. We still have a hundred or more trees that we will use tarred paper protectors on.

S. B. HARTMAN.

THEY GROW

Good Humor and Cheerfulness from Right Food and Drink.

Anything that interferes with good health is apt to keep cheerfulness and good humor in the background. A Washington lady found that letting coffee alone made things bright for her. She writes:

"Four years ago I was practically given up by my doctor and was not expected to live long. My nervous system was in a bad condition.

"But I was young and did not want to die so I began to look about for the cause of my chronic trouble. I used to have nervous spells which would exhaust me and after each spell it would take me days before I could sit up in a chair.

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"The first cup, which I made according to directions, had a soothing effect on my nerves and I liked the taste. For a time I nearly lived on Postum and ate little food besides. I am today a healthy woman.

"My family and relatives wonder if I am the same person I was four years ago, when I could do no work on account of nervousness. Now I am doing my own housework, take care of two babies—one twenty, the other two months old. I am so busy that I hardly get time to write a letter, yet I do it all with the cheerfulness and good humor that comes from enjoying good health.

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FALL PRUNING—II.

In a previous article we discussed fall or winter pruning in a general way, making several subdivisions and advancing several principles to keep in mind during the work. I now wish to give as nearly as possible our method of pruning out an old neglected tree, such as is found in an orchard that has not been pruned for many years.

In the first place, we wish to have the proper tools for the purpose. After trying out nearly all kinds of shears and saws I would advise a Paragon pruning saw, which has a double set of teeth, the blade being curved so as to make a push cut on the convex side and a draw cut on the concave, or hollow, side. This enables one to use the saw in a greater variety of ways and places than a straight saw or one with but one set of teeth can be used. The convex side, or push cut, is used more often in cutting a large branch near by, and the concave side, or draw cut in reaching out and cutting smaller branches. Many of these branches are small enough to be cut with the long handled pruning shears, but the trouble is to work the shears and hang on at the same time, as two hands are required to do this, while but one is needed to work the saw. It is not practical to use a ladder in pruning a large tree, as to much time is required to move it. The operator must get into the tree and work from the branches. Another advantage is a saw with a push and a draw cut is, that that work can be done more easily, as it rests one to use both motions rather than but one. Where the trees have a large number of quite large dead branches near the base we sometimes carry a coarse hand saw for cutting these, as it will cut a little faster than the pruning saw, but ordinarily it is more bother to keep it along than the advantage gained by using it.

The only other tool which we consider very necessary in pruning a neglected mature tree is the long-handled pruning shears. By these I mean the shears like hand shears, but with handles from two to three feet long. We usually set a step ladder against the trunk of the tree and use these shears in cutting out the water sprouts which are generally quite abundant on the larger branches near their base. Many of these may be dead, but there is usually some live wood at their base where they are cut. As a rule we do not take the shears into the tree on account of the difficulty in working them when standing on a branch, and the time consumed in changing from the shears to the saw and back again. The saw is light and can be held in one hand while holding on with the other, and it will cut either a large or small branch and do it almost as quickly as the shears. The concave side also acts as a convenient hook to start the branch to the ground after it is cut, for it must be remembered that in these old thick trees more time is consumed in getting the cut branches to the ground than in cutting them. To aid in this we begin at the bottom and center, so as to leave all the room possible to get the branches down. Those in the center are started downward with the saw or hand, cut end foremost, and those near the outside are left or thrown farther to the outside where they are pulled down from the ground with a pole having a spike driven in it obliquely near the upper end.

But to return to the question of tools, the saw alone will do, but the long-handled shears will prove a convenience in the center of the tree, and in trimming out the lower branches around the outside. These being farther from the body of the tree are not held as firmly and cut better with the shears than with the saw. For the higher branches we have a short step ladder, and also carry a ladder about 16 feet long to use on overhanging limbs that we can not reach from the tree. The pole pruners with lever will answer for some of this pruning around the outside where the branches can not be reached with the others, but I do not believe they are of sufficient advantage in pruning old neglected trees to warrant their use. Better work can be done by getting up to it either in the tree or from a step ladder, besides it can be done more easily. We have also had some of the recent patent pole shears on trial, but can not recommend them. The kind which works with a sleeve on the pole has not sufficient power, and the one which you hook over a branch and pull on the handle requires a firm branch or it will slip down the branch instead of cutting it, and it is also difficult to cut close to the parent branch with it. If an agent wishes to sell you some of these novelties at \$3.00

per, set him at work at an old tree with it, while you take the saw and shears. If he can do as good a job as you can in as short a time, you can talk with him, if he can't, let him trot along, and I dare say he will keep trotting.

So much for the tools and method of using them. Now, as to the best manner of pruning a neglected tree. We begin at the center, cutting out the dead limbs which may come out from the trunk or large branches near it, and the dead and surplus water sprouts. Where the center is rather open we like to leave a few water sprouts that are headed toward these open places if it can be done without breaking them in getting down the brush. If they must be taken out others will be likely to start and some can be saved at the next pruning. This selection and training of water sprouts to form a new head lower down on high trees, or to fill up open places in the tree should always be kept in view.

From the center of the tree we work outward on the lower branches of the tree, then upward toward the top. The dead branches are cut and taken out first, then the branches which rub or cross or are not growing in the desired direction. These are drawn out and dropped as cut so that one can better see what needs cutting next, for it is impossible to do a good job of pruning on a tree filled with brush.

There will still be places that are entirely too thick, and these should be thinned by taking out the branches that will leave the remaining ones best distributed. In general, this will be the branches near the center of a cluster. We try to leave those that are growing toward the center of an open space, also the lower ones where they are healthy, as we want as low trees as possible, and the average neglected tree is altogether too high. We also aim to cut a number of small branches rather than a large parent limb, where this will answer. All this work requires frequent observation and study as one should attempt to see how the limb will look after a certain branch is removed before cutting the branch, also whether the thinning could not be better done by cutting some other branch.

If the tree is too high, and most of them are, a special problem is presented. It is too expensive to properly spray and pick the fruit from the tops that can not be reached with a 20x24 foot ladder. Unless a special effort is made and a high derrick used the spraying will not be well done and the fruit will be inferior, and pests will spread from the top to the lower branches. A special ladder must also be used for picking out the tops, or one must climb into them, or a longer and heavier ladder be used for the entire tree, all of which is inconvenient and expensive. If these high tops are removed it will remedy all this. True, it reduces the bearing surface of the tree, but at the same time it gives the light a chance to strike further down into the center of the tree, so that more fruit will be produced in these centers, and if some new sprouts are left here to renew the centers the bearing surface that is lost by the cutting will gradually be replaced lower down where it can be handled at half the cost and the quality of the fruit will be better.

So much for the reason, now for the "dehorning" operation. We try to cut only the branches that are vertical or nearly so, unless they are altogether too high. Those whose origin is at a reasonable height and which are horizontally inclined will droop with bearing so that they can be sprayed and picked quite conveniently. Those which stand upright and are too high should be severed just above a branch that has a horizontal growth so that this branch or branches will take the growth which went to the severed limb, and will help to heal over the wound quickly. Stubs should never be left as they will die down and leave rotted places or will send out numerous water sprouts. It may be better to make a cut of this kind not quite horizontal so water will not stand on it, and if large it is best to paint the wound when the sap is not flowing too much, with thick, white lead paint. In cutting any branch it is best to cut rather close to the parent limb and somewhat parallel with it, but not too much so where there is quite an enlargement at the base, as in some varieties but long stubs should always be avoided. Dead limbs nearly always have some green wood grown about their base, and we usually cut near the outer edge of this, as the wood is softer here and cuts more easily, and the wound will heal more rapidly.

After the tree is pruned from the cen-

ter and the top lowered if necessary, we pull down any brush still hanging, and trim out the outer and lower branches that could not be reached from the tree.

After the tree is finished it is viewed from the ground from all directions and if any very thick places still appear they are located and thinned out. We do not aim to do all the pruning a tree will ever need at the one operation, but where a tree is so very thick it is necessary to thin it considerably in order to get the branches down, and sometimes a tree is thinned nearly enough when the dead and dying branches only are removed. However, I believe in giving the tree a fairly good thinning the first time for it can be done more cheaply then than to scatter it over several years, besides it will be found to be too thick in a year or two anyway and will need further thinning, but I may treat of this in another article.

As to the cost, one man will prune from two to six trees such as are found in the average neglected orchard, in a day. If they are large and thick, two to three make a good day's work. For the average run of trees 50 cents would be a fair charge for the pruning and 15 to 25 cents for burning the brush, but if the trees are very large and thick it may cost a little more.

Calhoun Co.

S. B. HARTMAN.

A GARDEN THAT PAID.

It has often been said that the garden was usually the most profitable plot of ground on a farm, size considered, and surely ours has proven the rule. The garden is about a half acre in extent, but a fourth of that is taken up with trees and bees, not scattered through the garden, but located in the center.

From this plot we have had abundance of all sorts of vegetables from early radishes to late sweet corn, for a family of seven, and have four bushels of sweet potatoes, three of Irish, several gallons of tomatoes canned, fifteen gallons of sauerkraut made, besides about 400 head of cabbage to bury; celery to run until Christmas, pumpkins to last all season, and have sold five dollars worth of vegetables.

Just a couple of loads of well-rotted manure were used, and that on the space where gooseberries and rhubarb were set out. The soil is sandy and is, of course, strong, but as an offset, it needs drainage very badly.

The soil was plowed deep, and as rain was threatening, no fining was done, just rows run and the seed put in—this for the early beans, corn, potatoes and cabbage plants. The radish, lettuce and pea seed, and the onion seed were put out earlier, on prepared soil.

For the later cabbage, corn, sweet potatoes and celery the ground was well stirred with cultivator before being planted.

Cultivating was done with hoe, rake and garden plow, and it was done often enough to keep weeds down, and this required soil stirring at least twice a week until plants grew too large.

The following varieties were grown: Dwarf Gem peas; Scarlet Tipped and Chartier radish; common white onion sets, Hanson lettuce, Success tomatoes, Country Gentleman sweet corn, Jersey Charles-town and Wakefield for early cabbage, late Flat Dutch and Marblehead for late, Valentine bunch beans, King of the Garden Lima beans, early Ohio potatoes, the yellow sweets, do not know the variety as we bought the plants, White Plume celery and seed we had saved from good pumpkins.

The pumpkins were planted with the Irish potatoes, principally, a few vines among the sweet corn, and were planted after potatoes were hand high, in the row, not between the rows as that would have hindered cultivation. They are fine for cooking this year. The sweet potatoes, late cabbage and celery plants, also some sweet corn, were planted in July, just average good plants excepting celery which were very small and puny.

Considering the price we would have had to pay for vegetables used and on hand, the garden was worth \$60 or \$75 to us, about \$1.00 was paid out for seeds and plants, and the cultivating was done by myself and children. The plowing would have cost \$1.00 probably, so after paying for all cash outlay we have \$3.00 or \$4.00 in money and the garden living through the summer, also an amount stored for winter.

Air slaked lime was used for cabbage worms, the children hand-picked potato bugs. The secret, is good seed and frequent, shallow cultivation.

Indiana.

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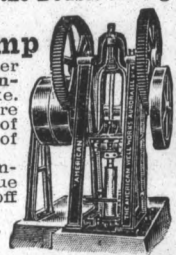
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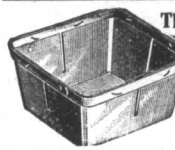
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Five Years 260 Copies Postpaid \$2.00

Three Years, 156 Copies, Postpaid\$1.50

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Six Months, 26 copies, postpaid.....40 cts.

Canadian subscriptions 50 cents a year extra for postage

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DETROIT, DEC. 10, 1910.

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CURRENT COMMENT.

The Progress of Agricultural Co-operation.

A bulletin just issued by the International Institute of Agriculture, with headquarters at Rome, affords some interesting revelations regarding the rapid progress of co-operation as applied to agriculture in some of the old world countries. Germany leads in the number of agricultural co-operative societies, having a total on the first of June, 1910, of 23,845 such organizations, of which 15,526 were loan and savings organizations, 2,293 for collective purchase, 3,325 co-operative trade organizations and 2,701 others.

The economic utility of the credit and loan societies of Germany was touched upon in a recent editorial in this paper and requires no further comment at this time, except to call attention to the fact that an easy method of borrowing money at a low rate of interest would make our farmers more independent of market conditions and enable them to place their

products on the market in a more gradual manner, which would cause the profits now reaped by speculators to accrue to the producers. These statistics regarding the operations of these societies for collective purchase, production or sale show that they do business in large figures and that they cover almost every phase of agricultural effort, including societies for the sale of cattle as well as other products grown upon the farms of that country. Space will not permit us to go into the details of the business done by the several German Co-operative societies at this time, but it is sufficient to say that they are operated in communities, but are federated together in a central organization which holds an annual congress and is a considerable factor in the securing of legislation and the education of the individual society along right lines of organization. It will be a surprise to many Michigan farmers to learn that the scope of co-operative work in Germany is very broad, covering even the providing of electric light and power to the residents of farming communities and small villages by means of co-operative societies.

Austria has a total of 2,605 agricultural co-operative societies in addition to over 7,000 banks which are operated upon the co-operative plan for the extension of credit to the members of the societies operating them. A large number of co-operative warehouses are operated by these societies and used in the purchase and sale of commodities used and produced by the members of the societies. There is also a general federation of the co-operative societies of Austria as well as 34 provincial federations of local societies.

In Denmark where agricultural co-operation has reached a high state of perfection the work has had a most remarkable effect on agricultural conditions. Agricultural co-operation was introduced as a means of bettering conditions when Denmark, as a nation, was bankrupt and her people practically in the same condition, with the result that today Denmark is second in per capita wealth of all the countries of the world. Some details of these organizations are most interesting but space will not permit them to be given in this issue. In 1909 there were in Denmark, 1,157 co-operative dairies, 34 bacon curing societies, 15 societies for the purchase of requirements, a number of societies for the marketing of cattle, and others for the marketing of eggs; cattle breeding societies numbering 1,260, horse breeding societies numbering 270, swine breeding societies numbering 102 and conbreeding societies numbering 253, sheep trol societies to the number of 519, the so-called control societies being similar to the cow-testing associations carried on in Michigan in a co-operative way.

Perhaps the most remarkable growth of agricultural co-operation has occurred in Japan in recent years. In 1909 there were 5,149 such societies in Japan, while in 1900 there were but 21. These covered a very wide range of usefulness and will be mentioned in more detail in a future issue. Other countries of Europe also afford examples of the increasing popularity and usefulness of co-operative societies for the economic benefit of farmers.

It is a matter of pride and congratulation that the United States comes in for a fair share of credit in co-operative work in this bulletin, the organization of fruit growers in California being given as the best example of the benefit of co-operation to be found in our country. While co-operative enterprises are becoming increasingly popular among the farmers of this country this method of doing business has not increased as rapidly here as in the older countries, probably because of the fact that our farmers have been more prosperous and have not felt the necessity for working together to the same degree that their old world contemporaries have done. However, every instance in which our farmers have organized themselves in a co-operative way has been one more instance of the success of this method of doing business. Practically all farm buildings are now insured in mutual insurance companies which are operated on the co-operative plan. The co-operative dairies have without any question been the means of maintaining a good price for butter because they afforded the producers the opportunity to sell it in the best markets of the world. Co-operative cow testing associations are making money for their members while the co-operative breeders' organizations which have been formed in Michigan during the past two years will prove of even greater value and benefit to their members. Co-operative elevators and associa-

tions for the marketing of produce have proven a success where tried on a practical plan, while the latest effort toward co-operation in Michigan is being undertaken by the beet growers of the state as noted in a recent issue. There is every reason to believe that co-operative work might be extended with great effect to the farmers of Michigan and this is a good time to consider the proposition and work out a practical plan of organization along lines of community production throughout the several agricultural centers of production in the state. Active work for a single year by interested readers of the Michigan Farmer would produce results which would give Michigan a sufficient number of these organizations to form a strong federation, which would become a very considerable factor in the various ways in which a potent influence is needed to put our agriculture on a par with other big industries.

A Lesson in the Hog Market.

In last week's Michigan Farmer, an old swine breeder and close observer of market conditions analyzed the relations between the farmers of the country and the packers who buy their product, and made some deductions that are well worth the careful consideration and study of every farmer who produces hogs. The fact that a very large percentage of the farmers of the country who produce hogs plan on fattening the spring pigs for the fall market, makes it not only possible, but a great object to the packers to bear the hog market during the early winter months, since they are able to stock up on meats and provisions to be sold later in the season on the advancing market which is sure to follow the season of flush marketing, following the time when the spring pigs commence to be rushed to market by growers who plan on this source for a needed cash income at this season of the year.

