

MICHIGAN FARMER

DETROIT

MICH.

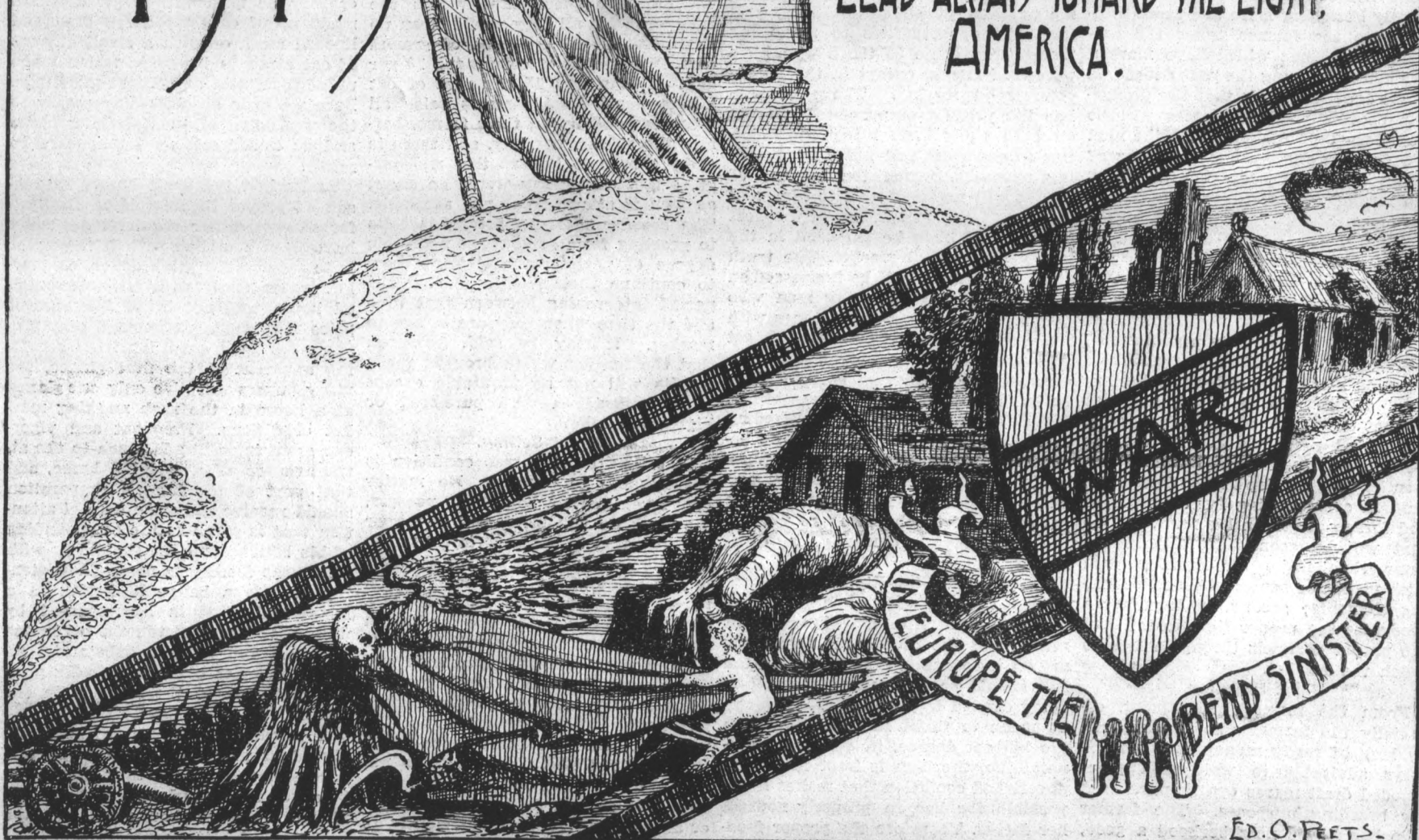
VOL. CXLIII

NO. 26

SATURDAY
DECEMBER 26
1914

NEW-YEAR'S
NUMBER
1915

GOD HELP US TO BE TRUE,
ALL TRULY LOYAL TO
AMERICA.
OLD GLORY, EVER BRIGHT
FOR WORLD-WIDE PEACE AND RIGHT,
LEAD ALWAYS TOWARD THE LIGHT;
AMERICA.



Growing and Marketing the Draft Horse.

By H. L. ALLEN.

It has been evident for some time that breeding draft horses has been, and is becoming constantly more profitable to the farmers of the United States who will breed them right, feed them right, and sell them right. While the general use of automobiles has greatly lessened the demand for light driving horses, the advent of auto trucks has only taken from heavy draft horses the more burdensome tasks bordering on drudgery. Indeed in the light of present known facts relating to the disposal of city traffic, it is almost impossible to imagine how that branch of traffic could have been performed had auto trucks not been perfected sufficiently to permit of their use just at the time they were, for statistics show that, notwithstanding the increase in the number of horses which the census figures denote, the demands of city and urban traffic have far outstretched the capacity of the horse for taking care of it unaided.

These were the conditions a few months ago before the commencement of the furious conflicts between the nations of Europe. Now they exist in a much more noticeable degree. Not only have large numbers of heavy mares that ought to have been retained for breeding purposes been sold and exported to Europe for use in the armies, but it is evident to those who are aware of conditions which have followed the fierce fighting in Belgium and France, that the breed of Belgian horses will be practically annihilated in the first named country and that the breeding of Percherons in France will be set back fifty years. Likewise the breeding stock of Great Britain, whence come the Shires, Clydesdales and Suffolks, will be greatly reduced by the demands made upon the breeders of those horses by their government to assist in the equipment of the immense army it has put into the field.

If it is admitted, as it must be, that draft horse breeding has been constantly becoming more and more profitable to the farmer under the economic conditions which have marked this country during the past decade, is it not equally certain that the production of this class of horses will be vastly more profitable during the next two decades and perhaps much longer?

The degree of success with which the farmer may participate in the division of the large amounts of money which will flow into the breeding communities through the medium of the horse market, from this time on, will depend upon the ability he may show to correctly grasp the requirements of the buying public, the correctness of his judgment in selecting foundation breeding stock, the ability he has, or may acquire, to get the greatest amount of growth on his colts during the period preceding their earliest marketable age, and the business acumen he may develop in two directions, first, in compounding from the grains and forage grown on his farm, rations that will be economical and at the same time make for rapid growth with plenty of bone and muscle forming elements; second, in learning to recognize the proper time to sell and the proper channels through which to reach the market.

Right Breeding.

From the farmer's standpoint, especially the farmer who is hampered by lack of ready money, it is not always advisable to wait until pure-blooded draft mares can be purchased for breeding purposes. The farmer who has in his neighborhood a good, pure-bred stallion may use first-class grade mares with every assurance of getting colts that will develop into marketable horses, if rightly raised. It should be remembered, however, that the most profitable market to

cater to is the one in which the demand is for heavy horses. Not 1,300 to 1,500-lb. chunks, but big horses of the real draft type, weighing from 1,700 lbs. up to a ton.

To the man so fortunate as to have big, heavy, pure-bred draft mares the breeding problem is an easy one to solve, for it means mating such mares with the best horse of the same breed accessible, selecting one above rather than below the ton mark, if such a horse can be reached that has that weight combined with the right kind of legs and feet.

The owner of grade mares, however, has a little different task. His mares, besides being lighter than pure-bred mares, will not be in possession of the same uniform qualities; that is, they will differ in conformation and type and some judgment will be required in selecting stallions to mate them with to overcome physical defects which they may have. If possible, grades possessing a strong dash of Percheron blood should be mated with a Percheron stallion or if they are more nearly of some other blood, mate them with stallions of that breed. Uniform excellence is what the breeder should have to secure the best results when selling time comes and only by using sires of the same blood as that predominating in the grade mares can uniformity be secured.