The only way to remedy a condition of this kind is to provide for a more even marketing of the product, and this in the case of hogs would require a different system of breeding and growing them, so that there would be no big surplus of hogs to market at any season of the year. The corn belt farmers will, as a rule, continue to feed off the spring pigs for the winter market, since as they are situated, this is likely to prove the most profitable method, even if the hogs have to be sold at a lower price at that season. But with an increasing number of hogs being fed in the cattle yards and feed lots during the winter by the cheap method of having them follow the steers fed on shock corn or ear corn, and the increased facilities for feeding hogs in the dairy sections of the country during the winter season, this tendency should be less marked, even in the corn belt, than it has been in previous years. Then, with an increased knowledge and appreciation of the advantage of feeding a fattening ration in connection with clover or alfalfa pasture in the summer, and a ration in which alfalfa or clover forms a considerable factor in the winter, together with the use of better balanced rations in the growing of the pigs, which will make it possible to get profitable gains and yet finish the spring or fall pigs at almost any season of the year desired, the hog growers of the country will be able to plan on marketing their hogs more seasonably. By this we mean, that if the tendency should continue to be toward a weakened market in the fall or early winter, the progressive hog feeder should plan on running his spring pigs a little later and finishing his fall pigs earlier than he has been accustomed to doing, since by this method he will be reasonably sure of having a better market when he sells than by following the majority in the present tendency toward heavy marketing in the fall and early winter.

Notwithstanding the fact that the big corn crop will tend to raise the average market weight of the hogs sold during future months, it will be a great surprise to all market students if hog values do not strengthen as the shipments begin to fall off with the marketing of the bulk of the spring pigs. Undoubtedly there is a shortage of hogs in the country, and while an increased average weight will help to make up for this deficiency, yet there will be no surplus above the demand, and provisions may be expected to remain at a comparatively high level. This will be but a repetition of history, but it is a repetition which can be predicted with sufficient accuracy to hold a valuable lesson for the hog growers of the country, and particularly for the hog

growers of Michigan, who can plan on a ration for their growing hogs which will make them more independent of seasons than can the hog growers of the corn belt.

HAPPENINGS OF THE WEEK.

National.

Secretary Meyer, of the navy department, has issued a report in which he recommends the disbandment of several of the navy stations of the country and using the funds necessary to maintain them for the better equipping of more important stations. Stations which could well be dispensed with, in so far as efficiency in case of attack by an enemy is concerned, are those at New Orleans, Pensacola, San Juan, Port Royale, New London, Sackett's Harbor, Culebra and Cavite.

On Monday of this week Port Huron held an election to determine the commissioners to rule the city under the new commission form of government, which has recently been adopted by the municipality.

Mrs. Mary Baker G. Eddy, who has always insisted upon being called the discoverer and founder of Christian Science, died at her home at Newton, Mass., last Saturday night. According to the announcement of medical examiner George West, of Newton Center, death was due to old age and an attack of pneumonia, from which the aged woman suffered about a week or ten days.

The members of the congressional committee on the Panama canal have returned from Panama after a tour of inspection. They state that the canal is 60 per cent completed. The canal officials are asking for \$47,000,000 from the coming congress for the further prosecution of the work.

Senator Elkins, of West Virginia, who has been seriously ill for some days back, was reported improved early this week.

Government officials are looking over the details of bids for the two new battleships of 27,000 tons capacity. When completed the ships will be the largest of the navy. It is estimated that three years will be required for building and the cost will approach \$12,000,000.

The hunting season which closed with the last of November, has, according to private reports gathered, cost 113 lives. Michigan was the heaviest loser, 27 lives being lost within her borders.

It has been found that the new collier of the United States navy is so designed that it cannot unload at the old docks. The craft, which has been christened "Cyclops," is the largest of its kind in the American navy.

The majority report of the committee considering the Ballinger-Pinchot controversy, is in session in Washington. The committee as a whole will not be called together until the majority members have concluded their work.

The interstate commerce commission is giving a hearing to the Pullman company and railroads, together with the attorney-generals of several states, to determine a change in the upper berth rates of Pullman cars. The Pullman company has offered to cut the rates of upper berths 20 per cent but the attorneys of the several states do not feel satisfied with this amount.

By advancing wages from 5 to 8 per cent, adopting a 11-hour day, and eliminating work on Sundays and holidays, the express companies have affected a settlement of the difficulties with drivers in New York city. The men are back to work, although there are a few minor details yet to settle.

The new court of commerce which has been authorized by congress, will have upon its bench, Judge Prouty, of Vermont, who has been a member of the interstate commerce commission for the past 20 years. Another member is Franklin K. Lane, of California.

It is estimated that the eight-hour labor rule will increase the cost of the battleship New York by \$1,500,000.

The war department has adopted a high power powder for use in mines. The nature of the new explosive is a secret.

The prison board of control of Michigan will recommend to the coming state legislature that a new state prison be built at Jackson, outside of the present city limits. The old prison, they state, has outlived its usefulness, is not secure, and it will soon require a large expense for additions, repairs, etc.

The complete returns of the last election show that the plurality of Gov.-Elect Osborn was 43,093.

The small pox ban has been raised from Saginaw, Mich., and schools there are in session and all business is going normally.

Twelve midshipmen and an instructor at Annapolis are ill with typhoid fever at the military academy.

General interest is being manifested as to the probable contents of the message of President Taft to the coming congress convening this month. The turn of events in the last election has necessarily made a change in plans feasible. The President appears to have diverted little, however, by the unexpected strength of the opposite party and will go forward, with possibly the exception of the tariff schedule, to carry out his program as announced earlier in his term of office.

The census shows the population of the state of Vermont to have increased during the past ten years 3.6 per cent. The population now stands at 355,956.

Foreign.

The election in England of a new parliament indicates that the liberal government will be returned, the latest news from the island appears to have reduced the question to one of how much the present majority will be increased or diminished. It is generally thought that the majority will be about the same as

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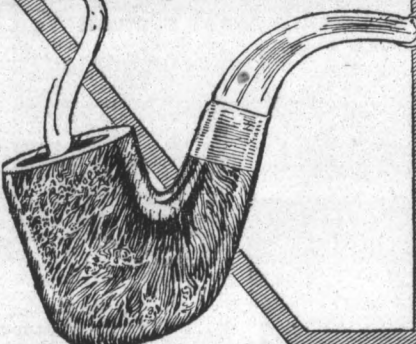
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that of the last parliament, although there may yet be some unforeseen change that will alter the outcome.

Reports are current that Prof. J. R. Allen, of the University of Michigan, has discovered a gum-bearing plant in Mexico that promises to reduce the cost of rubber. The quality of rubber made from the juice of this tree compares with the best Para product, and it can be laid down in New York at 17 cents per lb.

Little news has reached the states the past week regarding the situation in Mexico. Insurrecto bands have crossed over into the states and forced men from ranches to join the rebellion. Mormons in the Mormon colonies at Colonia, Dublan and Colonia Juarez have called out every male inhabitant from 14 to 70 years of age and are drilling them regularly to act in case property of the colony becomes endangered. Rifles have been shipped from the states to arm these men.

CROP AND MARKET NOTES.

Shiawassee Co., Nov. 30.—The first heavy snow storm of the season is passing over this locality. The snow is already four inches deep on the level. The ground is not frozen underneath. Wheat is going into the winter in splendid condition the soil being well saturated with moisture. Clover hulling is well under way and the yield ranges from one-half bushel to two bushels per acre. Hay is being sold in large quantities and straw is also being sold in baled form. A large number of lamb feeders are purchasing all the loose roughage and grain that farmers have to sell, and paying the top market. The potato market is not encouraging and many farmers say they will not open their pits if the price does not go higher than last season. The bean market is a little better, but farmers are determined not to sell until the \$2 mark is reached. A few farmers have several acres of beets to haul. Very few beets will be grown in this section next season unless the price is raised. Very few bunches of hogs in the country. No cattle on feed. A large number of sheep barns empty. Good milk cows selling high and in strong demand.

Gratiot Co., Nov. 28.—This county has had very good fall weather, with the result that farm work is well out of the way. There is still much corn in shock, as many farmers preferred to fall plow while the ground is open. About an inch of snow fell during the night and is still falling, though the ground is not frozen. Wheat, for the most part has made a good growth. Corn was rather below the average, both in quality and quantity, in this section. Beets have been rushed out of the ground and are about all secured. Many potatoes were caught by the severe freeze in October. Produce is quoted as follows: Beans, \$1.85; wheat, 86¢@89¢; oats, 30¢; butter, 22¢@25¢; eggs, 27¢.

Ohio.

Lucas Co., Nov. 28.—So far November has been a good month for farmers to secure the corn crop. We have had but little rain and a little snow—just enough to dampen fodder to make good husking. Nearly all husking done with the modern husking machines, which shred the fodder at the same time. In this way the farmer gets the corn husked, fodder in the barn and corn in the crib all in one job. The corn market is very dull at present; local elevators are paying but 45¢ per cwt. for ear corn. The price of live hogs has rallied somewhat since the recent drop; local buyers are paying \$6.50 per cwt; sheep, 3¢@4¢; lambs, 4½¢@5¢. Calves are scarce and high, 8¢@9½¢. Poultry remains about the same, chickens, old and young, 10¢@11¢; ducks, 12¢; geese, 10¢@11¢; turkeys, 16¢@18¢; butter, dairy, 28¢; eggs, 30¢; potatoes, 40¢; squash, ¼¢ per lb. and plentiful. There are a great many acres of sugar beets raised in this county and for lack of cars a great many of them remain to be shipped, but the most of them are out of the ground. It is a question of only a few days when they will all be cleaned up. The yield and quality have been good, averaging 12½ tons per acre and testing 17 to 19 per cent. Hay is scarce and high, bringing \$16@18 in the Toledo market. Wheat, 90¢; oats, 28¢@30¢; corn, 25¢ per basket. Wheat is looking fine.

CATALOGUE NOTICES.

The 1910 Game Laws and Guide Directory issued by the Union Metallic Co., of Bridgeport, Conn., is a pocket size pamphlet of 140 pages giving a synopsis of the game laws of every state in the union as well as the Provinces of Canada. It also contains a guide directory giving the name and address of experienced guides in all principal game sections of the United States and Canada, and is a valuable reference book for any sportsman.

"Orchard Dividends" is a title of a bulletin on modern methods of harvesting, grading and packing apples, issued by B. J. Pratt Co., manufacturing chemists of 50 Church street, New York city. This company will be pleased to place the bulletin in the hands of any one who is interested in the better care of fruit.

"Profits Begin with the Seed," is the title of a bulletin prepared by Manson, Campbell & Co., Detroit, Mich., showing the benefits derived from a thorough cleaning and grading of all farm grains and seeds, in which many good arguments are presented why every farmer should own a good fanning mill and seed grader.

Removed to Larger Quarters.

Owing to the increase in their business the H. W. Johns-Manville Co., announces the removal of its office now located at 85 Sheldon St., Houghton, Mich., into more commodious quarters at 96 Sheldon street. Mr. S. D. Harris, who has been associated with the company for a number of years, will remain in charge of the Houghton office at the new address.

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Send Coupon or Postal Now. Tear off coupon or take our address down at once to remind you to send for our book, prices and all the interesting facts connected with this proposition. A saving of \$10.00, \$20.00 or \$30.00 and the best wagon built is bound to interest you if the trade secrets and dealer tricks don't. Write before the first edition of our books is gone.

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Woman and Her Needs At Home and Elsewhere

THE CHRISTMAS DINNER.—BY EDNA SKINNER.

How we all look forward to holiday time—to the happy reuniting of family and friends; while the mother or hostess spends much time and loving thought preparing the dinner, taking a natural pride in each achievement. But our delight in a bountifully spread table is sometimes marred because of the tired, flushed face of our hostess.

Is there not a way to prepare and serve the meal without a maid so that the hostess will be less wearied and better able to enter into the spirit and jollity of the occasion? To do this we need to arrange the work very systematically and do as much as possible beforehand.

Below is suggested a menu for Christmas dinner, prepared and served without a maid.

Cream of celery soup	
Roast turkey, chestnut and oyster dressing	
Fried potatoes	Giblet gravy
Squash	Creamed onions
Jellied cranberries	Cabbage salad
	Fruit pudding
Hard sauce	Lemon sauce
Nuts	Fruits
	Coffee

The day before dinner is to be served, clean and truss the turkey, cook the giblets and chop them ready for the gravy. Cook and season the squash, ready to be re-heated when needed; to re-heat, place squash in oven in covered baking dish and stir occasionally. Cook and mold the cranberries, crack nuts, make hard sauce and lemon sauce for pudding. While the pudding, as well as the salad dressing, may be made many days in advance.

The following recipes may be suggested:

Cream of Celery Soup.

* Use outer stalks and tougher portions of celery; clean, cut in inch pieces, cover with water, cook until tender and rub through a sieve. To each pint of liquid allow one pint of thin white sauce; season with salt and pepper, also a slice of onion if desired. Serve immediately after combining strained celery and white sauce.

Chestnut and Oyster Stuffing.

Three cups chestnuts, half cup melted butter, one cup bread crumbs, one teaspoon salt, half cup milk or more, one-eighth teaspoon pepper, one pint oysters. Shell and blanch chestnuts and cook until tender in boiling salted water. Mash, using a potato ricer. Add salt, pepper and milk. Mix butter with crumbs. Combine mixtures and add drained oysters. If the bread crumbs are stale it may require more milk.

Jellied Cranberries.

Pick over and wash the cranberries. Put into enamelled stew pan with sugar and water, allowing one-half as much sugar as berries, and one-half as much water as sugar. Cover until they begin to boil. Stir occasionally. Cook until all the berries have burst, then without straining pour into an earthen mold and set aside to cool. When thoroughly chilled, this can be removed from mold and will retain its shape.

Cabbage Salad.

Save some of the choicest leaves for a garnish in which to serve the salad. Celery or nuts or green peppers may be cut and blended with the chopped cabbage in any proportion desired. Serve with a cooked salad dressing.

Salad Dressing.

Two eggs, one cup vinegar, half cup of cream, sweet or sour, two tablespoons of cornstarch, three tablespoons cold water, half teaspoon salt, half teaspoon mustard, bit of cayenne, three-fourths tablespoons sugar, one teaspoon butter. Thicken vinegar with cornstarch which has been blended with cold water. Mix mustard, salt, cayenne and sugar with slightly beaten egg—add cream, then add this mixture to thickened vinegar. Cook like soft custard, remove from fire, add butter, strain and cool. This dressing will keep in cool place for weeks in tightly closed jar. It is much improved if whipped cream is beaten into dressing just before serving.

Fruit Pudding.

One cup chopped suet, one cup chopped

and seeded raisins, half cup chopped citron, two tablespoons chopped candied orange or lemon peel, one cup molasses, one cup milk, three cups flour, half teaspoon salt, one teaspoon soda, one-eighth teaspoon cinnamon, one-eighth teaspoon ground cloves.

Mix and sift the dry ingredients, add suet, fruit, molasses and milk, stir until thoroughly blended, pour into buttered pudding dish, cover and steam four hours. One-pound baking powder cans make satisfactory pudding molds; fill only two-thirds full and adjust the covers. Or individual molds may be used, when a shorter time should be allowed for the steaming.

This pudding will keep for weeks; just before using steam the amount desired until thoroughly heated through. It is very fine if served with both hard sauce and lemon sauce.

Hard Sauce.

Quarter of a cup of butter, one cup powdered sugar, three-fourths teaspoon vanilla, quarter teaspoon lemon extract.

Sift the powdered sugar before measuring. Cream the butter, gradually add sugar, and lastly the flavoring. Keep in cold place until needed, that it may be hard.

Lemon Sauce.

One cup boiling water, half cup sugar, one tablespoon cornstarch or two tablespoons flour, two tablespoons butter, two tablespoons lemon juice, few gratings of nutmeg.

Mix sugar and cornstarch, add water slowly. Remove from fire and add butter, lemon juice and nutmeg. If this is made the day before, re-heat in double boiler when needed.

A HANDY BAG IS A WELCOME GIFT.

BY MAE Y. MAHAFFY.

The accompanying cut illustrates one of the handiest work bags one can possibly desire. It is copious as to space and opening, yet attractive in appearance and serviceable, and its construction is so

every may be solid, or some cross stitch design, either of medallion form or in band effect across the width of the bag. Some prefer an initial or monogram, with or without an encircling wreath. Others like a band of drawn work, through which the lining shows conspicuously.

The bottom of the bag is made on a fold of the goods, 24 inches being necessary for the double length, and 13 inches for the width. The lining and outside have their edges turned inward, so that a neat finish is made. The sides are overcast together half the distance from the bottom to the top. The embroidery hoops are wrapped with purple ribbon, or whatever shade prevails in the other work, and each section of the bag is turned down over one hoop and sewed into position, the material being pushed into gathers. These hoops are easily slipped over a chair, door knob or hook when the bag is not in use, or over the arm when carrying it.

For those who desire darker colors, burlap in green or brown, crash or linen in the tan or gray shades, or any of the canvases will be found appropriate fabrics to use as a background, and some of these will not require a lining. By using strong material like the burlap, and a dark shade, very useful school book bags may be made in this manner, making the size to correspond with the books to be carried.

CHRISTMAS GIFTS FOR THE OLD.

BY GENEVA M. SEWELL.

In this hurrying world do we stop to pay as much honor to our old people as we should? When we think of all they have done for us we surely ought to stop long enough to give them a pleasant time at least once a year, especially when the years that we can do so are steadily diminishing. Do go home for Christmas even if it causes you a great deal of inconvenience. Perhaps it will not be necessary next year.

All the children might club together and get father and mother a nice phonograph, and a few records, giving them the money to select other records, for they may like the pieces that you would never



A Work Bag for a Christmas Gift.

easily followed and no one need hesitate to attempt its fashioning.

The material used in this instance is cream colored scrim with lavender satin lining, almost verging on purple. The scrim is first embroidered in a design of violets and green ribbons. This embroid-

think of getting. Do not think this is foolish, for nearly all old people like music and we are so thoughtless that we do not often give them the opportunity to hear it. If it is in their own house it will shorten and lighten the long days and evenings, when they cannot get out

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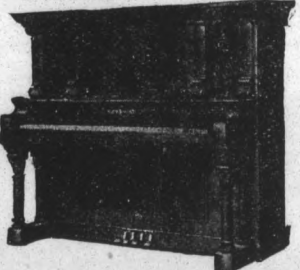


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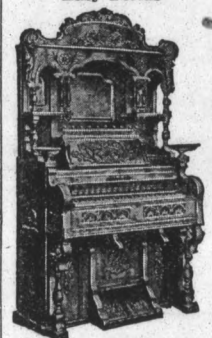
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and eyesight is too dim to read. Then afterwards for birthdays and other times you can send some new records. I can just see how eager they will be to try the new ones.

Another gift that both will appreciate is a calendar with familiar scenes and faces on each page. Every neighborhood has some one with a kodak. Get pictures of all the old friends and neighbors, as well as relatives. Get some from the childhood home, if possible, and put in their own pictures on the wedding day if you can get some that were taken so long ago. Put your mind and heart into it and I know you can think of enough to fill three hundred and sixty-five pages. Place the pictures and scenes at the top of heavy cardboard, which you can get at the printer's, and have the month below and then the day of week and day of month below that on a small piece of paper which is pasted across the top to hold in place. This may be torn off and a new one put on for next year so this will be a perpetual calendar.

Give mother a pretty work bag containing a quantity of pieces of all the woolen dresses the friends and relatives have had for a year or more, she will enjoy "piecing" them at odd times. Give father a subscription to his favorite paper. He also would enjoy a fountain pen, while she would be pleased with a bottle of perfume.

Make a shopping bag out of heavy black cloth or leather, putting her monogram or initial in silver on one side. Do not think that old people do not care for such things for they do. Just think of the things you like that are nice and dainty and be sure your mother will like them just as much as you do. We are too apt to think, "Oh, they do not care for fine things," simply because they are old. But give them some of them and see their dear old faces light up with pleasure.

Do not forget a generous box of the favorite candy to each one and if it is utterly impossible for you to go to them on Christmas write a long, long letter telling all your plans, and hopes and going over a lot of your childhood joys again with them. That will be a precious present to both of them.

CHRISTMAS HINTS.

BY MARY E. H. COVILLE.

Get out your boxes of remnants, lace, ribbons, silks, lawns and organdies and you will be surprised to find how easy it is to fashion a dainty gift even if it is at the eleventh hour.

There is such a rage for small bows, jabots, collars, bags, etc., that your friends will be delighted with your hand work; we have made several bows by taking a piece of mull four inches long and three and one-half inches wide, fold a very narrow hem all round, and on the right side (you can see the edge through) just outline stitch this hem in your chosen color of silk floss—then sew on each end a lace edge, cut another piece from same cloth three and one-half inches by three and one-half inches.

Take a ten-cent piece and on edge of each end of this draw small scallop, work in same color silk and in each scallop a small dot. Gather each piece in center, place the embroidered piece on top of the lace trimmed piece and you have a beautiful bow to wear with shirt waists. If you have no lawn remnants, a quarter of a yard purchased will make one-half dozen.

For large silk bows take a piece of white silk one-half yard long, or sew together pieces to make that length four or five inches wide; fold over very narrow hem and chain stitch with black silk all round after cutting the ends diagonally. Black and white are very much used. Take this piece when hemmed and tie into what is called an airship bow, just two loops and the two ends. This is also pretty in black silk with a favorite color.

We made jabots from lace insertion remnants by sewing them together. Cut all strips six inches long and have them seven inches wide when sewn together. Now sew quite full all round this a lace edge, lay three plaits each side center and fasten top, press plaits with warm flat-iron and a dainty jabot is the result.

We had some handkerchiefs, simply hemstitched and about 15 cent quality. Cut a handkerchief through the center for two jabots. With a fine crochet hook (No. 80 thread), crochet a pretty border around the hemstitch and plait them up into jabots. On some put black silk dots at the bottom above the hem.

Guest towels made from huck toweling

are easily done and very acceptable to the busy housewife. Some of these were scalloped at each end and initial letter above, others hemstitched and Greek key border darned in. These were three-quarters of a yard long and all had initial letters in blue, red, orange, pink, pastel shade, greens, etc., in mercerized floss.

Pillow cases prettily embroidered with scallops with a daisy in each and initial; hemstitched sheets, bags and aprons are easily made and always acceptable.

Pieces of jetted net make into collars all these you will doubtless find in your box remnants.

No matter how costly your gift is, unless it is properly and daintily wrapped up it will look cheap. Have plenty of white tissue paper and baby ribbon or the narrow holly ribbon and after it is prettily tied up slip a piece of holly in the knot. A dime will purchase a good-sized package of holly.

SHORT CUTS TO HOUSEKEEPING.

Keep a handled basket on the stairs to save frequent trips up stairs. When the basket is full of bed-linen, towels, etc. one trip will do the work of several.—C. R. L.

Lard will keep fresh much longer if on or two potatoes are cooked in it while trying it out.—Mrs. A. D. P.

Take the yolk of an egg and stir as much salt into it as it will take up. Bind this on warts every night for a week and they will gradually disappear.—Mrs. H. G.

Use oxalic acid for taking out ink stains. Put powder in a little water and pour through stain, then rinse articles well in clear water.—H. K.

When butchering time come try filling the dripping pans with lard and set in the oven to render. It is just as rapid and prevents a great deal of the odor which is so trying to many.—Mrs. D. L. G.

Powdered starch applied instantly will take out almost any fruit juice stain from wash goods, if allowed to remain on the goods for a few hours until the discoloration passes into the starch. Starch applied in this way will remove iodine stains also. Mrs. J. J. O'C.

HOUSE-BALLS FOR CHILDREN.

BY ELIZABETH M. STETSON.

During the winter time when children have to be kept in the house a great deal, a nice soft ball can be made for them to play with by cutting a pasteboard in circular form with the center taken out like a letter O. Then either cut very soft, bright pieces of woolen cloth or take old pieces of worsted and wrap them in and out, until the whole space in the center is closed. Now sew this center part together as firmly as possible after making sure that it is well filled and tight in the center.

With a pair of sharp-pointed scissors or a very sharp knife, cut the outside of the cloth or worsted and by slitting the pasteboard it will slip away and leave, with some fluffing up, a round ball. This should be trimmed and smoothed off and rounded by gentle rolling in the palm of the hand and is ready for the game of parlor ball.

For worsted the pasteboard circular piece should be about four inches, but may be a little more or a little less; but for cloth, which is heavier and more bulky, there may be a greater diameter, say about six inches. The main thing is to fill the center opening by winding in and out good and full, to crowd the central opening of the O until there is no opening left at all, and then to secure this part together as well as possible, so that the strands of the ball will not fall out when the outer edges are cut. With a little showing the children can be taught to make these balls for themselves and thereby this will prove a double amusement, one in construction and later, of manipulation in the game of tossing.

If you have a new polished table and want to protect it make ovals of linen large enough to fit under your tureens and platters; buttonhole these around the edge, of course, in scallops, and embroider a design in eyelet or solid work. Sew small pearl buttons on one oval and in the one of corresponding size work button holes. If you can secure asbestos or straw mats to slip inside these pockets, do so. If not, cut ovals out of pasteboard and button inside your linen covers. These will protect your table and add to its good appearance.

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Turns scraps and left-overs into most savory dishes. The "Enterprise" is the only meat and food chopper that actually *cuts* the meat, fish, vegetables, fruits, etc., without crushing or mangling. The four-bladed steel knife revolving against a perforated steel plate does the actual cutting. The "Enterprise" has the fewest parts, is easily cleaned, cannot rust, and is practically unbreakable.

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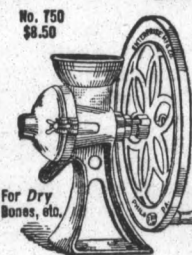
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CIRCULATION DEPT., THE MICHIGAN FARMER, Detroit, Mich

The Country Girl's Chances in Town—No. 1.

BY HILDA RICHMOND.

What the City Store Offers.

Just how the impression ever got out that "Anybody can clerk," no merchant has ever had explained to his satisfaction. Judging from the girls who apply for places in stores, it would seem that the idea is a very popular one. Girls who can not add, multiply and subtract, blandly say they "know they can clerk," but the proprietor of the store has his doubts after giving the applicants a few simple problems. Any girl who is thinking of applying for a place as a clerk in a store, large or small, should be sure she is quick and accurate at figures, and also that she knows something of the art of handling customers. The latter is acquired to some extent by long experience, but even a very young clerk should have a winning, obliging manner.

In spite of the fact that many city stores will not take girls who can not live at home, as clerks, there are many opportunities for country girls as clerks. The country is ever supplying the town

she may blame herself entirely if she fails.

At first the wages of a clerk are barely sufficient to pay her board and laundry work, and the country girl coming to the city to work should have a good-sized emergency fund to back her up before thinking of starting. The least extra expense, a slight illness, or anything liable to happen to almost any worker, will plunge her in debt and it gives a girl many anxious hours to fall behind ever so little. One thing the girl should never do and that is plan to stint herself on food. It will be hard enough to come from the abundance of the farm to the skimpiness of the city boarding house without trying to cut off even that insufficient supply.

If a girl can get a little experience in a store near home before coming to town, all the better, since every bit of experience counts. At holiday seasons and times of special sales the country girl should apply and then strain every muscle and every faculty of her mind to do more than she is paid for doing. At certain seasons merchants take on almost any sort of clerk, but they ruthlessly weed out the incompetent ones as soon as the busy time is over. Like stenography, clerking is rather overcrowded owing to the popular belief that it is "nice, easy work," but there are always opportunities for people with ability and tact and patience. The life of a clerk, even a successful one, is no snap, to use a common expression, but many workers find in it pleasure and profit. Machinery is driving many workers out of other trades and occupations, but it is hardly likely a machine will ever be invented to take down goods and patiently answer foolish questions as well as sensible inquiries. Until such a thing is put upon the market, there will have to be clerks, and the number of them is increasing every year.

From the farmhouse to New York buyer for a large millinery establishment is the long step made by Miss Anna Murphy, of Detroit. At least it seems like a long step when we note the distance between the two places, but in reality it was a series of small, painful steps.

"It was all hard work," declares Miss Murphy herself. "You don't get anywhere in this world without work and I have done my share of it. I learned my trade first in a country town, but after I learned it I decided to branch out into stenography instead. I worked hard to master this new subject, always with the glittering promise of my teacher that I could come to Detroit and step right into a position at \$15 or \$18 a week. After completing the course I came here to pick up one of those positions, but found instead that on account of a panic, the best stenographers were glad to get a position at from \$5 to \$8, and beginners like myself could not get work at any price.

"But I was determined to stay in the city so I turned my mind to millinery again. I hunted up the milliner under whom I learned my trade and asked her to let me come into her shop and brush up my ideas. She took me on at a salary and I stayed with her for a couple of years. Then another firm sent for me as a saleslady and finally made me their manager and buyer. Let me tell you though, that they did not do it because of any wires that were pulled for me. It was hard work and plenty of it that brought me to the top. I mastered my subject thoroughly, and I was never afraid of doing a little too much work. If I saw a thing that needed to be done I did it, even though it didn't add another dollar to my pay that week. Honest, hard work is bound to tell, and it has told for me.

"Am I sorry I left the country? I should say not. The only thing I am sorry for is that I didn't leave 15 years before I did. There is no reason why a bright, hard-working, conscientious girl can not get ahead in the city. If you want to make money the city is the place to do it. What could you do in the country to earn \$35 a week?"

Don't be too anxious to buy a Persian gown, as it promises to be very much overdone. However, if you want it, buy silkoline instead of silk if it is to be made up under marquissettes or chiffons. The effect is exactly as good and the cost of your garment is very much decreased.



Miss Anna Murphy.

with fresh blood, ability, energy and ambition in its workers, and there is no doubt that many girls from the farms master the details of clerking completely. It is a deplorable fact that the very best of the life and energy and talent of the country is forever lost to the country in so many communities, but since we are powerless to prevent it, there is no use misrepresenting the facts in the case. The girl who can conquer loneliness, hard work, indifferent food, lack of pleasure and the desire to "just slip along" is sure to succeed in clerking. It is all foolishness to think the day is past when there were chances to rise in any undertaking. The chances were never more numerous than at the present moment.

Two girls went into a store in a small sized city at the same time. Though the town only boasted 20,000 inhabitants the store was a large one, and one of the girls rose steadily and surely to the position of head of the cloak department and buyer of all that class of goods for the firm. To be sure, other clerks talked of "pull" and favoritism, but the girl with the ability kept her head and her temper, and also her position of trust. The other girl chatted, when she thought her employers were not about, with other clerks, made eyes at the traveling men and in every way shirked her duties, though in the main she was a good hearted, innocent person. Of course, she was discharged the instant hard times came, while the other young woman remained with the firm until she was married, leaving with the genuine regret of the men she had served so faithfully. Somebody must have the good places in the store, so why not the faithful girl who rises, not because of a "pull," but solely because of her ability. And in a peculiar way the country girl is fitted to rise if there is anything to her at all. She has been accustomed to work from childhood, and the fresh air and sunshine have given her such a fund of health to draw from that

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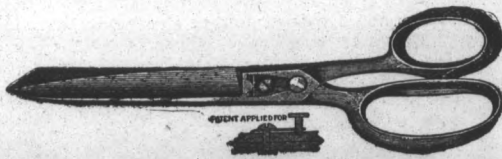
and money refunded if not satisfactory after 90 days' trial. Complete attachments, accessories and illustrated book free. We guarantee this machine to be first-class in every particular, handsome in appearance and equal to any machine made. Same machine without the automatic Lift for only \$18.

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THE MICHIGAN FARMER, Detroit, Mich.

POULTRY AND BEES

ABOUT MARKETING EGGS.

It is not enough that we bring our egg yield up to the highest possible figure. This is the first operation. The next, and just as important, is to multiply this yield by the best possible price per dozen.

It will be said that we can not multiply the yield by more than the market price. We can, however, multiply it by our own individual market price—the market price we each can find if we hustle for it.

Everybody cannot do this, it will be said, and this is true; but everyone will not try. The great bulk of the eggs will be sold the easiest way—to the regular trade—and for the least money—the market price that comes to you ready made. And a very good price it is despite its source. Yet it is but one market, it pays but a fair profit, and in this free country we need not be tied to it.

The regular egg deal as a whole is pretty well handled, but, as in most big deals, there are a lot of ragged places on the edges and some holes. The storing of eggs under the present system evens up the price for the year by regulating the output but sometimes it doesn't keep the eggs.