By keeping some of the best fillies from the grade mares, sired by pure-bred stallions to replace their dams and again selecting their daughters, continuing the process for generation after generation, the breeder will not be long in reaching a point where he will be raising colts that will possess such a large proportion of draft blood that, in the commercial market, they will rank with the pure-bred offerings in value.

It is not to be understood, however, that the breeder who confines his breeding operations to mating grade mares with pure-bred stallions, will have the opportunities to make big money that come to those who have pure-bred mares, except in the purely commercial market. The man who has the product of pure-bred parents on both sides finds many opportunities to sell colts and fillies for breeding purposes, which the breeder of grades will not find open to him, and at prices largely in excess of the best prices which may be expected in the purely commercial market. The truth of this statement will be impressed on the mind of the observing man who commences breeding draft horses with grade mares as he comes into contact with the conditions surrounding the demand for that class of horses and, if he has the requirements necessary to make a man a success in the breeding field, he will not be easy until he becomes the owner of one or more pure-bred mares, as his circumstances permit, in order to enable him to take advantage of the breeding as well as the commercial demand for draft horses.

Feeding Right.

This is a phase of draft horse breeding wherein the breeder of grades and the breeder of pure-breds are on the same footing. Feeding the colt should be commenced when it is being carried by its dam. No colt can be made to fulfill its possibilities in the highest degree, if, during its prenatal life, the dam is kept in an impoverished condition that makes it impossible for her to properly nourish her foetus. Therefore the proper feeding for a draft colt should commence with the proper care and feeding of the dam before the colt is born. And this does not mean that a draft mare may not be worked while carrying her foal. On the contrary, a mare, hand-

led carefully and fed liberally, may be worked moderately nine months out of the 11 she carries her foal without injury to either mare or foal.

The real work of starting a colt on his way to market, however, the work that the breeder can note results of, commences when the colt makes his appearance, but which for the first few weeks of its life must be still confined to the feeding of the dam in order to stimulate the flow of milk, just as the breeders of cattle of the beef type feed their cows to attain the same end.

At the age of two weeks or maybe a little earlier, the colt will commence to eat a little grain with the dam and from that time until he goes to market he should never experience a day without grain rations. Have a creep to feed the colt in where he can eat his grain by himself and give him all the grain he will eat up clean, principally oats with a little ear corn until weaning time. When this time comes the colt will be depending so much on his grain that he will scarcely miss his mother's milk. However, it must be remembered that the milk contained a large amount of sugar and the place of this in his rations may be taken by a little sugar or molasses; and for a time boiled oats, scalded bran mash and a little oil meal added to his regular grain ration will assist in keeping his bowels and kidneys working properly.

Every farmer raises the grain and forage which may be compounded into a ration that will enable a pure-bred or high-grade draft colt to gain more than a pound a day. At the Wisconsin University farm experiments were conducted during two winters, 1911-12 and 1912-13, along this line and pure-bred draft colts were made to weigh from 1000 to 1200 pounds at one year old, making during periods which ranged from 140 to 223 days, an average gain of two and one-tenth pounds per day. In these experiments the colts were fed all they would clean up a mixture of 60 per cent of ground oats, 15 per cent of corn meal, 10 per cent of bran and 15 per cent of cut alfalfa hay. Most farmers raise all these ingredients on their farms, barring the alfalfa, possibly, and there is every reason to believe that well-cured, bright clover hay would do about as well if alfalfa were not available. The breeder who can bring his colts to yearling form somewhere near this degree of perfection will know how to continue their feeding during the period intervening between that time and the time when they are of age to market. It may be said, however, that the feeding which brought those results will not be profitable except when undertaken with pure-bred or high-grade colts.

Right Selling.

In selling draft horses condition is the keynote to success. No matter how much merit a horse may possess, the price he will bring will be larger in proportion to the superiority of his condition when presented for the buyer's consideration. To condition a horse, in the right sense of the term, is to feed, handle and care for him in such a manner that he will be a finished horse, both in appearance and deportment, in which state he will bring a very much larger price than he would when presented in the rough. A finished horse is one that has been fed liberally enough to put a good covering of flesh on his frame; exercised enough to develop his muscular system, groomed sufficiently to give his coat that bloom that denotes perfect health; educated to the bit so that he will not be awkward in harness, and his feet trimmed and shod in a way to give him the best possible action.

Any farmer can comply with all of these conditions, indeed, to fail in any one of them is to reduce the price he will receive for his horses.

Feeding a horse to condition him for the market is not a difficult nor a long task if the feeder is a close observer of the horse's condition from day to day. The object is, of course, to secure as much fat, up to a certain point, as possible and keep the horse in a state of healthfulness. When thin horses are started with they may be made to gain from three to five pounds daily for a period ranging from two to three months, intelligently fed and handled.

As it is upon grain that a horse will fatten most rapidly only enough hay should be fed to supply the carbonaceous matter needed to balance the concentrates in the grain ration. Commence with the horse which is to be fattened carefully, and find out how much he will eat, then govern his future feeding by the avidity with which he consumes his feed. Oats, corn and bran are the three constituents of the grain ration in the highest favor with feeders who grow their own feedstuffs, but other grains may be used. A special fattening ration used by many who make a business of fattening horses, consists of barley, sugar beets, corn meal and bran. The beets and barley, 25 lbs. of the former to one bushel of the latter, are boiled together until soft. To every three pounds of this mixture, two pounds of corn meal and three pounds of bran are added and it is fed warm, mixed with an equal amount in bulk, of clean, cut hay. Silage, if without mold, may be substituted for the beets if desired, and oats may take the place of barley, but corn should make up a large part of the ration. If the available roughage is timothy hay, corn, oats and bran make a suitable grain ration. If alfalfa is the roughage, bran and shorts may be fed, or corn equal in amount in weight, with the alfalfa. With red clover hay, some corn stover may be used with a grain ration made up of corn meal, rye bran and linseed meal, or with a small amount of oat straw and a grain ration made up of corn meal and wheat middlings. Pure water is absolutely necessary to the well-doing of the fattening horse and as much salt as he appears to relish.

And when the draft horse, by reason of proper feeding, is in fit flesh for market, other requirements must have been complied with if the seller is to receive the "high dollar," in market parlance. Even a fat, well-rounded horse will not bring the highest price if a rough, ungroomed coat prevents his good condition from becoming apparent at the first glance, for many buyers will give only one glance at a horse in the rush marking market conditions. Frequent and vigorous grooming will add much to the attractiveness of a well-fed horse, and that part of the horse's preparation should receive the same careful attention that is given to the compounding of his rations and the regularity with which the feeding is done. A glistening coat is a badge of health in a horse and if it is accompanied by well-kept mane and tail the otherwise fit horse will bring a substantial increase in price over one equally good but that goes to the market "in the rough."

A moderate amount of exercise should be given to horses being prepared for market, but they should not be asked to do hard work during their fitting. To work them means that the period of feeding will be prolonged but also that they will not present the fresh appearance to the buyer that means added money to their selling price; neither will they be marked by

(Continued on page 580).

Pop Corn as a Cash Crop

IN the writer's locality, an experiment in extensive pop corn growing has been tried out this season. Something like 150 acres of pop corn was planted and harvested. The acreage of various growers ranged from a half-acre to 12 or 15 acres, and among the growers might be found all gradations from the small farmer and truck gardener to the general farmer with a hundred acres or more. Naturally, from these diverse conditions and widely different circumstances, differences of opinion have arisen as to the profitability of the crop. In some instances, the pop corn crop has been one of the chief, if not the all-important crop, around which the interest of the grower centered, and from which he planned to reap the reward of his summer's toil. In other cases, the crop has been a side issue, a minor consideration, which must give way always to what were considered more important matters.

From these varied conditions, however, certain facts may be deduced which would be fairly reliable. With regard to the desirability of the crop, it will, doubtless, take another year or two in which to decide the matter fully, in the minds of many growers. Now and then a grower declares his first experiment is enough, and that he does not wish to raise pop corn again, under any consideration. On the other hand, growers may be found who express their willingness to plant pop corn again, and consider the first venture successful and satisfactory.

In comparison with field corn, the pop corn crop seems to have both its advantages and its disadvantages. All agree that pop corn is harder to tend and keep clean at first, because the plants are so small and easily covered while being cultivated. At harvesting time, an item in favor of the pop corn as compared to field corn, is found in the fact that as a rule, cutting is not deemed necessary. Of course, this is as the grower chooses, and while the growers in this locality as a rule, did not cut the pop corn, a few did this, and considered the fodder worth the work of cutting. As a general thing, the pop corn was husked from the hill. While the work of husking is slow in comparison with the husking of field corn, the task was performed in much quicker time than was at first anticipated. The amount husked by a man in a day, depends, of course, on the crop and the man. In no other kind of farm work, is there so wide a difference in the amount men can perform in a day, as in the husking of corn. It is a well-known fact, that men who can not be excelled in the hay or wheat field, are slow corn huskers. Allowing for this wide divergence in efficiency, it may be said that a day's work in husking fairly good pop corn is from 10 to 15 bushels. A man who can husk 100 bushels of field corn, might raise this to 20 bushels, but not often. The usual price paid in this locality, for husking pop corn, was 15 cents per bushel.

In considering the desirability of pop corn growing, one fact would seem to stand out as settled, namely, that the grower does not want to go into the business on too large a scale. This is especially true of the man who is doing general farming and who is apt to be rushed with work during the fall months. Help is often hard to get at this time, and pop corn is not worth anything unless it is harvested in time. It would appear that from one to five acres is a better proposition than 15 or 20 acres.

With pop corn as with all other crops, it is the good yield which is profitable. Good ground is the first essential, and this, coupled with proper care, will make the crop a profitable one in a normal season. Fifty bushels per acre is a big yield. Sev-

enty-five bushels per acre may be grown, but this would be a phenomenal yield and is not apt to occur except on small, well fertilized and well-cultivated patches. From 35 to 40 bushels per acre is probably more near to the average as shown in this section, this year. Two and one-half cents per pound, on the ear, or about one dollar per bushel, was the price received for the product, by local growers.

In general, it may be stated that any new crop which tends to add diversity to farm products, is a good thing. Many farmers did not try the pop corn experiment this year, and have no desire to do so. They already have all they can attend to, and in some cases, no doubt are making more money than they could make by raising pop corn. On the other hand, many farmers not so favorably situated or lacking the means or adaptability to carry on extensive farming and stock feeding, welcomed the pop corn proposition. It affords opportunity for money making on small farms. Like the cabbage industry, it widens the opportunity for profitable farming, and gives the farmer a chance to break away from the old things to some extent, and try his hand in a new field. The amount of pop corn consumed each year, in this country, is enormous. The pop corn industry is a flourishing one, and conditions being favorable, the grower may count on getting his share from the profits of the industry.

Hillsdale Co. J. A. KAISER.

FARM NOTES.

Eradicating Wireworms.

In the fall of 1913, I plowed up ten acres of meadow land that had been in hay for the six years preceding. Last spring I plowed it and sowed it to peas, and have plowed it again this fall. I wish to plant this land to potatoes next spring. Do you think there will be danger from wireworms? Would you advise, as a precautionary measure, plowing it again in the spring? I wish to be sure of the extermination of wireworms. How much fertilizer would you advise using to the acre, and what is the best kind for potatoes?

Huron Co.

E. R. L.

The fall plowing of this land will aid in the extermination of any larvae of the wireworms which may yet remain in the soil. The larvae live in the soil two or three years, but as this ground was fall plowed in 1913, plowed again the following spring, and again fall plowed this year, it is probable that wireworms will not be particularly prevalent; this, however, cannot be definitely known from the facts given. Another plowing in the spring would probably be beneficial in preparing the land for the potatoes, and would tend to still further discourage wireworms, but not to the extent that will be accomplished by the fall plowing.

The amount of fertilizer to use per acre for potatoes depends on many conditions, such as the natural fertility of the soil, its physical condition, and last, but not least, the probable price of potatoes. The writer has used varying amounts up to 1,000 pounds per acre, but under normal conditions has settled down to the use of 300 to 400 pounds per acre, applied in the row. Many successful growers, however, find it profitable to use a larger amount.

The increase in yield of crops from light applications of manure, say six to eight tons per acre, is much greater per ton of manure applied than where large quantities are used at a single application, and the farmers who apply lighter applications at shorter intervals receive better results from a given amount of manure than those who make heavier applications at longer intervals.



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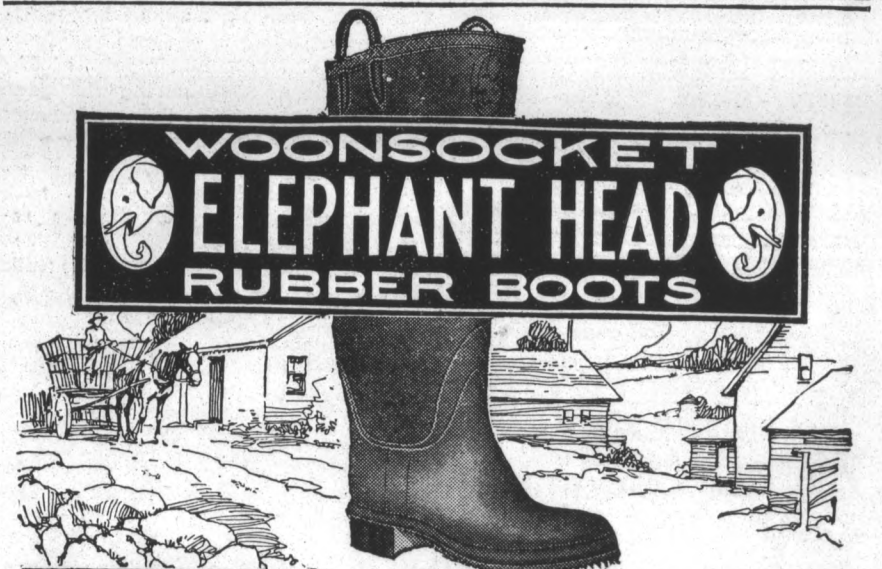
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HOLSTEIN BREEDERS IN SESSION.

The Western Michigan Holstein Breeders' Association held a well attended meeting December 16 in Grand Rapids. It was the regular December gathering, but had been postponed for two weeks owing to the outbreak of hoof-and-mouth disease in the state. President Arthur Clark, of Alto, was in charge and the meeting was a profitable one throughout. At the outset M. W. Willard, of Grand Rapids, spoke in his usual helpful way of developing 20-pound two-year-olds and feeding for A. R. O. records. His grand champion heifer at the West Michigan State Fair has recently, in an official seven-day test, reached better than 21½ lbs. of butter, giving 70 lbs. of milk on the best day. Mr. Willard started with grade Holsteins ten years ago but for the past three years has had strictly pure-breds. He advises beginners to start with the grades. He emphasizes the importance of giving cattle careful treatment from birth. Mr. Willard's son Luther also gave interesting details on the recent test made.