This condition is the opportunity of the hustler for prices. Farmers and poultrymen generally take it for granted that cold storage eggs are just like other eggs, or nearly so. This is a mighty long way from the truth. Ask the consumer, what's in an egg? The market quotations on cold storage eggs are not much lower than on the "strictly fresh."

This would seem to confirm the excellence of the storage product. But the whole question hinges on that expression, "strictly fresh." "Strictly fresh" very often means a condition very different from what it should. Some remarkable cases of rapid decomposition have been known to occur in "strictly fresh" eggs, instances in which the eggs have even exploded before they reached the home of the consumer. In fact, the strictly fresh eggs furnished by the regular trade are usually the better grade of the cold storage stock on hand at the time. There may be exceptions, but this is the rule, so do not think that the difference of two or three cents usually given in the market quotations is the only one.

No Question About the Demand.

The consumer would be willing to pay for real strictly fresh eggs. I have talked with a great many consumers in the larger cities, and they are unanimous in saying that it is next to impossible to buy good eggs. When eggs are selling at from 20 to 22 cents per dozen to the egg wagons and country stores, and this largely "in trade" which brings the actual price down to less than 20 cents, they are retailing in the cities, sometimes not over twenty miles distant, at from 26 to 30 cents per dozen. Even at these prices there was an average loss to the consumer, because of bad eggs, of from 10 to 50 per cent. You can figure for yourselves what this brings the actual cost of these eggs to.

Yes, I know there are laws governing the sale of ancient and otherwise objectionable eggs, and such eggs are not supposed to be sold, but they are.

There is a very great demand for fresh, sweet, wholesome eggs direct from the farm to the consumer. It is a demand that would be willing, yes, eager, to pay 10 cents per dozen more than is paid for the storage article.

It now becomes a question of how to get the egg producer and the egg consumer together. There are many ways of doing this. Have you a friend or friends in the city? Send them a crate of eggs, a small one, say two or three dozen of real fresh eggs. Let them see what a real fresh egg is like. They will soon get the habit, and the profit will be mutual. You and I can afford to sell them eggs at prices above what we now get, and still have them cheaper than they can buy them for from the corner grocery. They get healthy, wholesome food in the bargain. When one or two families of egg users take our product direct they will soon tell their neighbors, and our customers will multiply until we have a trade that will take all we can supply.

Some of us are better situated than others with regard to access to the prospective city customer. However, there are few who are so placed that they can not reap the reward of direct sale to

consumers in the nearest city. If there is no other way, we can sometimes spend a few dollars very profitably in advertising our product. It may seem unusual, but it is often the unusual that succeeds; in fact, most large business enterprises are willing to pay good money for unusual methods in advertising.

Anyhow, get a city customer or two somehow. It is a good time now to "work this up," and by the time the heavy laying season is here you may be reaping a handsome profit through a little extra foresight and diligence. Remember that 10 cents extra on a dozen of eggs means about 50 per cent increase in profits in your poultry business.

Isabella Co.

WM. J. COOPER.

PRODUCING EGGS ECONOMICALLY.

Now that the short winter days and long nights are with us, those of us fortunate in having a nice flock of hens can find ample time to give them the attention necessary to make them profit producers. The first requisite is a coop or house that is proof against draughts and one wherein water in dishes does not readily freeze by day or night. A poultry house, even if sided with inch lumber, may be banked with earth or coarse straw manure and made comfortable. One great fault with many is crowding too many fowls into one compartment, expecting thereby to secure a large number of eggs. Twenty to thirty fowls together, and well tended, will produce more eggs than fifty or more crowded into the same space, and they will do it on less feed. If one has room it is best to partition off compartments with ordinary chicken netting, providing light slat doors so as to readily enter any part without having to go out of doors in the cold, then place the proper number in each pen.

The more economically a product is produced on the farm, without sacrificing quality or yield, the more profit there is in it for the producer; therefore I would say to those who expend tidy sums every season for the various commercial egg foods, conditioners, tonics, etc., for their poultry, look about and first see what the farm affords or will afford during the winter months. All standard poultry feeds, etc., are manufactured commodities, grown and produced originally right here at home on our farms, even to bone meal, beef scraps, etc., which are all originally the farmer's product. Make it a rule to save, in a box in some dry place, every bone found in the yards and surroundings, even to old dry ones. During snappy weather these may be readily crushed to atoms with an ax or maul by placing them on a flat rock or on the frozen ground, and no better egg producer can be made, as they contain lime, ash and the elements that go to make the albumen, the yolk and tissues of the egg. When butchering, save all odds and ends of meat not suitable for house use, wash, dry and, if necessary for their preservation, smoke them in some out of the way place and they will keep sweet and may be fed at the rate of one ounce per hen. Three or four feeds weekly of this is sufficient. They may be freed of bones, run through the meat chopper and mixed with ground corn and oats, or bran, middlings, etc., changed about frequently, as fowls do best on a variety of feed. Salt in small quantities in mash feeds is necessary and, in real cold weather, add to the equivalent of one peck of same one-fourth ounce of common red or cayenne pepper. All table scraps, parings, cabbage leaves, etc., are excellent feeds in conjunction with grain and meat for eggs. An abundance of water, easy of access and not easily polluted, should be before them at all times; also, dry sand or gravel, old lime mortar, or ashes, as these have lime for the shells. A space should be set apart, littered with leaves, chaff or straw, for them to scratch in and into this litter cracked corn, wheat, buckwheat and other grains and seeds should be thrown for them to dig for. Whole corn, the shelled grains, should be heated quite hot and given them for their supper. It is the best grain for this meal, and were I to dispense with any I would let them all go before parting with corn. It may be fed in many ways, as meal, cracked grains, whole grains, boiled soft and fed as green corn, or made into meal cakes, which are splendid when cold and broken or crumbled. Skim-milk, also sour milk, are very good for hens and should be fed by all means if at hand.

It pays to fuss and fool with hens, as well as hogs or cattle, if one has or expects to have a profit page in his ledger.

I frequently place clover leaves and stems in an old kettle, pour on water and boil them until soft, then mix them in mash feeds. The hens fairly fall over themselves in trying to get this, for it is one of the very best green feeds in either summer or winter and one which every farmer who has clover hay can supply. There is no great secret in making hens lay. It is a matter more of small details, carefully adhered to and followed out, than the launching out into untried methods.

Gratnot Co.

G. A. RANDALL.

SNOW IN THE APIARY.

Since the fields have put on their warm white winter clothing, it is well to consider what is best for the colonies that are wintering under this white sheet in the apiary. Is it necessary to remove the snow from the hives, or should it be left for a protection? Snow is a protection to fields and meadows, as all farmers well know. It is a non-conductor of heat and cold, and the ground under it retains its natural warmth. When the snow melts, the wheat and grass show, by their green blades, that this mantle has been beneficial. The hives, likewise, if partly or entirely buried in snow will retain the warmth of the bees, and many of our old farmers purposely pile up the snow over their hives.

In a latitude where there are but few days when the sun does not cause some thawing, the snow changes to ice and a subsequent freeze-up, by a sudden change of wind, may completely close up the entrances and air passages. This condition leads to the suffocation of the bees, if protracted beyond a few days, unless some aperture or crevice is made for admitting pure air. So here is a danger against which we must guard, and a little snow, enough to close the air-holes with ice, is much more dangerous than a drift in which the hive is entirely buried.

No doubt many persons feel alarmed when they see the hives becoming buried under snow. Just a few precautions will make them safe. Place the hives so that the entrances will face toward the south. Then the snow and sleet will blow against the backs of the hives and not into the entrances. Also incline them a little forward. The warmth of the bees will cause the snow to melt, and the water will run out and not into the entrances. Snow itself is porous and air can penetrate it, but if it thaws in the day time, and the water cannot run off, it may freeze solid about the entrance at night; then, before tomorrow's sun does its work, your bees may have perished.

After hive entrances have been partially clogged for a time, and the bees have not had sufficient air, they will often rush from their hives when the weather is too cold and perish in the snow. The entrances should also be kept free from dead bees that drop from the cluster from time to time. These are old bees that die off naturally, but they stop the ventilation if not removed. Take a piece of stout wire, bend the end like a poker and rake them out occasionally.

So the snow is not to be trusted too far, and the south side of the hive is in danger of being quickly uncovered when its shelter is of this flimsy material. Acting upon this experience I have been in the habit of banking up the snow, when there is plenty of it, on the north and west sides of the hive and carefully cleansing the apron-board on the first warm day after the snowfall. Then if the weather gets mild enough for a flight the bees find themselves dry footed in front of their hive.

I have seen many bee-keepers close their hives on a warm day in snow time to keep the bees from flying and getting lost on the trip. I have never found any benefit in this method. When the weather is warm enough for the bees to fly they will fret and worry if confined. Better let them fly and run the risk of their not returning. Not only is this reasonably plausible in theory, but practice has confirmed my view of the matter, for I have invariably noticed that those colonies which take the freest flight on warm days, and consequently seem to lose the greatest number of bees on the snow, prove to be the best colonies in the spring. All things considered, a heavy snow is to be taken as more beneficial than injurious to the interests of the apiarist, for if it is a sign of protracted cold—which is by no means always the case—it is also prophetic of prosperity, since it shelters the land and promises us a healthy growth of grass, clover and other plants.

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MARKETS

DETROIT WHOLESALE MARKETS.

December 7, 1910.

Grains and Seeds.

Wheat.—There appears to be a great deal of conjecture in trading circles since conditions of the market and of the growing crop in different sections appear to change radically with the days. However, during the past week advances have been made in both cash and future wheat. This has occurred in spite of the emphasis given to the rains of the southwest where the crop was suffering from dry ground, and snows in the west and northwest where the protection was needed. But a European shortage is still conceded, and Argentine, although the past few days has brought her rains that have bettered the crop, will not offer to the markets of the world a normal amount of wheat. Speculators also claim to come in for a share in causing fluctuations, in that it is alleged that Armour is short a few million bushels and those having a surplus are trying to make him pay a premium for the necessary number of bushels to cover, with the result that prices have gone up a small margin. One year ago the price for No. 2 red wheat was \$1.20½ per bu. Quotations for the past week are:

	No. 2	No. 1		
	Red.	White.	May.	July.
Thursday	.96	.95	1.00½	.96½
Friday	.95½	.94½	.99½	.95½
Saturday	.96½	.95½	1.00½	.96½
Monday	.96½	.95½	1.00½	.96½
Tuesday	.96½	.95½	1.00½	.96½
Wednesday	.96½	.94½	1.00½	.96

Corn.—The week has not been a discouraging one to those who have corn to sell. Advances were made and, while the market is dull largely for the reason that farmers are not bringing the cereal to the elevators but are keeping it in the cribs for feeding purposes, the cold weather that has now arrived will likely give the trade support. But a few thousand bushels increase is noted in the visible supply. Larger operations by feeders will aid in keeping prices firm, although from now on those who have a surplus of the crop will probably be putting it onto the market. One year ago the price for No. 2 corn was 59c per bu. There was an advance of 3c per bu. between Dec. 8 and the close of 1909. Quotations for the past week are:

	No. 2	No. 2
	Corn.	Yellow.
Thursday	53	56
Friday	54	57
Saturday	54	57
Monday	54	57
Tuesday	54	57
Wednesday	54	57

Oats.—Here, too, has an advance been made. The demand for oats is active. The market is steady at the new figures. The price for oats advanced three cents on this market during the month of December, 1909. One year ago the price was 43½c per bu. Quotations for the past week are:

	Standard.	No. 3
	White.	White.
Thursday	35½	35
Friday	36	35½
Saturday	36	35½
Monday	36	35½
Tuesday	36	35½
Wednesday	36	35½

Beans.—Contracts in this department are scarce and the prices given out by the board are not based on actually reported sales. The figures are the same as were given a week ago. The trend of the market for December of 1909 was steady. The nominal quotations are:

	Cash.	Dec.
Thursday	\$2.08	\$2.05
Friday	2.08	2.05
Saturday	2.08	2.05
Monday	2.08	2.05
Tuesday	2.08	2.05
Wednesday	2.08	2.05

Clover Seed.—Improved prices characterize this market. The trading continues to be active. While early reports were suggestive of a large yield of clover seed for the country, later reports are to the effect that the opposite is true. Alsike advanced during the week. Quotations are as follows:

	Prime	Spot.	Mar.	Alsike.
Thursday	\$8.75	\$8.85	\$8.75	\$8.75
Friday	8.75	8.85	8.75	8.75
Saturday	8.75	8.85	8.75	8.75
Monday	9.00	9.05	9.00	9.00
Tuesday	9.00	9.05	9.00	9.00
Wednesday	9.00	9.05	9.00	9.00

Rye.—Market is higher and firm. Quotation for No. 1 is 83½c per bu.

Visible Supply of Grains.

	This week.	Last week.
Wheat	42,990,000	42,485,000
Corn	1,545,000	1,452,000
Oats	15,758,000	15,502,000
Rye	507,000	453,000
Barley	1,849,000	2,206,000

Flour, Feed, Provisions, Etc.

Flour.—The flour trade is easy with prices unchanged. Quotations are:

Clear	\$4.65
Straight	4.65
Patent Michigan	5.20
Ordinary Patent	4.75

Hay and Straw.—Hay values are steady. Quotations on baled hay in car lots f. o. b. Detroit are: No. 1 timothy, \$16.50@17; No. 2 timothy, \$15.50@16; clover, mixed, \$15.50@16; rye straw, \$7@7.50; wheat and oat straw, \$6@6.50 per ton.

Feed.—All prices are steady with those of last week. Carlot prices on track are: Bran, \$21 per ton; coarse middlings, \$23; fine middlings, \$26; cracked corn, \$25; coarse corn meal, \$25; corn and oat chop, \$24 per ton.

Potatoes.—The announced quotations are off two cents from those of last week. There is a fairly liberal supply. Demand is steady. In car lots Michigan potatoes are selling at 38@40c.

Provisions.—Family pork, \$23@24; mess pork, \$21.50; medium clear, \$21@22; smoked hams, 13½c; briskets, 12c; shoulders, 12c; picnic hams, 12c; bacon, 18@19c; pure lard in tierces, 11¼c; kettle rendered lard, 12½c.

Dairy and Poultry Products.

Butter.—Best creamery butter is off 1½ cents this week. Dairy goods are steady. The creamery market is firm at the new figures. Quotations are: Extra creamery, 29½c; firsts do., 27c; dairy, 23c; packing stock, 20½c per lb.

Eggs.—Continued small receipts and pressing demand made higher egg prices. The price for fresh receipts, case count, cases included, is 31½c dozen.

Poultry.—Generally speaking, the poultry situation is slightly improved from a week ago. Dressed chickens are down to 12c; fowls steady at 11c; ducks at 16c; geese, 12@14c, and turkeys, 18@20c. Live birds remain at 12c for chickens, 11 for fowls, 9c for old roosters, while turkeys are down to 16@17c; geese advanced to 12@13c, and ducks to 15@16c.

Cheese.—Michigan, 17c; Michigan sharp, 17@18½c; York state, 17½@18c; York state sharp, 19c; limburger, old, 16@17c; Swiss domestic block, 20@22c; cream brick, 17@18c.

Dressed Pork.—Down to 9c lb. **Veal.**—Choice, 12@12½c; ordinary, 8@10c per lb. **Rabbits.**—Per dozen, \$2.00.

Fruits and Vegetables.

Apples.—There is some activity in the apple circles and choice fruit is quoted higher. Choice consignments selling at \$4@4.50; common kinds and grades, \$2@3 per bbl.

Cranberries.—Quoted at \$3 per bu. **Cabbage.**—Steady. Selling at \$1.50 per bbl. for new.

Pears.—Steady. Selling at \$1.25@1.30 per bu. **Onions.**—65@70c per bu.

Honey.—Choice to fancy comb, 15@17c per lb.

From Farmers' Wagons on Detroit Eastern Market.

Apples, potatoes and pork constituted the bulk of the offerings on the market Tuesday morning. Apples were selling from 75c@1.50 per bu., according to the grade and kind. Pork was in good demand at 10c per lb. Potatoes were generally quoted around 50c per bu. although there were offerings of inferior grades at a slightly lower figure. Chickens were selling at 12@15c per lb. Celery was quoted at 20@25c per bunch.

OTHER MARKETS.

Grand Rapids.