Some Profitable Cows.

The discussion was led by Peter Buth, of Grand Rapids, whose Holstein herd at present numbers 67 head. He also urged good care from the start and is not in favor of heavy feeding, giving cases of dropping down from 29 pounds to 18 pounds of grain daily and getting about the same amount of milk and more butter-fat. Mr. Willard increases his daily grain ration to 16 or 18 lbs., but saw no danger in going even higher if cows kept taking the same amount of coarse feed. When they show the least signs of being off feed he cuts of the grain entirely and gives a bran mash. G. A. Weed, of Lake Odessa, told of his five-year-old cow which has lately made a record of 315.6 lbs. of fat in a seven-day test.

In discussing profits from a Holstein herd in furnishing milk for a condensed milk factory, H. E. Rising, of Woodland, said that six of his registered cows, being two, three and four-year-olds, had produced a total of 64,990 pounds of milk during the past year and his profit at the condensery was \$1,014.92. The average price paid for milk during the season was \$1.59. H. E. Curtis, of Lake Odessa, also gave impressive figures on the returns from his cows and he believes there is fair profit in supplying milk for the condenseries.

Foot-and-Mouth Disease.

At the opening of the afternoon session Mr. Willard offered an amendment to the by-laws, reading that "no member shall be eligible to hold office for more than two years in succession," which will be voted on at the next meeting, held in February. The foot-and-mouth disease was then taken up by Dr. Troan, government official in charge of the work in Allegan county. Highest praise was given the members of the state live stock sanitary commission and to L. Whitney Watkins, the appraiser, for their energy, ability and the efficiency of the work done in Michigan. Farmers and live stock men were also praised for their hearty co-operation in getting the upper hand speedily of this "Devil's Canker." The disease was described and the swiftness of its infection shown in the statement that if let run all animals in the United States would be either sick or exposed in two weeks. He said the word "control" does not apply in this dreadful disease. You must eradicate it and do it quickly. He dwelt on the importance of proper cleaning up of barns and infected premises, removal of manure

and litter and dirt, renovation of stables and use of disinfectants. He recommends the creosote preparations, chloride of lime and pure carbolic acid for disinfection and says that frequent treatment is necessary. Animals are never slaughtered on one man's diagnosis; this precaution being taken against error. After 90 days the farmer whose herd has been killed will be allowed to begin to restock his place.

Unpasteurized Milk a Means of Spreadin Disease.

L. Whitney Watkins, of Manchester, who has been busy since last October in the important work of setting values on the live stock slaughtered, gave a most interesting talk regarding his work. It has not been an easy task. He had never seen a case of the disease before being called to Berrien county at the outbreak, and clad in rubber overcoat, rubber boots, rubber hat and rubber gloves he began making appraisals. He has tried to be absolutely fair, recognizing that the best dairy cow has the poorest beef value and that pure-breds are worth more than scrubs. He regards it as lucky that he didn't find many pure-breds. There was less trouble in dealing with hogs, with appraisal by the pound. He spoke in highest terms of the patience and reasonableness of farmers in this sudden affliction. Creameries that do not properly pasteurize their milk were declared to be a great menace in spreading this disease and tuberculosis and he urged early legislation on the subject. Of 40 patrons of the Buchanan creamery he said that 39 had lost every animal. One farmer with eight children, three of them subsisting largely on milk, came to him and asked what he should do. Not a living cow was left within four miles of him. "Michigan is practically free from the disease now," said he, "and the breeders ought to recognize the efficient efforts of the state and national officials."

D. D. Aitken, of Flint, president of the Holstein-Friesian Association of America, was the last speaker and he strongly supported the vigorous efforts of the state and government authorities in stamping out the disease. "So far as I can learn," said he, "the Michigan live stock owners have been paid all their animals were worth. We can't afford to take any chances with hoof-and-mouth disease. Holland's method of handling it has been a failure while our more radical treatment is a success. I am delighted that we have and national officials with the courage to go ahead and eliminate the disease without waiting for a money appropriation. This is an age of co-operation, and we all go up or go down together."

National Association Popular in Michigan.

"As to the national Holstein-Friesian Association, we have gained 60 new members in Michigan since last May, and have nearly 8,000 members in the state. We need more members. New York, Wisconsin, Ohio and Michigan, in the order named, are leaders in the membership and there is no reason why Michigan should not rank at least second." It was publicity that made Wisconsin the greatest dairy state in the Union."

A number of the speakers said that the danger of further spread of foot-and-mouth disease in the spring must be reckoned with. The Illinois plan of placing infected animals at Chicago live stock show in quarantine, instead of killing them, was discussed and for the most part seemed to be regarded as of doubtful value. H. H. Stroud, of Hopkins, spoke a word in behalf of the creameries and urged state milk inspection.

ALMOND GRIFFIN.

COUGHS IN COWS.

A cough is not a disease; it can only be looked upon as a symptom, and it may arise from a variety of

causes, such as cold and sore throat, bronchitis, parasites in the air passages, indigestion, and through reflex action, from parasites in the liver and intestines. Thus to treat a cough, without reference to its cause, is bad surgery, since it means attacking a symptom only and the use to make of coughs which have distinct and peculiar sounds is as an aid to diagnosis.

Canada. W. R. GILBERT.

SWEET CORN FODDER.

I would like to know if sweet corn or the fodder has any tendency to dry up milch cows.

Van Buren Co.

L. A. R.

The more sweet corn you have on the fodder, the better food it is for cows. Indeed, sweet corn fodder, that is, sweet corn before it is husked, is one of the best corn fodders there is. How you could ever get the idea that sweet corn would dry up your cows is more than I can conceive. Sweet corn grown to supplement pasture is one of the best foods possible. There is nothing equal to it unless it is the same corn made into silage at the proper stage of development. Wise dairymen who have no silos grow sweet corn to supplement the pastures in the late summer and early fall. If it is not all used up as a soiling crop, the balance is cut and fed dry, ears and all. The ears are dearly loved by the cows, and a larger per cent is digested than the dry stalks. Don't be afraid to give milch cows a good feed of sweet corn fodder, (stalks with the ears on), but, of course, it is good rich food, and one can feed too much, just as well as not enough.

COTTONSEED MEAL AND SILAGE.

What is a good balanced ration for Holstein dairy cows, consisting of the following: Good hay, 70 per cent clover, and 30 per cent of June grass, timothy, shredded corn fodder, ensilage and cottonseed meal. Kindly state in your opinion, the maximum amount of ensilage that should be fed at each feed to cows ranging in weight from 1100 to 1400 pounds.

READER.

Cows should have all the roughage they will eat without waste. I doubt if it will pay to weigh the roughage in a ration. Simply give them all they want. This will apply to corn silage as well as hay. I think we should encourage cows to eat large quantities of silage and hay. They are the cheapest foods we can get. It is the grain that costs so much.

I would not recommend feeding cottonseed meal as the only concentrated food; better feed some bran and corn meal, or good oats and barley. It would probably be satisfactory to feed these large cows as much as three pounds of cottonseed meal, perhaps more. You can feed too much; I am satisfied of this, especially for a breeding herd. I would put the maximum at three pounds, and for the balance of the grain ration good corn and oats or corn meal and bran.

A BRICK SILO.

Will you kindly advise me whether it would be advisable to build a brick silo? Will ensilage keep as well in a brick silo as in a cement or wood one? If so, will you kindly inform me how they are constructed?

READER.

A brick silo is as good as any after it is built. It should be plastered on inside with cement to make it smooth. But a brick silo is no better than several other kinds and is much more expensive. You can build a brick silo by laying the bricks end to end and making the silo wall four inches thick, but this must have iron hoops to give it sufficient strength. You can make an eight-inch solid wall which will have sufficient strength, but the cost will be excessive. A concrete, a cement block, a stone or a lath and plastered silo will be just as good and much cheaper.

Practical Science.

FRUIT IN ITS RELATION TO DIET.

BY FLOYD W. ROBISON.

The Status of the Industry.

There has been an increase in the last few years in the attention which has been given to the growing of fruit and not only in the growing of fruit but in the attention which has been paid to the manufacture of the various fruit products as well. Most American farmers have at one time been active fruit producers, sometimes of a great variety, but the problems incident to fruit growing in the last ten to twenty-five years have been very great. Insect pests and fungous diseases have made great inroads on fruit and tree as well so that a very great many American farmers have become discouraged and have gone almost entirely out of the fruit growing business. Therefore, farms that in previous years were stocked with large orchards of apple, peach and pear, as well as a considerable variety of smaller fruits, have in many instances now been given up almost entirely to the production of grains and other farm produce. Much attention has been given as a consequence by the experiment stations and colleges, both state and governmental, to the problems involved in fruit growing, and the methods necessary to produce profitable crops of fruit have been so thoroughly and persistently brought before the agriculturists that the present day has witnessed the rapid increase in farms which are becoming devoted to fruit raising, particularly to orchard culture.

Taken as a whole, the fruit industry in this country is a very important industry. It is of such importance that the government and states are well warranted in devoting time and money and much effort to ascertaining the basic principles which underlie modern fruit growing and in determining what manner of procedure may be followed to counteract the disastrous results from the attacks of insect pests and fungous diseases.

Our Fruit Imports.

The American people have seemingly always been a people very highly appreciative of fruit in the diet and in spite of the extent of our country and the amount of fruit products produced in this country there has been a large quantity of fruit products imported. According to the United States Department of Agriculture in the year 1905 there was imported into this country over \$18,000,000 worth of fruit products, and over \$51,000 worth of fruit juices. The fruit products imported were bananas, currants, dates, figs, grapes, lemons, olives, oranges, plums, prunes, and raisins, together with small quantities of a variety of other fruit products. In 1906 there were over \$19,000,000 worth of fruit products imported and over \$58,000 worth of fruit juices; in 1907, upwards of \$26,000,000 worth of fruit products and \$70,000 worth of fruit juices. In 1908 there were nearly \$28,000,000 worth of fruit products imported and over \$52,000 worth of fruit juices. It is apparent therefore, that aside from the fruit produced in this country, which includes all of the varieties imported with the exception of bananas, dates, and figs, the demand for fruit products by the American consumers is very great.

Our Fruit Exports.

Some considerable exportation of fruit products has also occurred. The exports have been chiefly apples, apricots, oranges, peaches, pears, prunes and raisins. In 1905 over \$12,000,000 worth of these products was exported; in 1906-7-8-9, these averages have been somewhat more than maintained.

In fact, including canned fruits and preserved fruits on the average for the last five years there has been an exportation of about \$15,000,000 worth of fruit products per year.

Where the Fruit is Grown.

The fruit industry in this country covers a considerable space. In fact, most of our states produce more or less fruit, the apple industry perhaps being centered most largely in the Atlantic states, such as Virginia, and the states of the north, and particularly in the northeast states; also, in large quantities in New York and Michigan. The small fruits, such as strawberries and the like, are pretty well distributed throughout the Atlantic and middle states. Climatic conditions apparently have been responsible for the tremendous growth of the fruit industry in those states which lie west of the Rocky Mountains and much friendly competition has sprung up between the west and the east in the production, particularly of apples and grapes, in which California and those states west of the Rockies have, through the influence of climatic conditions and, what is worth probably even more to them, the exercise of excellent business judgment and active co-operation among farmers, been more uniformly successful in capturing the markets of the United States. Particularly has the competition been keen between California, Oregon and Washington apples and the apples of New York state and Michigan, and likewise in the matter of grapes grown in California in competition with the grapes and grape products grown in northern Ohio and in western New York.

Western Fruit has been well Marketed.

The western fruit, particularly apples, is put up in very attractive containers, has a very high and beautiful color, and western packers have been very scrupulous in maintaining the integrity of their product. Consequently dealers throughout the east have been glad to pay fancy prices for a California product which is carefully graded, has a nice color, contains no spoiled and inferior material, and sells well on the market. The attention which is being paid to the grading and packing, as well as marketing of fruit in Michigan and New York within the last two or three years has indicated to farmers of these states that it is going to be possible to seriously threaten the supremacy of western fruit growers in products which can be grown successfully in the middle states. The interesting fact is shown this very year, despite the abundance of the crop of apples in the east, that Michigan fruit particularly is demanding as high a price in our local markets as is western fruit, and what is quite remarkable, the color of Michigan fruit during the present year is quite as satisfactory in the main as the color of the western fruit. Michigan fruit is also admittedly decidedly superior in flavor. When a couple of years ago western Michigan exhibited her apples at the fruit show in Chicago, as soon as the visitors had tasted the product in comparison with the western apples, further competition on the part of the west was out of the question. It is apparent, therefore, that as far as quality of product is concerned, flavor, and even color, this climate and this soil is perfectly capable of producing products which will compete successfully with fruit from other localities in the market. This makes it plain, therefore, that the success of the west has not been due to climatic conditions but rather to the exercise of scientific management and culture, and good business judgment. (Continued next week).



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She extends to Americans a hearty invitation to settle on her FREE Homestead lands of 160 acres each or secure some of the low priced lands in Manitoba, Saskatchewan and Alberta.

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The Government this year is asking farmers to put increased acreage into grain. Military service is not compulsory in Canada but there is a great demand for farm labor to replace the many young men who have volunteered for service. The climate is healthful and agreeable, railway facilities excellent, good schools and churches convenient. Write for literature and particulars as to reduced railway rates to Superintendent Immigration, Ottawa, Canada, or to

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Orchards in Central Michigan.

THE orchard situation of our state outside the fruit belt is alarming. The gravity of the situation cannot be overestimated. Prompt and thorough work in the fight against the ravages of the scale is imperative. This little insect must be killed, and that without delay, or the orchards of the central part of the state will be a taining of the past in two years.

I am not an alarmist, but speak from knowledge of the facts and conditions, and know that with a few exceptions the scale has the advantage and will soon finish its work and die only with the death of the orchard. I have an orchard of about 900 trees and have been fighting the scale since it made its appearance here four years ago. I have succeeded in keeping my trees practically free from this orchard pest and from other pests as well.

Know the Habits of the Scale.

You ask what has been the basis of my success. First, knowledge of the life history of the scale, as well as other pests, has been helpful in combating them. I did not need to know that the San Jose scale was introduced into California from China and that its parasite enemy that keeps it from destroying the fruit trees in its native land was not imported with it, and hence this terrible orchard scourge that has traveled from east to west and from coast to coast. This and many other things regarding orchard pests are of interest to the student, but not essential to the success of the fruit grower.

But, to know that the young scale is brought forth a minute louse and that there are three broods, one in June, one in July and one in August, that this minute louse crawls along the branches and twigs of the trees seeking a place where it may insert its sharp bill into the tender bark and there build the scale on its back and live its life on the sap of the tree is important.

Spraying to Get Results.