Potato buyers are unable to get refrigerator cars and with warehouses filled they have stopped buying at many loading stations and with plenty of cars the potato market would undoubtedly go to pieces. The market is very weak now, prices to growers ranging from 22@30c. The bean market is still flat, with quotations to farmers still on \$1.75 basis for white and \$2.25 for red. Quotations for farmers for live poultry, delivered, are as follows: Fowls and chickens, 10@11c; geese, 11c; ducks, 13c; turkeys, 18c. Veal is worth 6@11c. The egg market continues firm, fresh stock bringing 30c. Both dairy and creamery butter are off 1c. Dressed hogs are worth 8½@9c.

Chicago.

Wheat.—No. 2 red, 94@94½c; May, 96¾c; July, 94c per bu. **Corn.**—No. 2, 49c; May, 48¾c; July, 49c. **Oats.**—No. 2 white, 33¼@33¾c; May, 34¾c; July, 34¾c.

Butter.—Creamery prices have been reduced 1c below Elgin, making a 2c decline for the week, but despite this fact the market is slow and rather weak. Dairies remain unchanged. Creameries, 23@28c; dairies, 25@27c per lb.

Eggs.—The egg business is largely confined to the better grades of fresh eggs and prices have moved up another cent. Demand for storage stock slow. Quotations are: Prime firsts, 33c; firsts, 31c; at mark, cases included, 19½@22½c dozen.

Hay and Straw.—Market firm in the face of an advance of \$1 on all grades of hay. Straw unchanged. Choice timothy, \$20@20.50; No. 1 timothy, \$18.50@19.50; No. 2 do. and No. 1 mixed, \$16.50@18; No. 3 do. and No. 2 mixed, \$13.50@16; rye straw, \$8@9; oat straw, \$7@7.50; wheat straw, \$6.50@7 per ton.

Potatoes.—A decline of 2@3c is producing a little more activity in this market. Receipts are running ahead of the corresponding period last year. Choice to fancy are quoted at 43@45c per bu; fair to good, 38@40c.

Beans.—Market holding steady although business is slow. Pea beans, choice hand-picked, are quoted at \$2.18@2.23 per bu; prime, \$2.10@2.12; red kidney, \$2.75@2.90.

New York.

Butter.—All grades 1@1½c lower. Market barely steady at the lower range of values. Creamery specials are quoted at 30c; extras, 28½@29c; thirds to firsts, 23@27½c.

Eggs.—Market strong under a lively demand which is pulling up prices on lower grades of fresh and on storage stock. Nearby eggs quoted at 52@55c; fresh gathered extras, 37@39c; firsts, 34@36c; fancy refrigerator stock, 25¼@26c dozen.

Poultry.—Dressed show little change beyond a wider spread in values. Western chickens, 10@17c; fowls, 12@17c; spring turkeys, 15@22c. Live, chickens about steady; turkeys lower. Spring chickens, 11¼@12½c; fowls, 12@13c; turkeys, 12@16c.

Boston.

Wool.—During the past week fleeces have been neglected, but some attention

has been given to territory products. In spite of the dullness dealers are looking forward to higher prices. The following are the leading domestic quotations: Ohio and Pennsylvania fleeces—Delaine, washed, 34@35c; XX, 31@32c; fine unmerchanted, 24@25c; ¼-blood combing, 29@30c; ¾-blood combing, 29@30c; ¼-blood combing, 27@28c; ½, ¾ and ¼ clothing, 23@26c; delaine, unwashed, 27@28c; fine unwashed, 23@24c. Michigan, Wisconsin and New York fleeces—Fine unwashed, 20@21c; delaine, unwashed, 26@27c; ¼-blood, unwashed, 28@29c; ¾-blood, unwashed, 28@29c; ¼-blood, 26@27c; ½, ¾ and ¼ clothing, 21@22c. Kentucky, Indiana and Missouri—¾-blood, 29@30c; ¼-blood, 27@28c; braid, 22@23c; black, burry, seedy cotts, 18@20c; Georgia, 24@25c.

Elgin.

Butter.—Trade firm at 29c per lb., which is a decline of 1c from last week. Output for the week, 639,700 lbs. as compared with 625,200 lbs. the previous week.

THE LIVE STOCK MARKETS.

Buffalo.

December 5, 1910.

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

Receipts of stock here today as follows: Cattle, 200 cars; hogs, 20,800; sheep and lambs, 24,000; calves, 1,200.

With 200 loads of cattle on our market here today, and 32,000 on the Chicago market, we report the best cattle of 1,200 lbs. and upward steady with last week. All other grades steady to weak with last week's prices, except bulls, which were 10@15c higher.

We quote: Best 1,300 to 1,400-lb. steers \$6.50@6.75; good prime 1,200 to 1,300-lb. do., \$5.75@6.25; best 1,100 to 1,200-lb. shipping steers, \$5.50@5.75; medium butcher steers, 1,000 to 1,100 lbs., \$5.25@5.50; light butcher steers, \$4.75@5; best fat cows, \$4.50@5; fair to good cows, \$3.25@4; common to medium do., \$2.75@3.25; trimmers, \$2.50@3; best fat heifers, \$5.50@5.75; good fat heifers, \$4.50@5; fair to good do., \$4@4.25; stock heifers, \$3.50@3.75; best feeding steers, dehorned, \$5.10@5.35; medium to good feeding steers, \$4.50@4.75; stockers, all grades, \$3.75@4; best bulls, \$4.75@5.25; bologna bulls, \$4@4.50; stock bulls, \$3.75@4.25; fancy milkers and springers, \$7@8; good to fancy milkers and springers, \$5@6.50; common to good do., \$3@4.

With 130 cars of hogs on the market today, market opened about a nickle lower than Saturday's best time, and closing about steady with the opening, with a good clearance of all that was yarded in time for the market.

We quote: Mixed, medium and heavy, \$7.55@7.60; mostly \$7.60; yorkers, \$7.55@7.60; pigs and lights, \$7.75@7.90; roughs, \$6.75@6.80; stags, \$5.25@5.75. Prospects look fair for the near future.

The market opened active today on handy lambs; most of the best handy weights selling at \$6.25. Heavy lambs slow and hard to sell. Most of the northern Michigan lambs selling from \$5.85@6, according to weight and quality. Prospects don't look much better for the balance of this week. May sell a shade higher last of week with light receipts. Sheep were about steady today; most of the best ewes selling \$3.75@4.

We quote: Best handy lambs, \$6.15@6.25; heavy lambs, \$5.65@5.75; heavy ewes \$3.75@4; bucks, \$2.50@3.25; yearlings, \$4.75@5; wethers, \$4@4.25; handy ewes, \$3.85@4; cull sheep, \$2.50@3; northern Michigan lambs, \$5.85@6; veals, choice to extra, \$10@10.50; fair to good do., \$7.50@9.50; heavy calves, \$5@6.50.

Chicago.

December 5, 1910.

Cattle. Hogs. Sheep. Received today 32,000 32,000 45,000 Same day last year. 25,810 22,540 21,782 Received last week. 72,659 148,480 142,642 Same week last year. 82,724 153,655 106,093

This week opens with large receipts of live stock, the run of cattle and sheep being excessive, causing lower prices. The more attractive steers and butcher stock had a fair outlet early at steady prices, but other kinds were slow of sale at weak to 10c lower prices. Hogs were more active than ever at further advances of 10@15c, following last week's advance of 35c, while the weak cattle market followed last week's decline of 10@15c in heavy steers, butcher stock closing 10@15c higher Saturday than a week earlier. Hogs sold today at \$7.10@7.60, with a reported sale at \$7.65, best light selling a nickle below top. Hogs received last week averaged 230 lbs., compared with 218 lbs. a year ago. Shippers took 41,557 hogs in this market last week, and this new outlet is expected to continue. Lambs declined last week 35@50c, and sheep broke early, but closed 10@15c higher. Today lambs were off 15@25c and sheep 10@15c. Lambs are selling at \$4@6.25, feeders paying \$4@5.65. Wethers go at \$3.75@4.30; ewes at \$1.75@4; bucks at \$2.50@3.25 and yearlings at \$4.50@5.50. Feeders have been buying wethers at \$3.25@3.75 and yearlings at \$4@4.50. A good many sheepmen are compelled to market their holdings, as bank loans are expiring, and heavy losses are suffered on lambs that cost them as feeders \$6@6.75.

Cattle were in much larger supply last week, following Thanksgiving week, and there was such a surfeit of choice heavy beefs that this class continued to decline in value, for in addition to the arrivals for the regular market, there were the liberal numbers of prime beefs exhibited at the International Live Stock Exposition, besides the numerous lots intended for the great show and rejected as not up to the standard. The prize winners brought high prices, of course, and in the regular market there was a very fair outlet for handy little fat cattle, both steers and heifers, with yearlings usually out-selling heavy cattle. The latter had to

go lower, and there was not the best kind of a market for the many short-thin cattle that were not adapted for feeders, but when offerings were on the stocker or feeder order they were bought readily, and much better prices were paid for desirable lots by country buyers. The great bulk of the beef steers sold between \$5 and \$7, with no large trading outside of these figures, the commoner class going at \$4.40@5.50 and the better class at \$6.50@7.50. As usual, yearlings topped the market, and any cattle that sold at \$7 or better graded as choice. Cows and heifers had a good outlet at \$3.30@6.40, canners and cutters going at \$2@3.25 and bulls at \$3.20@5.50, while calves sold for \$3@9.15 per 100 lbs. Milksters and springers were much less active than usual, bringing \$30@70 each. Stockers were active at \$3.25@5.25, and there was a strong market for feeders at \$4.70@5.80, the best heavy feeders being in only moderate request. It seems safe to expect continued liberal marketings of "warmed-up," light-weight steers for several weeks and the outlook cannot be good for high prices while this heavy movement is maintained. Stockmen should go in for producing a better grade of beefs and utilize the abundance of roughage, as well as cheap corn.

Hogs had several substantial advances last week that placed the market on a decidedly higher level, the marked increase in the eastern shipping demand, together with good buying of the choicer lots by speculators, being mainly responsible for the gratifying improvement. Stockmen expressed much satisfaction over changed conditions, and to a marked degree the disposition to ship in hogs prematurely received a sudden check. This is certainly a matter of encouragement, since there is great need of well-matured hogs to meet the large requirements of the meat trade at leading markets. Fresh pork products have become in greatly improved consumptive demand everywhere owing to the substantial declines that have taken place in prices, but sales of cured meats are still checked by their slowness to decline, bacon, hams, etc., still selling extremely high in the retail markets of the country. Stocks of provisions held in Chicago warehouses the first day of this month, aggregated 50,744,246 lbs., compared with 45,967,022 lbs. a month earlier and 43,006,725 lbs. a year ago. Butcher hogs of medium weight are still market toppers, with prime light weights going at a considerable discount. Last spring's pigs are comprising a large percentage of the receipts.

Sheep and lambs started off last week with a good outlet for the choicer mutton grades, lambs being much the most active and advancing sharply, the top being \$6.75 for fancy lots that were not extremely heavy. Later in the week the demand fell off materially, and there were sharp breaks in prices for lambs, and the decline in the feeder traffic had a bad effect. There was also a reduced demand from eastern shippers for live muttons, and sellers had to submit to a lower range of prices in most instances, although prime sheep and yearlings sold quite well, as did the best breeding ewes. It is late in the year to look for much animation in the demand for feeders, and from now on the demand will naturally run mostly on mutton grades of sheep, yearlings and lambs, especially on the better class. It should be clearly understood by sheepmen that big, heavy lambs are strongly discriminated against by killers and that such stock has to be sold at quite a discount. Both sheep and lambs are much lower than at corresponding periods in most former years, with much freer marketings.

There was no horse market last week, the stables at the stock yards being used for the stock show. Buyers of horses will be pleased to learn that a horse inspector of horses has been appointed by the Union Stock Yards and Transit Company. His duty will be to carefully inspect every horse before put up at auction and point every defect to buyers before sales are made.

LIVE STOCK NOTES.

Hereafter every horse offered in the Chicago market will be examined before sale by an inspector appointed by the Union Stock Yards Company. This is a step that is highly appreciated by buyers, and it will undoubtedly result in materially lessening the differences that arise between buyers and sellers after sales take place. Every unsoundness, blemish or peculiarity of conformation that is discovered will be noted and pointed out before sales, and there will be no understating any defects. Of course, there may be hidden defects of respiratory or digestive functions that cannot be discovered except by a more searching trial, but the inspector will make as thorough an examination as is possible.

Harry Beatty, of Iowa, reports a big Iowa corn crop and farmers generally regarding prices as too low and refusing to sell. Some corn is being sold by renters and by farmers who always sell as soon as the corn is in marketable condition but the larger growers are not marketing much corn, and there will be extensive stock feeding. According to Mr. Beatty, a greater percentage of the crop has been secured in Iowa than in Illinois.

Once more a little yearling steer has been awarded the prize and becomes the champion at the International Live Stock Exposition in Chicago, Shamrock II, a black grade calf, weighing 1,100 lbs. being the winner. Steadily "baby beef" is growing in favor, and there is a corresponding decrease in the demand for long-fed, heavy beefs. Everywhere farmers are becoming deeply interested in ascertaining methods of producing fat little yearlings, and the long process of producing the once popular heavy cattle is derided by many of the most successful stock feeders.

THIS IS THE LAST EDITION.

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

DETROIT LIVE STOCK MARKETS.

Thursday's Market.

December 8, 1910.

Cattle.

Receipts, 1,251. Market opens steady at last week's prices on all grades. Run will be heavy; prospects lower.

We quote: Best steers and heifers, \$5.50@5.75; steers and heifers, 1,000 to 1,200, \$5@5.25; steers and heifers, 800 to 1,000, \$4.50@4.75; steers and heifers that are fat, 500 to 700, \$4@4.75; choice fat cows, \$4@4.50; good fat cows, \$3.50@3.75; common cows, \$3; canners, \$2.50@2.75; choice heavy bulls, \$4@4.25; fair to good bolognas, bulls, \$3.50@3.75; stock bulls, \$3; choice feeding steers, 800 to 1,000, \$4.25@5; fair feeding steers, 800 to 1,000, \$4@4.25; choice stockers, 500 to 700, \$4@4.25; fair stockers, 500 to 700, \$3.50@3.75; stock heifers, \$3@3.25; milkers, large, young, medium age, \$45@70; common milkers, \$30@40.

Roe Com. Co. sold Thompson Bros. 1 bull weighing 1,250 at \$4, 2 cows av 885 at \$3, 5 butchers av 490 at \$3.50, 2 do av 525 at \$3.50; to Sullivan P. Co. 1 steer weighing 520 at \$3.50; to Fry 4 heifers av 745 at \$4.50, 2 do av 700 at \$4.50; to Newton B. Co. 6 steers av 871 at \$4.85; to Kamman 11 butchers av 803 at \$4.20; to Newton B. Co. 3 steers av 990 at \$5; to Goose 2 cows av 1,065 at \$3.25.

Spicer & R. sold Mich. B. Co. 60 butchers av 808 at \$4.45; to Hammond, S. & Co. 1 cow weighing 830 at \$4, 3 do av 943 at \$3.50, 1 heifer weighing 750 at \$4.75; to Kamman B. Co. 8 steers av 906 at \$5, 3 cows av 990 at \$4, 1 do weighing 720 at \$3.50; to Hammond, S. & Co. 4 steers av 855 at \$4.50, 2 cows av 940 at \$3, 4 butchers av 670 at \$4, 3 cows av 920 at \$3, 1 do weighing 1,020 at \$3, 3 do av 900 at \$3, 2 steers av 800 at \$4.50, 1 bull weighing 1,000 at \$3.75, 2 cows av 1,000 at \$3.25, 2 do av 1,010 at \$3.25; to Fry 1 cow weighing 950 at \$4.25, 3 do av 1,043 at \$3.50, 1 steer weighing 840 at \$4.50, 2 cows av 850 at \$3.50, 2 steers av 665 at \$4.25, 16 butchers av 860 at \$4.50; to Kamman B. Co. 9 steers av 930 at \$5; to Regan 3 butchers av 517 at \$3.90, 2 do av 520 at \$3.80; to Goose 5 do av 836 at \$3, 6 cows av 855 at \$3, 1 do weighing 820 at \$3.