To know this is to know that a weak summer spray of lime-sulphur applied to these young scales before they have the protection of a scale covering will destroy millions of them. Again, to know that the adult scale that we seek to destroy by means of the strong lime-sulphur spray applied while the tree is dormant, is only the size of a pin-head, and does, or may, occupy every particle of space on every part of the tree, and that the scale is killed only by being covered by a solution of sufficient strength, is to know the absolute necessity of thorough work. When finished and dry the entire tree should resemble a carefully painted surface. Why is it so important to destroy all the scale that winter over? Because of the rapidity of its increase. Every scale left alive will bring forth a brood of 300 in June, after which the mother scale dies. Each of this 300 brings forth 300 in July and 300 in August. So, you see, we must destroy all we possibly can of the scale that winter over and by a careful use of the summer spray destroy many of the young scales or this pest will destroy your orchards.

Good Equipment Necessary for Thorough Work.

The first essential is a good machine suited to the size of the trees and to the amount of work to be done. As well might you expect to save your house from being destroyed by a raging fire by the application of water through a squirt gun, as to expect to save your orchard from the ravages of the scale by using inadequate equipment for the work. A poor nozzle, a weak pressure, inability to reach and drop fine sprays on the top of the trees, are among the causes that spell failure to save the orchard. It should be remembered that lime-sulphur does not spread. You may see

it drip or run down the trees and think you have finished the job. Instead, you have simply piled up the solution and forced it from the tree, while, perhaps, the bulk of the tree surface is untouched. The spray nozzle with the proper pressure should make a mist-like spray that will strike and remain on the surface as though put on by a painter's brush.

When to Spray.

Inasmuch as I have succeeded in conquering the scale and producing choice fruit, as well as increasing immensely the vigor and growth of my trees, and that by the use of the lime sulphur spray, I think it safe for others to follow my plans of work.

I make the dormant spray as near as I can safely to the bursting of the bud, using lime-sulphur, one gallon to eight gallons of water. Spraying with the wind and opposite side as soon as wind changes sufficiently to enable me to finish a perfect covering of the tree. Summer spray is made of one gallon of lime-sulphur to forty gallons of water, with two and one-half pounds of arsenate of lead added.

Spraying Necessary for Profitable Orchard.

Now, my fellow farmer, let us reason together before we part company. You say, "The apple is not a paying crop and will not stand the added expense of spraying, and I will let the orchard go by." Then again, you say, "Some of my neighbors have sprayed their orchards and are losing them." I agree with you that the ordinary farmer with the ordinary orchard will not get wealthy producing apples for market, but this is not, as I see it, the vital question. You seem to forget that you cannot produce any kind of fruit without spraying thoroughly. The kind scale will take all except the strawberries. This fact is what makes the outlook for fruit in central Michigan so alarming. Now, if you do not do a thorough job of spraying, you will lose your orchard. If you do thorough work, you will win.

Ionia Co. S. H. PILKINGTON.

A CONVENIENCE FOR PRUNING.

I noticed an article in the Michigan Farmer of November 28, asking fruit growers to give their experiences with time or labor savers, such as a way to keep the hands free of tools while on the pruning ladder. While I am not a farmer or fruit grower, I have been a mill-wright and I know what it means to be on top of a ladder and have to come down for each tool. I solved the problem this way. I made out of some scrap machine belt about one and a half or two inches wide, a belt that would fit loosely around my waist. On this I fastened four large hooks fashioned out of wire, and two wire loops placed horizontally. On these hooks I hung a short saw, bit brace, hammer and wrench. Through the loops I hung a belt punch and pliers. With this outfit all hung at the back of my waist I was ready for business, yet both hands were free and my climbing was not inconvenienced by anything on my knees. It strikes me that with the amount of old harness and wire on each farm, the fruit grower could easily make such a belt which would enable him to carry up the ladder a pruning saw, short-handled shears, pruning knife, scraper and even a long open-mouthed bottle to accommodate paint and brush for painting limb stubs could be suspended by a cord and hung to a hook. It may be a little awkward to reach around to one's back for each tool, but one soon gets used to it, and the little trouble involved to make the belt and use it is repaid by the travel up and down the ladder that is eliminated.

Wayne Co. B. H. DECLAIRE.

MAKING THE GARDEN PAY TAXES.

Some years ago the writer began, in leisure time, experiments in the field of gardening and horticulture to ascertain the fullest returns from soil culture under intense methods. These results culminated in 1913 and 1914, more particularly the latter. My efforts were confined to 700 square feet, upon one city lot, this comprising one-sixtieth of an acre, all handled by hand cultivation. In order to obtain the very highest results, and use to advantage every inch of soil, the crop was considerably mixed; for instance, between ourselves and a neighbor was stretched a fence of poultry wire upon which was trained garden peas both sides, and upon another such dividing the lawn from garden, sweet peas were grown on one side, and while comments were made by friends, belittling this plan, it succeeded, for the garden peas were taken off before sweet peas came to bloom, with no results whatever in hindering either their growth or flowering qualities.

Intensive Small Fruit Growing.

Being a lover of currants, raspberries and strawberries, I chose sufficient of these to provide for home use, and of the latter many for sale. Varieties selected were, St. Regis raspberries, Perfection currants, and Senator Dunlap strawberries, the latter in rows two feet apart. Now comes the strange unagricultural part of the whole proceeding, tested out to prove both its wisdom and intensity. Between the rows of strawberries were planted such early season vegetables as lettuce, spinach, mustard and radishes.

A former professor in one of the famous agricultural colleges of the nation came miles out of his way to view my demonstrations, and inquired my idea of using the ground between the strawberries. I told him my theory was that shallow rooted plants taken off early would not affect the berries, provided the ground was well fertilized. He conceded the theory and practice well proven, and further complimented my efforts by stating it was the greatest in intense soil culture he had ever witnessed, and as further indorsement of my methods, wrote a letter of recommendation to one of the most prominent citizens of Michigan, who is greatly interested in general agricultural progress.

The Financial Returns.

Now the point of interest to your readers is: what were the financial returns? In value of strawberries alone the plot yielded 254 quart boxes at actual market value of 15 cents each, being at rate of \$2286.00 per acre, but the total returns, including other fruit and garden products, was \$45, or at rate of \$2,700 per acre.

Naturally you inquire, can one adopt the same manner on large acreage? I say, most emphatically yes, but remember that the figures given are gross, but even allowing such a liberal allowance as 50 per cent for crating, labor, and marketing, I am sure the profits would be most attractive for those who care to enter into it commercially. My experience so convinces me that intense culture pays, that I am seeking to acquire from 10 to 50 acres to demonstrate as I choose, and using berries as a base of profit in connection. In doing this it is my intention to further contribute to "intensity" by having a few cows, some hogs, and large poultry yards, these all combining to both consume any waste, and furnish part of fertilizer to renew the soil W. H. DAVIS.

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Getting Winter Eggs.

THE problem of getting winter eggs is the greatest problem that confronts the farm poultry keeper. It is, in the majority of cases, the factor that sways the balances to the side of profit. Yet the fact that some do get them, and in abundance, too, is proof that the thing can be done. Undoubtedly more failures in the poultry business are directly traceable to the fact that hens will not lay in the winter, unless certain conditions are met, than to any other one reason. There are some who argue that the cold season, being the unnatural time for hens to lay, it is therefore impossible to expect many eggs. This has long since been disproven. Fully matured hens, if properly housed and fed, will lay right through the cold weather. I had a striking proof of this last winter. The first of December I purchased one dozen year-old hens from a man who said he was sick of trying to get eggs in winter. The hens plainly showed that they had not had much care, but, as I purchased at a very low price, I thought it safe to take a chance on them. At any rate I could fatten them for market. They were given good quarters and good feed with the result that the first egg was laid in less than three weeks and they continued to lay all winter almost as well as my best pens. Verily it is the treatment the hens get that brings the winter eggs.

Conditions Necessary for Winter Laying.

It is true that the strain has something to do with laying qualities, but I am not considering that in this article. Instead, I will set down a few rules that ought to induce any kind of hens to lay enough to make them profitable during the cold weather. First, the birds must be fully matured. Pullets of the proper age are best and next in the order of production come the year-olds. Two-year-old hens will sometimes lay fairly well but it is not advisable to keep the birds after the second year. In the first place the quarters must be just right. These should be tight and free from drafts and at the same time well ventilated. It is doubtless true that the open-front house is best. Do not crowd the birds. If the houses are not large enough, remove part of the flock to other quarters. Better kill off some if necessary. You will get more eggs by doing so. Hens simply will not lay if they are kept in too small a space.

Cleanliness Essential.

Keep the pens clean. Cleanliness insures health, and health is an essential to egg production. There should be droppings boards under all roosts and these should be cleaned frequently. After doing so, sprinkle sawdust or dry earth on the boards to absorb moisture and help to neutralize the odors. Spray the roosts and boards frequently to kill the mites that are so annoying to the birds. Coal oil, with a small quantity of crude carbolic acid added, is an effective mixture. Even in winter the mites will do some mischief if left to work unchecked. Lice are menaces to egg production. Provide dust boxes in the sunniest part of the house and refill them often with clean dry earth. This should be provided before the snow comes on and may be procured from the highway. This is nature's way of keeping the parasites in check. In addition to the dust bath, it is well to sprinkle the birds with insect powder once in a while. A few lice will escape the dust shower they get daily. Clean nests, in which the material is frequently renewed, are also of importance.

Make the Hens Exercise.

Having the needful quarters and keeping them clean are first essentials. Now we must feed the hens well and keep them happy and con-

tented. In order to do this, the pens must have a deep layer of litter on the floor. This may be dry leaves or straw. Straw is the best material, as it will last longer and can be worked over by the hens more easily. Six or eight inches is not too deep, as it is desirable that the birds should work hard hunting for part of their food. This keeps them contented and gives them needful exercise. It is not necessary to change this litter more than once during the winter unless the house is damp. Stir it up once in a while to help the hens find their food.

The daily life of a laying hen should be something like this. At daylight she should come down from the roost to hunt for a breakfast of wheat, which had been scattered in the litter after dark the night before. This should occupy her attention for a good part of the forenoon. A second scattering of wheat should be made at eight or nine o'clock. I do not believe in throwing in a whole lot at once. Better a small quantity at a time, but be sure to have some food ready for the bird at daylight, to induce her to get up early. At noon or earlier the hen should have a few oats to hunt for. This gives her a variety. A quantity of green feed of some kind should also be fed every forenoon. Just before going to roost the bird should have a good meal of whole corn. In addition to these foods, there should be a hopper of dry mash always at hand for her to peck at, also oyster shells, grit and charcoal. The meal of corn at night helps to heat up the bird and enables her to keep out the cold.

Feeding Hints.

A good mash is composed of equal parts of bran, middlings, corn meal, ground oats, gluten meal, alfalfa meal and beef scrap, with half the quantity of linseed meal added, also a small quantity of salt, say about one pound to every 150 pounds of mash. This should be thoroughly mixed before feeding. I believe this is better for the birds than the wet mash, but there are some who get good results from warm mixtures.

Green food should be fed every day in winter. This serves as an appetizer and keeps the digestive organs in perfect order. Vegetables are greatly relished by the birds. Cabbage, turnips and mangels are best. Cabbages may be chopped or simply cut in quarters. The fowls do the rest. Mangels are treated in the same way. The cheapest form of green food is sprouted oats. To provide these, have a number of shallow boxes. Soak the oats 24 hours and spread them in the boxes, which have been provided with drainage holes. Sprinkle night and morning and feed when the sprouts are two or three inches long. A block six inches square is enough for ten fowls. I feed oats one day and vegetables the next, alternating throughout the winter. CHAS. H. CHESLEY.

APOPLEXY IN FOWLS.

Apoplexy in fowls occurs from over-feeding, and can seldom be headed in time to be of service. If the bird, however, although insensible, does not appear actually dead, the wing may be lifted, and a large vein which may be seen underneath, may be freely opened, after which hold the bird under the cold water tap for a minute or two. It is just possible that it may recover. If so, feed sparingly on soft food only, for a few days. In over-fed hens death often occurs during the exertion of laying; if, therefore, a laying hen be found dead upon the nest, the owner should at once examine the remainder, and should they appear in too high condition, the allowance of food should be reduced accordingly. Canada. W. R. GILBERT.



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39 to 45 Congress St. West, Detroit, Michigan
TELEPHONE MAIN 4525.

NEW YORK OFFICE—41 Park Row.

CHICAGO OFFICE—604 Advertising Building.

CLEVELAND OFFICE—1011-1015 Oregon Ave., N. E.

PHILADELPHIA OFFICE—214-218 Twelfth St.

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TERMS OF SUBSCRIPTION:

One year, 52 issues.....50 cents

Two years, 104 issues.....1.00

Three years, 156 issues.....\$1.25

Five years, 260 issues.....2.00

All sent postpaid.

Canadian subscriptions 50c a year extra for postage.

Always send money by draft, postoffice money order,

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We never, unless through error, send The Michigan

Farmer beyond the date subscribed to—our subscription price

being always due in advance, and sample copies always free.

No bills will ever be sent should a subscription through

error be continued after expiration.

RATES OF ADVERTISING:

40 cents per line agate type measurement, or \$5.60 per

inch (14 agate lines per inch) per insertion. No adv't in

serted for less than \$1.20 each insertion. No objection-

able advertisements inserted at any price.

Entered as second class matter at the Detroit, Michigan,

postoffice.

DETROIT, DEC. 26, 1914.

A FEW LEADING ARTICLES OF THE WEEK.

Growing and Marketing the Draft Horse.—The eighth of 52 special articles to be published in consecutive issues of the Michigan Farmer574

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Dealers' Choice of Apple Varieties.—The third of a special series of articles relating to a survey of Michigan's apple industry.....588

New Year's 1915.

OUR cover design for New Year's Day, shows the mind of our artist still dwelling upon the unhappy conditions in the old world and their contrast in the peace enjoyed in our own land—America—history's greatest exponent of representative government.

And why not? It is the great lesson for the day's study.

The point of the design harks back to the Middle Ages.

In those old days when heraldry, minstrelsy and the King's buffoon practically absorbed all mental activities, many interesting and varied customs of chivalry were expressed by different European peoples in their development and employment of the language of symbolism.

Mediaeval chivalry or knighthood might be termed a militant fraternity on horseback. It was predicated upon the outrageous inhumanity of caste, by which the limited few in idleness, lived upon the labor of the masses in poverty and yet it was interesting, picturesque and in its rough way sought to develop in men and women, some of the finer qualities.

"On my shield's front, emblazoned by the armor's cunning,

Thou mayest see my sign manual and that for which I stand."

says the old knight.

The Bend-Sinister, a broad band extending from the upper left corner of the shield to the lower right side as the knight held his shield in front, constituted his honest confession of illegitimacy, or if heavy dark borders accompanied the band or bend-sinister, it signified some failure in knightly duty or some unchivalric conduct: while a heavy additional black border around the entire shield, signified his deep contrition and a vow to offset or efface his disgrace by penance or knightly deed of valor.

After such penance or deed of valor, there came the right and with due ceremonial the bend-sinister was removed and the shield again showed only the knight's armored emblems denoting his name, rank and the honorable character which he desired to personify.

Recalling this meaning of the bend-sinister, the point of the design is clear and speaks for itself.

The fair face of Europe is indeed under a broad bend-sinister of blood and sorrow and desolation, with the vultures in their wake, and from which even unthinking, unrealizing infancy can not escape either present conditions or their evil effects projected far into a future whose progress will be crippled for many generations.