Bishop, B. & H. sold Mich. B. Co. 27 butchers av 863 at \$4.35; to Hammond, S. & Co. 6 do av 873 at \$4.40, 2 bulls av 1,000 at \$4, 1 cow weighing 1,200 at \$4.25, 1 do weighing 1,180 at \$3.50, 2 do av 860 at \$3; to Parker, W. & Co. 27 butchers av 828 at \$4.25, 1 cow weighing 770 at \$3, 1 do weighing 940 at \$3, 1 do weighing 990 at \$3; to Bresnahan 12 heifers av 573 at \$3.75; to Kamman B. Co. 11 butchers av 727 at \$4.30, 4 cows av 920 at \$3.75, 2 do av 1,025 at \$4, 1 steer weighing 840 at \$4.50; to Kamman 2 cows av 1,090 at \$3.75, 7 butchers av 643 at \$4.10, 1 bull weighing 950 at \$4, 2 heifers av 425 at \$3; to Parker, W. & Co. 2 cows av 925 at \$3; to Rattkowsky 2 do av 1,150 at \$3.75; to Kamman B. Co. 4 butchers av 782 at \$4; to Fromm 30 do av 774 at \$3.70; to Rattkowsky 1 cow weighing 970 at \$3.25, 7 butchers av 967 at \$4.50, 7 cows av 1,003 at \$3.60, 3 do av 843 at \$3; to Huffe 5 butchers av 608 at \$3.75; to Applebaum 1 cow weighing 1,150 at \$3.50; to Sullivan P. Co. 6 butchers av 843 at \$4.50, 3 cows av 883 at \$2.75, 6 do av 806 at \$3.25, 2 bulls av 835 at \$3.75, 3 cows av 1,017 at \$3.25, 2 do av 815 at \$2.75, 4 do av 1,070 at \$4.50, 2 bulls av 1,300 at \$4, 2 do av 825 at \$3.75, 1 steer weighing 950 at \$5; to Goose 3 cows av 873 at \$3, 3 do av 1,050 at \$3.50; to Regan 4 heifers av 632 at \$4; to Vermander 10 stockers av 656 at \$4; to Goose 2 cows av 1,025 at \$3.25, 4 do av 975 at \$3, 2 bulls av 1,290 at \$4.25.

Haley & M. sold Hammond, S. & Co. 5 cows av 1,066 at \$4.15, 14 butchers av 900 at \$4.65; to Newton B. Co. 24 do av 833 at \$4.25; to Strong 9 feeders av 855 at \$4.75.

Johnson sold Breitenbeck 10 butchers av 765 at \$4.65.

Sandall sold Kamman 4 butchers av 842 at \$4.25.

Kalahar sold Mich. B. Co. 9 steers av 863 at \$4.50, 6 cows av 1,073 at \$4, 3 do av 933 at \$3.50.

Kendall sold Sullivan 3 cows av 1,073 at \$3.50, 3 do av 843 at \$2.50.

Veal Calves.

Receipts, 598. Best grades steady; common, 75c@1 lower than last week. Best, \$3.50@3; others, \$4@8; milch cows and springers steady.

Haley & M. sold Parker, W. & Co. 1 weighing 140 at \$9, 2 av 170 at \$9.50, 8 av 150 at \$8, 5 av 125 at \$8; to Goose 14 av 350 at \$4.75.

Kalahar sold Parker, W. & Co. 13 av 140 at \$9.

Roe Com. Co. sold Sullivan P. Co. 11 av 135 at \$8.25.

Spicer & R. sold Hammond, S. & Co. 5 av 140 at \$8.25, 3 av 140 at \$6, 6 av 145 at \$8, 12 av 125 at \$8.

Leach sold Burnstine 11 av 135 at \$9.

Kendall sold same 8 av 145 at \$9.

Long sold Newton B. Co. 4 av 155 at \$9, 2 av 160 at \$8.50.

Bishop, B. & H. sold Parker, W. & Co. 6 av 135 at \$8.50, 1 weighing 110 at \$8.50, 8 av 130 at \$8, 2 av 115 at \$8, 10 av 126 at \$7, 12 av 130 at \$8.75, 5 av 130 at \$9; to Goose 2 av 405 at \$4.50; to Newton B. Co. 3 av 125 at \$7, 1 weighing 170 at \$8.50, 9 av 150 at \$9, 2 av 135 at \$8.50; to Brant 4 av 130 at \$7; to Mich. B. Co. 2 av 120 at \$8.50, 7 av 135 at \$8.50, 2 av 135 at \$9; to Goose 3 av 175 at \$5.50, 3 av 145 at \$9.

Sheep and Lambs.

Receipts, 4,109. Market 15@25c higher than last week's close.

Best lambs, \$6.15@6.25; fair lambs, \$5.75@6; light to common lambs, \$4.50@5; fair to good sheep, \$3.50@4; culls and common, \$2.50@3.

Spicer & R. sold Street 51 sheep av 110 at \$3.25; to Sullivan P. Co. 55 lambs av 75 at \$5.75; to Stocker 16 do av 80 at \$6; to Newton B. Co. 36 do av 85 at \$6, 11 sheep av 110 at \$3; to Thompson Bros. 17 do av 105 at \$3, 44 lambs av 70 at \$5.80; to Barlage 9 do av 77 at \$6, 6 sheep av 120 at \$3.75; to Gordon 26 lambs av 65 at \$5.75; to Barlage 21 do av 60 at \$5.50, 8 sheep av 105 at \$3; to Mich. B. Co. 4 do av 130 at \$3.50, 45 lambs av 60 at \$6; to Fitzpatrick Bros. 38 sheep av 120 at \$3.50; to Sullivan P. Co. 35 lambs av 65 at \$5.80; to Hammond, S. & Co. 64 mixed av 85 at \$4.75, 49 lambs av 80 at \$6.25; to Mich. B. Co. 24 do av 85 at \$6.25; to Fitzpatrick Bros. 31 sheep av 80 at \$4.

Haley & M. sold Nagle P. Co. 65 lambs av 75 at \$6, 82 do av 75 at \$5.60, 27 do av 80 at \$6, 16 do av 100 at \$5.60, 7 sheep av 88 at \$4, 6 do av 115 at \$3.25, 9 do av 140 at \$3, 29 lambs av 72 at \$5.60.

Tubbs & S. sold Barlage 13 sheep av 80 at \$3, 28 lambs av 80 at \$5.75.

Bishop, B. & H. sold Sullivan P. Co. 39 lambs av 65 at \$5.75, 13 do av 45 at \$4.65, 4 sheep av 85 at \$2.50, 13 do av 80 at \$2.75, 17 do av 120 at \$3.65, 12 do av 100 at \$3.50, 19 lambs av 55 at \$8; to Nagle P. Co. 61 do av 80 at \$6.10, 374 do av 100 at \$6.15, 9 sheep av 130 at \$3.75; to Hammond, S. & Co. 11 do av 58 at \$2, 11 lambs av 85 at \$5, 18 do av 70 at \$4.75, 14 do av 85 at \$6.15, 7 do av 60 at \$5, 37 do av 78 at \$6.25, 10 do av 65 at \$6; to Nagle P. Co. 56 lambs av 78 at \$6.10, 21 lambs av 75 at \$6.15, 57 do av 77 at \$6.05, 142 do av 80 at \$6.20; to Mich. B. Co. 125 sheep av 105 at \$3.60; to Gordon 75 do av 110 at \$2.75; to Sullivan P. Co. 36 do av 80 at \$3.50, 16 lambs av 85 at \$6.25; to Hammond, S. & Co. 12 sheep av 100 at \$3.75; to Fitzpatrick Bros. 16 lambs av 55 at \$5.50.

Kalahar sold Street 5 sheep av 110 at \$3.10, 14 lambs av 110 at \$4.75, 65 do av 75 at \$5.90.

Roe Com. Co. sold Sullivan P. Co. 18 sheep av 135 at \$3.50.

Hogs.

Receipts, 5,806. Market 30c higher than last Thursday. Packers bidding \$7.60@7.65; nothing sold up to noon.

Range of prices: Light to good butchers, \$7.65; pigs, \$7.60; light yorkers, \$7.60; stags one-third off.

Bishop, B. & H. sold Hammond, S. & Co. 1,687 av 190 at \$7.60, 669 av 200 at \$6.75.

Haley & M. sold same 450 av 180 at \$7.65, 230 av 170 at \$7.60.

Sundry shippers sold same 460 av 155 at \$7.60.

Spicer & R. sold Parker, W. & Co. 1,150 av 200 at \$7.65, 150 av 170 at \$7.60.

Roe Com. Co. sold same 960 av 200 at \$7.65.

Bishop, B. & H. sold Sullivan P. Co. 655 av 185 at \$7.60.

Friday's Market.

December 2, 1910.

Cattle.

Receipts this week, 1,648; last week, 703. Market active at Thursday's prices.

We quote: Best steers and heifers, \$5.50; steers and heifers, 1,000 to 1,200, \$5.25@5.35; steers and heifers, 800 to 1,000, \$4.50@5.10; steers and heifers that are fat, 500 to 700, \$4@4.50; choice fat cows, \$4@4.50; good fat cows, \$3.50@3.75; common cows, \$3@3.50; canners, \$2@2.75; choice heavy bulls, \$4@4.50; fair to good bologna bulls, \$3.50@3.75; stock bulls, \$3@3.25; choice feeding steers, 800 to 1,000, \$4.25@5; fair feeding steers, 800 to 1,000, \$4@4.25; choice stockers, 500 to 700, \$4@4.25; fair stockers, 500 to 700, \$3.50@4; stock heifers, \$3.25@3.50; milkers, large, young, medium age, \$40@60; common milkers, \$25@35.

Veal Calves.

Receipts this week, 551; last week, 549. Market very dull and 50c lower than at opening Thursday; quality common. Best \$8.75@9; others, \$4@7.50.

Milch cows and springers steady.

Sheep and Lambs.

Receipts this week, 7,847; last week, 2,663. Market steady at Thursday's close. Best lambs, \$5.75@6.10; fair lambs, \$4.50@5.25; light to common lambs, \$4.50@5.25; fair to good sheep, \$3.50@4; culls and common, \$2@3.

Hogs.

Receipts this week, 9,756; last week, 7,516. Market steady at Thursday's prices. Range of prices: Light to good butchers, \$7.30; pigs, \$7.30; light yorkers, \$7.30; stags one-third off.

M. H. Brinton, president of the State Bank of Ellsworth, Iowa, reports the best corn crop ever raised in that section, yields running from 80 to 90 bushels per acre. All of the cribs will be filled to overflowing, and farmers will feed a great many cattle.

A great many inferior lambs from the ranges have shown up in the Chicago market during the closing weeks of the season, some of them selling as low as \$2.50@3 per 100 lbs. and weighing sometimes only about 30 to 40 lbs.

Most of the light-weight hogs marketed at Chicago recently were shipped from the dairy districts of Wisconsin, where there is a lack of corn and other feed. Where corn is plentiful farmers are feeding their young hogs until they reach maturity and weigh well.

At the great International Live Stock Exposition in Chicago, Hampshires are the most numerous in hog breeding classes, followed in the order named by Durocs, Chester Whites, Blacks and Yorkshires. Shropshires lead off in sheep breeds, but there are large entries of Rambouillets, Hampshires and Cotswolds. Shorthorns lead the pure-bred breeding classes of cattle, with Angus and Herefords following after.



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HOME AND YOUTH

THE MOTHER'S QUEST.

(An answer to the poem bearing the above title, by Mrs. Anna Stearns, which appeared in these columns some months ago).

BY FANNY J. MOON.

Yes, little mother, I heard your plea,
Your sigh for vanished joys;
I will take good care to bring them back,
If I find your little boys.

My heart was touched by your anxious cry,
Though quite beyond my ken
Is what to do, or where to seek,
To find those little men.

But I'll look for those whose eyes are blue,
The laddies with curling hair—
A merry whistle, or shout of glee
May show me those children fair.

I know how you miss the scattered toys
And the sound of little feet—
You miss the joy of the bed-time song—
You miss the kisses sweet.

I know—for I miss my little girls—
Have you seen them anywhere?
With eyes of brown and eyes of blue
And one with golden hair?

Where are my girls, my little girls,
Who filled my home with light?
They have been gone so long—so long,
I wish they were here tonight.

It seems so long since I sang to them
When snug in bed at night—
So long since they started first to school
And I watched them out of sight.

I long to hold them in close embrace,
With soft cheek close to mine,
As a sweet voice lips the evening prayer,
While arms my neck entwine.

Though our search be ever so earnest and long
Amid life's busy whirls,
I'm sure we'll never find again
Our lost little boys and girls.

But in young mothers and maidens fair,
And boys grown manly and tall,
In the loving thought they give to us
I think we will find them all.

Then why should I grieve? Their children come.
As jolly, as loving and bright,
They fill the old home with laughter and song—
O why do I miss them at night?

THE BRIDE'S TREE.

BY MILDRED M. NORTH.

"O Gertrude, I'm so glad you're really here! Let me take your suit-case, the horse and buggy are just behind the depot."

Gertrude Armstrong had just alighted from the west-bound afternoon train which was disappearing around the curve beyond the little station, to be greeted thus enthusiastically by her friend, Marian Ames.

"You can't be more glad than I to come," returned Gertrude with an affectionate little squeeze of her companion's arm. "This neighborhood will always seem like home. I like our new home but not so well as the one we left. My favorite song is still 'Michigan, My Michigan.'"

A few years previous Mr. Armstrong had owned a farm near the home of Marian's father, but had sold it and the family had moved to Virginia. Gertrude had come to spend two weeks of the holiday season with Marian.

"I've such heaps and heaps to say," said Marian as she led the way to the waiting carriage. "Two weeks won't be half long enough, even if we sit up nights. And I can't have you all to myself either," she mourned. "Everyone will be so glad to see you again."

"O, it's good to see you, and everything around here looks so natural!" exclaimed Gertrude with a smile and a contented little sigh as they started briskly down the smooth road. "What lovely weather for December! Who would imagine to look out over the country that winter is just upon us?" Then turning to her companion she said, "Now begin. You wrote that you had a great surprise for me, and I've been simply dissolving with curiosity ever since."

"Well," replied Marian, "turning to observe the effect of her words, 'Margaret Lee is to be married on Christmas eve.'"

"Really!—Do you think he half appreciates her?" questioned Gertrude.

"Everyone says he is a fine fellow. We don't know him very well here, but he's nice looking, at least. I don't mean just good to look at; he looks good. He lives about twenty miles from here and they have the dearest little bungalow all ready to go to on the farm he owns. You see they expected to be married last fall, but

Margaret's sister was so very sick they decided to wait. Now she's well again and the date is set for Christmas eve. Bess and I want to entertain for her next week, and that is why I bless our lucky stars for bringing the wedding date and your visit in the same month. We need your fertile brain. You'll help, won't you?"

"I'm flattered, indeed, you little wheedler. Of course I'll be glad to do anything for Margaret. What is it you wish?"

"Well, we thought it would be nice to have a Christmas tree and put all the gifts on it. Can you write verses as easily as you used to?"

"My jingles? O yes. Once I get started there's usually no end to the nonsense that comes into my head," laughed Gertrude.

"What we want is fun," replied Marian. "We thought that if you could write something to go with the gifts it would furnish lots of amusement."

"When shall you entertain?"

"We think about Thursday," replied Marian. "Christmas comes on Saturday. Margaret says they're not superstitious and she wants to be married on Christmas eve because her great-grandmother was."

"Is everyone to contribute something for the refreshments as we used to?"

"Yes, we think it better, as it makes less work for those who entertain."

"Why not send the invitations in rhyme, too?" said Gertrude. "That would be a little out of the ordinary."

"Splendid!" exclaimed Marian. "I knew you'd be just the one to think of things."

By this time they had reached the pleasant farm home of Mr. Ames and for the time being Margaret's tree was forgotten in the delighted welcome Gertrude received.

The family did not retire at an early hour. Mr. and Mrs. Ames had many questions to ask about Gertrude's family, and Marian and her sister Bess were so delighted to have their friend with them again that time flew fast. Marian was just growing drowsy when Gertrude's voice roused her. "Sorry, dear, but you started this thing. I think you'd better get me a pencil and paper and let me put down my 'firstly.' I may not be able to recall it in sober daylight."

"On one condition—that you let me see," replied Marian.

"Now?"

"Now, or no light," was the answer.

"Very well, we can't risk such a loss to the public," responded Gertrude. So, looking over Gertrude's shoulder, Marian read the lines which the next day the three girls wrote on sheets of note paper, sealing each small envelope with a tiny holly Christmas seal:

On Thursday, P. M., at half-past three,
Month of December, day twenty-three,
Come, if you please, to a pot-luck tea,
Come with a gift for a bride-to-be,
Also your favorite recipe,
Cake, pie or pudding, whatever it be;—
The guest of honor is Margaret Lee.

At the bottom were written the names of Marian and Bess and Gertrude.

The remaining days were busy, happy ones. Tongues and fingers flew, planning to make the entertaining for a favorite friend a success.

"You might write some rhymes for things likely to be given," suggested Bess. "Then you won't have to overwork your poor brain at the last minute. You haven't been used to our demands upon you for the last few years and I tremble for the effect upon even your robust constitution. We'll write them on cards and punch two holes in one side. Then they can have the giver's name written on the back and when it is all over Margaret can tie them all together for a reminder."

Mrs. Ames suggested the purchase of a blank book and that each guest "register" by writing in it her "favorite recipe" which Gertrude had asked for in the invitation. It was Bess who bought the piece of dark green leather, such as is used for burnt work, a trifle larger than the open book, and, removing the cover of the blank book, folded the leather for a cover, punched holes through both and tied it with a holly red ribbon. Then she burned a spray of holly and "Recipes," in fancy letters on the front.

Thursday came at last. The house was made festive with evergreens, scarlet rose-berries, holly and Christmas bells. The doors of the parlor were closed and bore a sign, "Sant A. Claus. My busy day." The parcels of the guests were smuggled thither and after all had arrived Gertrude and Bess disappeared for a while. Some time later Bess appeared at the door and said that Santa was too rushed to see them but Mrs. Santa would be glad to have them enter.

The big doors were opened, disclosing a room with drawn shades, lighted by

candles and Japanese lanterns. In one corner stood a tree about six feet tall, hung with articles, while others were heaped about it. Beside it sat a dear little old lady with cap, spectacles and knitting, who proved, on closer inspection, to be Margaret's grandmother.

"Come Margaret, sit here," she said, with a smile, laying her hand on a chair beside her. "You haven't had a tree all your own since you were a little tot. You couldn't reach the top of that one but you insisted on your father holding you up to reach the last thing all your 'own self.' Maybe you could reach the top of this one, but they'll bring the things to you, as you are guest of honor. They tell me you are to read out loud what you find with each one."

Margaret, her sweet face rosy with surprise, seated herself and the articles, one after another, were put into her hands.

A flour sifter bore the couplet:
If his wife can make good bread and butter
Her husband never ought to sputter.

A pile of basins held a card saying:
These basins are like Uncle Job's wife, Mandy,
He said his wife was "drefful handy."

To a spider handle was tied:
Here's a black spider, but it won't bite,
Fill it well and 'twill be all right.

Then came cake tins with this:
Men like sweet things, especially cake,
But make it good for his stomach's sake.

A big dishpan containing a crumb tray and scraper, and half a dozen pretty cups and saucers, admonished her:
Wash the cups and saucers up
And brush the crumbs away;
Always with a cheery smile
Send him on his way.

To the end of a mop handle was tacked:
I once read a tale of an Irishman's shanty
Where dirt and disorder were everywhere plenty.

Don't let yours be so, for here is a mop,
And on its nice stick fasten cloths 'ere you stop.

To save yourself from domestic scandal
Never use this end of the handle.
Into a bright aluminum kettle was tucked this sensible advice:
Stew anything you can find on the shelf,
But never get in a stew yourself.

In a kitchen salt shaker she found:
Now catch your fish, (you've caught your man),
Salt and flour it and fry in a pan.

On the handle of a tea strainer was:
Remove all grounds from your coffee and tea.

And a pleasant smile on his face you'll see.

A dainty holder, knitted from yellow worsted in the shape of an ear of corn and having green ribbon loops instead of husks, had tucked within it:
This is to use with your coffee pot.
For you'll find he likes his coffee hot.

Two thick ones fastened by strings to a belt said:
Tie this string around your waist,
Then you'll find these when in haste.

Tucked between the bars of a toaster she read:
Toast and tea is an old maid's dish
But you may feed John some if you wish.

This warning was in a roaster:
Here is a roaster—use it with care,
Beef, pork or mutton, chicken or hare;
Don't burn the meat, whatever you do,
Else your good husband may sometimes "roast" you.

For her gift of a tablecloth Gertrude had written:
If the cloth is snowy, if your smile is sweet,
If you always give him something good to eat,
He'll be truly happy, well pleased with his bride,
And tho' skies be cloudy, sun will shine inside.

A berry set from Marian read:
When the fruit trees blossom bright,
Watch their dainty pink and white;
When fruits ripen in the sun,
Pick and can them, one by one;
When you put them in these dishes
Think of Marian's best good wishes.

A carving set from Mr. and Mrs. Ames declared:
They say you mustn't give a knife,
Nor any sharp-edged thing,
Lest friendship suffer. We're not scared,
This knife to you we bring.

Bess had given a pretty framed water color to which had been added:
This is to make the new home bright,
Beauty and sweetness and love and light
Make what it should be—a place just right.

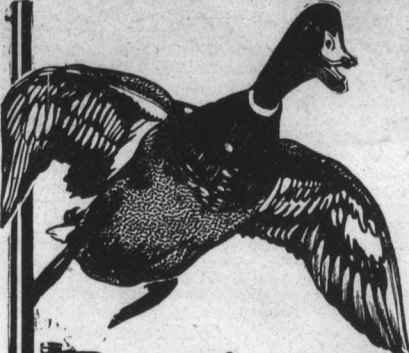
There were a number of articles, both pretty and useful, which bore only the giver's name, for, as Gertrude declared, "they just wouldn't rhyme."

The last thing put into Margaret's hand was a card which read:

Go to the kitchen, like little Jack Horner,
And see what you find in the southeast corner.

It proved to be a kitchen cabinet from Margaret's uncle and aunt, and it, too, bore its card:

This is the kitchen cabinet,
Seances will be held, you bet;
Many a shade (on her face) will appear,



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Rappings (of spoons and dishes) you'll hear.

Many times will spirits sink, And many times will rise, we think.

Of course, Margaret had not gone alone to the kitchen, and when the laughter had subsided Mrs. Ames led them to the dining-room. In the center of the table a looking-glass, removed from its frame, had been laid flat upon the cloth, bordered with cotton sprinkled with frost powder. Upon it was placed a tiny sleigh with Santa and reindeer. The jolly little man had his sleigh heaped to overflowing with holly and mistletoe.

After supper the guests departed, wishing Margaret "All things good and beautiful," and well pleased with the afternoon.

A GEOGRAPHY PARTY.

BY DORA B. PHILLIPS.

Invitations were sent out to twelve schoolmates to come and spend the evening, and wear or carry something to represent a city in the United States. As each guest arrived he was given a sheet of paper and pencil with instructions to write out the names of the different cities represented by the members of the party.

A fountain pen was to be given the one guessing the most names, and a dunce cap to the one guessing the fewest.

Red Wing of Minnesota wore a red wing in her hair; Lima of Ohio, a string of Lima beans around her neck; Parsons of Kansas, a black frock coat with a high collar and black cravat, and was guessed correctly by only one of the party; Elgin of Illinois and Waterbury of Connecticut both wore watches of the above names, and were easily guessed; Canton of Ohio wore a blouse of cream-colored Canton flannel and was guessed by only two. Reading of Pennsylvania carried a book from which he read a few sentences now and then. Auburn of Maine possessed a wealth of auburn hair, and remained undiscovered until the close of the contest; Deadwood of South Dakota carried a small piece of dead wood in the shape of a cane; Tombstone of Arizona sported a small watch fob of painted wood in the shape of a headstone. Helen Gray wore the letter A and but two of the party guessed Helena, Montana; Anna Dyer carried a slender pole and displayed the word "is." Only two guessed her identity as Annapolis, Maryland.

The guests were given an hour in which to guess the names. Meanwhile the hostess picked up a book; her father grabbed it away from her, and she began to cry, "Pa took it," "Pa took it," and only one guessed Pawtucket of Rhode Island.

SMILE PROVOKERS.

Mr. Penn—"The say the streets in Boston are frightfully crooked?"

Mr. Hubb—"They are. Why, do you know, when I first went there I could hardly find my way around."

"That must be embarrassing?"

"It is. The first week I was there I wanted to get rid of an old cat we had, and my wife got me to take it to the river a mile away."

"And you lost the cat all right?"

"Lost nothing! I never would have found my way home if I hadn't followed the cat!"

A high school girl said to her father the other night:

"Papa, I've got a sentence I'd like to have you punctuate. You know something about punctuation, don't you?"

"A little," said her cautious parent, as he took the slip of paper she handed him. This is what he read:

"A five-dollar bill blew around the corner."

He studied it carefully.

"Well," he finally said, "I'd simply put a period after it."

"I wouldn't," said the high school girl; "I'd make a dash after it."

"Joseph," said his mother, reprovingly, "I should think you'd be ashamed to be in the same class with boys so much smaller than yourself."

"Well, mother," replied Joe, "I look upon the matter a different way altogether. It makes me feel fine to see how proud the small boys are to be in the class with a big boy like me."

Announcer (county fair)—The next event will be a professional sack race for girls.

Visitor—What do you mean by professional?

Announcer—Those who have been wearing hobble skirts.



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Reliance plate is made by the Oneida Community and every piece is guaranteed for 10 years wear. It is for sale by all leading jewelers (6 teaspoons for 90 cents) and in offering it to our readers we can guarantee its quality.

Made on an 18 per cent Nickel Silver Base—5 oz Silver Plate—25 per cent heavier than Standard A-1.

This set of 6 teaspoons cannot be sold by any one for less than 90 cents, but we will send

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If you prefer we will send you this Handsome Wildwood BERRY SPOON



Length 8 3/4; Bowl 2 1/4 x 3 1/2 in.

Instead of the six Teaspoons.

It is the same design and quality and guaranteed for 10 years wear.

For an order for 2 subscriptions (under above offer) we will give the one sending the order an extra set of 6 teaspoons or an extra berry spoon.

The 6 teaspoons are Premium No. 194. The berry spoon is Premium No. 195. Always mention number.



Silver Berry Set. These three pieces are quadruple silver plate, full gold lined, crimped sides. The berry bowl (can also be used as a fern dish, nut bowl, etc.), is 7 1/4 inches in diameter. Creamer and sugar each 3 1/2 inches in diameter, not including handles. The three pieces, No. 176, given free for seven subscriptions. By express. If nine subscriptions are sent, we will prepay the charges.

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50 DIFFERENT SUBJECTS.

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The illustration will give some idea of the subjects, but they must be seen to appreciate their beauty.

All are finished with ivory surface, gold and colortype decoration.

All cards are full size, 3 1/2 x 5 1/2 inches, with space on address side for written message. If you bought cards of similar style and finish, at retail they would cost from \$1.00 to \$1.50.

This complete set 50 cards free with one year's subscription to the Michigan Farmer at 75 cents, or two years' at \$1.20. Mention premium No. 185.

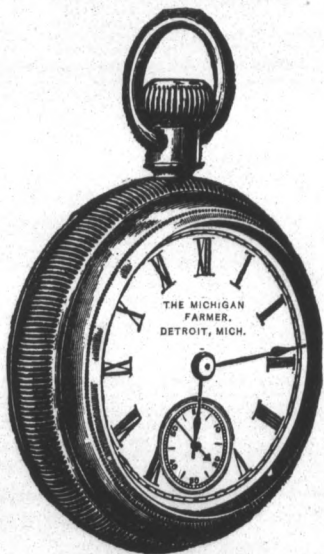


Bill Fold and Coin Purse. Cowhide leather, stitched throughout. One pocket for coins, and separate fold for bills. Size 2 1/4 x 3 1/2. Button fasteners. A strong, substantial purse that will

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Size 16, Nickel Open Face Case, Stem Wind and Set.

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Beautiful Carving Set FREE

For a club of three subscribers to the Michigan Farmer. One of the subscriptions may be your own.

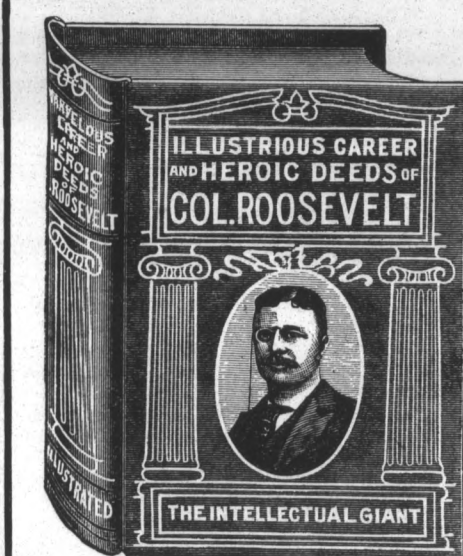
Two piece, Nickel Silver Carving Set, WARRANTED. Knife is 10 inches long and Fork is 7 3/4 inches long. Highly polished with beautiful design on handles. A beautiful ornament to any table, and at the same time serviceable.

NO MONEY REQUIRED

Only a few minutes of your spare time.

We will send you this beautiful Carving Set FREE for a club of 3 subscribers to the Michigan Farmer, and one of the subscriptions may be your own. They may either be for 1, 3, or 5 years, and all of the subscribers get FREE premiums as per the premium booklet. No doubt you have a couple of neighbors who will subscribe for the Michigan Farmer if you will ask them. It will only take a few minutes of your time and you will get FREE a Carving Set that would cost you \$2.00 or more at any Jewelers. If it is not convenient for you to get a club of 3 subscribers and if you would like to have one of these Carving Sets we will send you one for \$1.00.

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The Mich. Farmer for 5 years and this book sent postpaid For Only \$2.20

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FARMERS' CLUBS

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

Associational Motto.—

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

Associational Sentiment.—

The farmer, the garner from the soil the primal wealth of nations.

THE ANNUAL MEETING.

As we go to press the delegates are gathering for the eighteenth annual meeting of the Michigan State Association of Farmers' Clubs. Before this issue reaches the reader, the meeting will have passed into history. We trust and believe that it will come up to the high standard of success which has been set in previous years, as it certainly will if the local Clubs are properly represented. Without doubt this meeting is one which holds great possibilities in the way of inspiration for the local Clubs throughout the state. With an excellent program prepared for the instruction and entertainment of the delegates, it is certain to be an enjoyable event for them. But this is not all the benefit to be derived from the meeting by the local Clubs which send them. The discussions and deliberations of the delegates may be made of the greatest value to the local organizations if properly reported and assimilated in the future meetings of the local organizations. The conference of Club workers is one of the most helpful features of the annual meeting. Here the delegates tell their associates in the meeting about the conduct of their several local Clubs. There are many new features and interesting points brought out each year in this conference which will prove helpful to other Clubs, provided the delegates make a note of them and incorporate them in their report of the meeting. Then the discussion of the resolutions offered will provide many helpful thoughts which may be carried home for the benefit of the local Club in case the delegates are alert to catch them as they are presented. Last, but not least, the program itself will be productive of beneficial ideas which may be carried home for the benefit of fellow Club members whom the delegates represent.

Altogether the report of these delegates may be made a source of inspiration in any local Club, and no mistake will be made if an entire meeting is given up to such reports and their discussion in any local Club. This opportunity is not always improved to the fullest extent in every local Club. But it should be this year, since the report of delegates to the associational meeting and a full discussion of the same may be made a most profitable feature of one or more meetings of any local Club.

CLUB DISCUSSIONS.

Thanksgiving Meeting.—Conway and Handy Farmers' Club met with S. R. Holmes and family, Friday, Nov. 25. Nearly 100 people at dinner with them. Several members were absent for various reasons, but a goodly number of invited guests made up the crowd. The meeting was called to order by President Joseph Franks, and after the opening exercises a good program was rendered. Several numbers savored of Thanksgiving, such as "The First Thanksgiving," by Fred Rathburn, and "Pilgrim Mothers," by Mrs. W. M. Horton. A talk on government ownership, by H. Grant and the question box were interesting features of the meeting. S. R. Holmes and wife were elected delegates to the State Convention to be held at Lansing, Dec. 6-7. The Club then adjourned to meet with E. House and wife the last Friday in December.

The Farm as a Home.—The Deerfield Farmers' Club met at the pleasant home of Mr. and Mrs. Ray VanderCook, Saturday, Nov. 26. After a bountiful dinner, which was enjoyed by nearly 100 people, the Club was called to order by President Fred Hall. First on the program was singing by the Club, prayer by Chaplain Wm. Jubb, secretary's report, and roll call. John Lutz chose for the subject of his talk, "The Farm." Thought the farm home the best place on earth for several reasons. Thought the farmer was too easily discouraged and it was human nature to always want the other fellow's job.

The Farmer's Living.—"Do farmers live as well and economically as they ought to?" was led by Wm. Jubb. He thought we could not always tell by one's surroundings how well he ought to live and therefore ought to be slow in judging. This was followed by a lively discussion by Albert Cameron, Guy Hosley and others. Mr. Jewel, from Ohio, being present, was called upon to give a talk in regard to centralized schools. Next came the question box, conducted by Guy Hosley. The Club adjourned to meet

with Charles Bemiss the third Saturday in December instead of the fourth on account of Christmas.

The Care of Farm Tools.—At the October meeting of the Norvell Farmers' Club, with Ex-Pres. L. D. Watkins and son, Mr. T. B. Halladay discussed the care of farm tools, stating that they should be properly housed as the cost is a great item and the tools are utterly indispensable as they lessen the need of labor which is very hard to get, even at present wages. While nearly every one will admit they should receive the very best of care possible, do the farmers really practice what they believe? We would judge not by the looks of some barn yards as we drive by. At the least estimate it is almost absolutely necessary that \$500 be invested in farm machinery to run a farm to good advantage and if left out in all kinds of weather here is at least a ten per cent depreciation. Why not take that amount wasted and construct a building that will protect the tools for at least ten years? Would that not be a good investment?

Harvesting and Feeding the Corn Crop.—The question of harvesting and feeding the corn crop opened by Lewis Kimble, was quite thoroughly discussed. Nearly all agree that if help could be obtained to cut and husk the corn crop by hand that the best results could be obtained but with that as a principal difficulty some resort to a silo, binder for cutting, shredder for husking and preparing the stalks for feed. As to feeding some would feed whole while others believe in grinding. As a conclusion it seems that each individual must study his own needs and work out the problem to get the best results.

Favor Protection of Quail.—Senator L. Whitney Watkins called to mind the quail law that was passed two years ago to protect the quail for five years. It is understood that the sportsmen are going to try to have that law repealed. The sentiment of the Club was asked for and found to be strong for protection as a motion was made and carried that we ask to have the time extended for ten years instead of five.

GRANGE

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

THE COMING STATE MEETING.

Another "All Michigan" Grange is the prospect before those who are planning to attend the 38th annual meeting of the State Grange which opens at Traverse City on Tuesday next. Last year, for the first time, every county in the state was entitled to representation in the State Grange and the number that failed to send delegates was very small. In the



Building in which the Granges of Northern Michigan will house their Farm Products Exposition to be held with State Grange Meeting.

year that has passed the organization has secured a surer foothold in many of the counties which came to State Grange for the first time last year, while some of the older counties have made material gains in number of Granges and membership. Last year's meeting demonstrated that the Michigan Grange map has been extended to the state line in every direction and that henceforth delegates will be recognized as representing counties rather than sections. Indeed, the rapid development of the organization in new territory promises to become a potent factor in leading to a more united state than we have had in the past.

With every one of the 84 counties entitled to membership, and with the addition of over 70 new Granges in the past year, the coming meeting bids fair to be the largest and most successful yet held in this state. The hospitality of northern Michigan Patrons was thoroughly tested last year and the Grange returns confident that, so far as Traverse City is concerned, the success of this year's meeting is assured. Last year's efforts in the way of making a display of the

products of that region have been completely outdone, the proportions of this year's exposition being such as to make necessary the securing of the spacious building shown upon this page for housing the exhibits. A number of the counties of that region have co-operated in getting together these exhibits, and a portion of the Michigan fruit shown at the recent exposition in Chicago will be on exhibition at Traverse City next week.

THE 44th ANNUAL MEETING OF THE NATIONAL GRANGE.

Twenty-eight states were represented at the National Grange meeting held Nov. 16-26, at Atlantic City, N. J. Besides the voting delegates, consisting of the state masters and wives, there was a good attendance of visiting members.

National Master Bachelder's annual address was a clear-cut, comprehensive statement of the growth and condition of the national organization and the present status of the various governmental matters, of a national character, which have claimed the attention of the Grange. Barring the year 1909, the past year saw the greatest growth in the history of the organization, 454 new and re-organized Granges having been reported. The receipts for dues by the national treasurer indicate a gain of \$5,000 in paid membership, showing a net gain in every state except four. The total assets of the National Grange, as reported one year ago, were \$115,821.29, and the total assets Oct. 1, 1910, as reported by the treasurer, are \$118,825.23. This shows a net gain during the year of \$3,003.94, with about the same amount of unpaid dues and bills due since Oct. 1 as one year ago.

Federal aid for road improvement, he declared, is favored by a good majority of the members of congress, the only problem being to devise a satisfactory plan by which the central government shall co-operate with the states in this work. He favored a measure following closely the lines of the Currier bill.

Parcels post legislation was vigorously urged upon congress during the year, the Grange being represented at the hearings by Bro. Atkeson, of West Virginia, who made it clear to the legislators that the farmers of the country are a unit in demanding a serviceable parcels post, and that they regard opposition to it as evidence of hostility to the public interests. Steps were also taken during the past summer to have local Granges acquaint the various congressional candidates with their desires in this matter.

Regarding a national income tax, the Master said: "The Grange favors the adoption by the legislatures of the various states of the pending constitutional amendment authorizing the United States government to levy a tax on incomes. Many of the states in which Grange influence is strong have not yet taken action in regard to this amend-

Discussing the high cost of farm products, Master Bachelder attributed the great discrepancy between the price paid the farmer and the cost to the consumer to bad roads, which increase the cost of marketing crops; to excessive freight charges based on watered stocks far exceeding the real value of the railways; and to exorbitant profits of the commission houses and others in the chain of communication between producer and consumer. An encouraging sign of the times is the formation of associations of farmers for the purpose of eliminating these abuses, and securing fairer treatment in the matter of freight rates, storage charges, etc., and it was recommended that the National Grange undertake the collecting of information demonstrating the advantages of co-operation, disseminating the same through Grange papers and the lecturers.

Provision by congress for securing a physical valuation of all railroad properties was proposed as a means of offsetting the concerted effort now being made by the great railway systems to advance freight rates. The Master also voiced the well known opposition of the Grange to ship subsidies, to a central United States bank and to the amendment or repeal of the present oleomargarine law.

Michigan Farmer's Club List.

For the benefit and convenience of our subscribers we have arranged the following list of papers on which we can save them money. Besides the money, they save the trouble and expense of sending each order separately.

EXPLANATION.—The first column is the regular subscription price of the other papers. The second column gives our price for a year's subscription to both the other paper and Michigan Farmer. The third column gives the price at which the other paper may be added when three or more are ordered. Example: We will send the Michigan Farmer and Detroit Semi-Weekly Journal for \$1.25. If, for instance, McCall's Magazine also is wanted add it at 40c making total \$1.75. Any number of papers may be added at third column price if they are for a subscriber to the Michigan Farmer.

If you want the MICHIGAN FARMER THREE YEARS and the other papers one year add 75c to the second column price. For the Michigan Farmer 5 years add \$1.25. We do not send samples of other papers. Address the publishers direct.

Send all orders to the Michigan Farmer or through our agents.

We will take your order for any publication you want whether it is or not. Write for rates.

NOTE.—So long as a subscriber is on our list for one or more years he may order at any time any publication at third column price. So that a three or five-year subscriber does not lose the advantage of the reduced price if he wants any other paper next year or the year after.

Subscriptions ordered to Canada require postage. Write for rates unless postage is known, in that case include with order. Postage on Michigan Farmer alone to Canada is 1 cent per week.

NAME OF PUBLICATION.	See explanation above.
Daily, (6 a Week.)	
Journal, Detroit, Mich. on rural route	2 50 3 25 2 55
" " " " " "	5 00 5 60 4 75
Times, Detroit, Mich. " "	2 00 2 50 1 75
News Grand Rapids, Mich. " "	2 00 2 00 1 50
Courier-Herald, Saginaw, Mich., (inc. Sunday) on R. R. " "	2 50 2 30 1 60
News, Cleveland, Ohio, " "	2 00 2 60 1 85
Tribune, Bay City, Mich. " "	2 00 2 50 1 85
News-Bee, Toledo, Ohio, " "	2 00 2 25 1 65
Tri-Weekly, (3 a Week.)	
World, New York, (3 a week) " "	1 00 1 45 75
Semi-Weekly, (2 a Week.)	
Journal, Detroit, Mich. " "	1 00 1 35 75
Weekly Newspapers and Current Comment	
Blade, Toledo, Ohio, " "	1 00 1 05 35
Commoner, Wm. J. Bryan, Editor, Lincoln, Neb. " "	1 00 1 35 65
Inter Ocean, Chicago (w) " "	1 00 1 10 75
Cattle, Sheep, Swine, Poultry, etc.	
American Poultry Journal, Chicago (m) " "	50 1 05 35
American Poultry Advocate, Syracuse, N. Y. (m) " "	50 1 05 35
American Sheep Breeder, Chicago (m) " "	1 00 1 50 80
American Swineherd, Chicago, (m) " "	50 1 05 35
Breeders' Gazette, Chicago, (w) " "	1 75 1 65 1 00
Farm Poultry Boston, Mass. (s-m) " "	50 1 05 35
Gleanings in Bee Culture, Medina, (s-m) " "	1 00 1 45 75
Hoard's Dairyman, Fort Atkinson, Wis. (w) " "	1 00 1 45 1 00
Horse World, Buffalo, N. Y. (w) " "	2 00 2 00 1 50
Horseman, Chicago, (m) " "	2 00 2 30 1 60
Jersey Bulletin, Indianapolis, Ind. (w) " "	1 00 1 60 1 00
Kimball's Dairy Farmer, Waterloo, Ia. (s-m) " "	40 1 05 35
Poultry Keeper, Quincy, Ill. (m) " "	50 1 05 35
Poultry Success, Springfield, O. (m) " "	50 1 05 40
Reliable Poultry Journal, Quincy, Ill. (m) " "	50 1 05 35
Swine Breeder's Journal, Indianapolis, Ind. (s-m) " "	50 1 05 35
Popular Magazines.	
American Magazine, (m) " "	1 00 1 70 95
Etude, Philadelphia, Pa. (m) " "	1 50 1 70 1 00
Hampton's Magazine, N. Y. (m) " "	1 50 1 75 1 10
Metropolitan Magazine, N. Y. (m) " "	1 50 1 75 1 10
Mechanical Digest Grand Rapids (m) " "	50 90 25
McClure's Magazine, N. Y. (m) " "	1 50 1 80 1 10
Musicalian, Boston, Mass. (m) " "	1 50 1 80 1 10
Outing Magazine, N. Y. (m) " "	3 00 3 15 3 00
People's Home Journal, N. Y. (m) " "	50 1 00 80
Pearson's Magazine, New York (m) " "	1 50 1 50 1 50
Red Book Magazine, Chicago, Ill. (m) " "	1 50 1 50 1 25
Success, N. Y. (m) " "	1 00 1 50 80
Ladies' or Household.	
Designer, N. Y. (m) " "	75 1 30 60
Everyday Housekeeping, Salem, Mass. (m) " "	50 1 15 35
Harper's Bazar, N. Y. (m) " "	1 00 1 60 1 00
Housewife, N. Y. (m) " "	35 1 00 30
McCall's Magazine, N. Y. (m) " "	50 1 10 40
Mother's Mag., Elgin, Ill. (m) " "	50 1 10 50
Modern Presidia, Boston, Mass. (m) " "	75 1 30 60
Pictorial Review N. Y. (m) " "	1 00 1 50 80
Woman's Home Companion, N. Y. " "	1 50 1 80 1 25
Religious and Juvenile.	
American Boy, Detroit, Mich. (m) " "	1 00 1 40 75
Little Folks, Salem, Mass. (m) " "	1 00 1 50 1 00
Sunday School Times, Philadelphia, Pa. (w) " "	1 00 1 55 85
Young People's Weekly, Elgin, Ill. (w) " "	75 1 20 75

(w—weekly; m—monthly; s-m—semi-monthly.)

FREE PREMIUMS.

Those subscribing for the Michigan Farmer in combination with other papers are allowed premiums just the same as if the order was for the Michigan Farmer alone. One premium only for every Michigan Farmer order. Orders for other papers alone will receive no premium under any circumstances.

The above combination prices will advance after Jan. 1, 1911.

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I will guarantee that this Alectrice Grinder will **not** draw the temper from the steel.

I don't want you to send me any money—not a cent. **I want to make you an offer so liberal that you simply cannot afford to refuse it.**

I will give you the use of this magnificent outfit for **ten days absolutely FREE**—no red tape, no papers to sign, no obligations of any nature. Just get the outfit use it for ten days just as though it were your own, on your own work, sharpen your sickles, plowshares, cultivator shovels, scythes, axes—anything that is dull—then, if you wish, return it to me at my expense.

Now, I want to tell you why I am making this offer

We know that every progressive, up-to-date farmer realizes the advantage of always having sharp, bright tools to work with. You know how much more work can be done with tools which are always in good condition. You know how much easier your work is and how much longer your tools last. You know all these things and yet—**you DO sometimes work with dull tools, don't you?**

I want to prove to you that you can **easily keep all** your farm tools in good condition **all** the time with this wonderful, **simply wonderful**, outfit which I will send you **FREE**.

Genuine Alectrice Grinder NOT An Emery Wheel

And **Alectrice** is the most wonderful abrasive in the world, even hard enough to scratch the diamond. It is really manufactured precious stones, for it is made of the very same substances which go to make up the sapphire and the ruby. Alectrice is the most perfect grinding substance known. It is just as much harder than emery as emery is harder than ordinary chalk. A grinding wheel made entirely of pulverized South African diamonds would not grind one bit better or faster than the genuine Alectrice wheels which we furnish with this superb machine.

Alectrice is manufactured in the most terrific heat which man has ever been able to produce. A heat so great that it will actually burn up a common brick like so much gunpowder. And in this incomparable heat is produced Alectrice. **It is the heat in which the worlds were formed.** Every one of the beautiful iridescent, needle-like crystals is so hard that it will actually scratch the diamond itself. It is these crystals which are crushed up and made into the grinding wheels. It is these inconceivably hard and sharp crystals which cut through the hardest steel more easily than the finest emery wheel will cut through soft copper.

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You can do the same work in two minutes on an Alectrice wheel that would take you at least half an hour on a grindstone, and do it better. **And you can operate the Harman Special Farm Tool Grinder for half an hour with less effort than would be required in running a grindstone for two minutes.** Alectrice will grind 25 times faster than a grindstone and 8 times faster than an emery wheel.

We want to prove these things to you at our expense. We want to send you the Harman Special Tool Grinder for a ten days' trial right on your own farm. See for yourself how it will grind and sharpen every tool on your farm. See for yourself that it is time to throw away the grindstone. Send the free coupon for our free booklet describing this wonderful Alectrice. **Mail Coupon Today!**

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Alectrice wheels are so much harder than the hardest steel that no amount of grinding seems to have the slightest effect on them. Alectrice will cut the biggest steel file you have in two in five seconds. We give a lasting, binding guarantee with our tool grinder.

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Sirs: The tool grinder shipped to this school has given good satisfaction and appears to be as guaranteed by you. I am enclosing photograph of the school and buildings, and you may use same and recommendation as you desire. Very respectfully,

W. C. RANDOLPH,

Supt. and Spl. Disb. Agt.

Government recommendation means something. The Harman Grinder was first tested carefully, approved and purchased. Now, after it has been used and proved its worth in hard everyday grinding and polishing and has been approved by officials who are slow to praise unless they KNOW—don't you think that you should at least TRY this grinder when you can do so at no expense to yourself and no risk? The grinder MUST make good to your entire satisfaction or we want you to send it back. Write for the grinder today and see how much money it will save on YOUR farm.

Most Useful Machine on Farm

I must say the grinder is far ahead of anything I expected it to be. No more hand power grinders for me. When I want to sharpen anything I go and do it without chasing up the second party to turn the stone. Not being used to sharp tools, three of my family have slight mementos on their fingers and I touched myself slightly this afternoon. My boy calls it "Pop's" bicycle. Very true that statement that you can use it 365 days a year. I gunned a cross-cut, sharpened some knives and a hatchet. I am satisfied that it is the most useful tool or equal to any tool the farmer or anybody else has on his place.

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I don't think any farmer would be without one of your grinders on his farm after he has an opportunity to try one. I think it is the best machine of the kind I ever saw. The one that I received with my machine is the best stone I ever used, and I have used a great many different kinds. I have tried nearly everything that needs sharpening on a farm on this grinder and it has proven satisfactory in every case.

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I have had the grinder just seven days and that is enough to show me that it is more than you say it is, and I have tried it on everything that I could, and it beats the old grindstone all hollow, and I think you will make more sales around here, as there has been quite a few of my neighbors who have seen my grinder work.

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