Should not the American heart pulsate with gratitude as he contemplates the happy contrast which the bright symbolism of his own country presents in the upper part of the design?

How many thousand American travelers, as they came scurrying home from Europe after those fateful days of last summer that inaugurated the deluge of blood, could feelingly quote from Sir Walter:

"Breathes there a man with soul so dead
Who never to himself has said
This is my own my native land
Whose heart has ne'er within him
burned

As home his footsteps he has turned
From wandering on a foreign strand?"

And above and beyond gratitude for the blessings of peace, and even deeper than the emotions that cluster about the word home, precious though they be, are the thoughts of pride in all that America represents in the cause of human liberty—a very beacon of light to the humanity of all the earth.

And though "Labor is the only honest prayer," as "Faith without work is dead," and even hope should have behind it the instant willingness of endeavor, yet may we not—

Hail! Hail! O Mother land
Sweet Freedom's Holy Land—
America.

Never the brave more brave,
Never the fair more fair,
Than in our dear home land,
America.

Workers with hand and brain,
Here home and school maintain;
Labor's renown.
Progression true is here,
Right triumphs when made clear,
Knowledge and worth appear;
Industry's crown.

God help us to be true,
All truly loyal to
America.

Old Glory, ever bright,
For world-wide peace and right,
Lead always toward the light;
America.

CURRENT COMMENT.

A movement is now on foot, of Agriculture, which is being fostered by some of the local development bureaus and the chambers of commerce of several Michigan cities, to secure the passage of a law by the next Legislature providing for the establishment of a state department of agriculture. One plea made for this move is that several states have such an office and that it has been found highly beneficial in the

fostering and improvement of the agriculture of those states.

This is not a new subject of discussion in Michigan. It has been pretty well threshed out in agricultural circles and has not been generally favored after a full discussion, for the reason that a large measure of the beneficial results which might be attained by such means can be as well accomplished by the agencies already at hand as by an expensive duplication of work and multiplication of officials and employees. This is more true at the present time, since through the operation of the Lever act the federal government will provide a large and annually increasing fund for the direct application of scientific and business principles to farming on the farms of every county in the state. This work will, by the provisions of the federal law, be conducted in co-operation with the agricultural college, and to secure the maximum of available federal funds, the state will be required to give like financial support to the projects undertaken.

With this splendid development work in prospect, and already begun, it would seem the part of wisdom for the state to move slowly in the matter of establishing a new department for similar work. Recently there has been developed a well defined sentiment among many Michigan farmers in favor of the establishment of a state department of markets, for the collection and dissemination of market information among the farmers of the state. This would be original work, rather than duplication, and would seem to offer far greater advantages, so far as real value to our agriculture is concerned, than would the establishment of a large and expensive department, many if not most of whose activities would be a duplication of work already provided for.

GROWING AND MARKETING THE DRAFT HORSE.

(Continued from page 574).

the better action which results from high spirits and which is another requirement of the buyer who pays the big prices.

Speaking of action should remind one that no horse, even the heaviest drafter, can handle himself well if encumbered with heavy, misshapen, ill-fitting shoes or with his feet grown out of all correct proportion with worn shoes imbedded in the grown-out hoofs. Feet cut back to the right length and angle and shod with plain, well-fitting shoes represent a good investment of time and money on the part of the seller.

As a last word it may be said that the art of successful salesmanship in the horse market is to present a good horse in such condition that he will instantly create a favorable impression on the buyer who wants the best and then, when that impression has been created, to be able to demonstrate to the buyer that his first impression was correct. The farmer may do this as well as the middleman who buys horses in the rough and fits them for the market, if he will breed right, feed right, learn his market and cater to those buyers who pay the big prices for the good horses, presented to them in the best condition.

This is the eighth of 52 special articles to be published in consecutive issues of the Michigan Farmer. The special article for next week will be the first article in a most interesting series on European Co-operative Agriculture, as seen by a member of the American Commission. This series of articles, written by Mr. William B. Hatch, the Michigan member of the American Commission which made a special study of agricultural co-operation in Europe, is certain to be most instructive and entertaining reading for every Michigan farm family.—Eds.

A COMPARISON.

A monthly farm paper, to be as cheap as the Michigan Farmer at 50 cents a year, would have to sell for 12½ cents a year, and a twice-a-month

farm paper to be as cheap would have to sell for 25 cents a year. Markets, veterinary advice and other features would be of the same comparative value.

HAPPENINGS OF THE WEEK.

Foreign.

The European War.—Winter weather has failed to stop fighting in Europe. In both the eastern and western war centers the struggle continues. During the past week operations before Warsaw in Russian Poland have largely eclipsed the movements of troops in the west. The Germans are meeting with some success in their attempt to break the Russian center before the old capital of Poland. However, Berlin reports state that the Russian line is still intact after the Kaiser's forces had taken Lodz and Lowicz and that the difficult part of the campaign is still to be accomplished. The Germans hope to establish winter quarters in Warsaw. The probability of their doing this is somewhat questionable, for the Russians are very active in eastern Prussia and also in the region of Krakow in Galicia. Last week it was reported that the Austrians had forced their way through the Carpathian mountains and threatened the Russians' position before Krakow, but this movement of troops either did not occur or failed of its purpose. With Russia holding strongly at both ends of the long battle front they are in a position to contest every foot of ground at the center. Serbia has administered a severe defeat of the Austrian forces which recently captured Belgrade and invested northern Serbia. Belgrade has been recaptured and the Austrians are practically driven from Serbian soil. The Allied forces on the west have made advances. Severe fighting has occurred around Ypres with slight progress reported on the part of the Allies. The same is true on the Lys and from there to the Oise river. The Germans have attempted to gain ground near Argonne, but the attacks seem to have been repulsed. Last week German war vessels made a raid on the eastern coast of England. The coast towns of Scarborough, Whitby and Hartlepool were shelled; later reports state that 31 persons were killed and many wounded. Although reports are conflicting, it is generally believed that the warships escaped unharmed. The attack occurred during a fog.

The third contingent of Canadian troops at Salisbury plains, England, is being prepared for an early departure for the front.

National.

Last week the Interstate Commerce Commission granted to the trunk line railroads practically all of their claims for advanced rates. This decision is expected to greatly influence better business conditions.

To avoid firing across the international boundary line at Naco, Mexico, Gen. Villa's forces have been ordered to fall back ten miles from the border. The order was issued by the provisional government. Gen. Scott, chief of staff of the United States army, is now at Naco making an investigation of the complaints that Americans have been killed by bullets from across the line.

John M. Hall, founder of the Bay View Reading Circle, a national literary organization, of about fifteen thousand members, died at his home in Detroit Sunday, at the age of 60 years. He was well known throughout Michigan.

Eugene Zimmerman one of the most prominent railroad promoters of the country, died suddenly in Cincinnati, Sunday.

The Federal House of Representatives votes this week on the Hobson resolution for the submission of a constitutional amendment for national prohibition.

The Lake Shore railroad company won its fight against an effort to thwart the merging of that road with the New York Central lines.

AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS.

The eighth annual meeting of the American Society of Agricultural Engineers will be held at the Sherman Hotel, Chicago, Ill., December 28-30, 1914. An interesting program has been prepared on various phases of agricultural engineering, one session being devoted to a discussion of the place and field of the agricultural engineer.

EXPLANATION. If your date tab reads 1Jan15, or 1Jan5, it means your time is up with the last issue in December. It does not mean that your time continues to January 5, or January 15. The figures represent January 1, 1915. Please renew now if your time is up.

Magazine Section

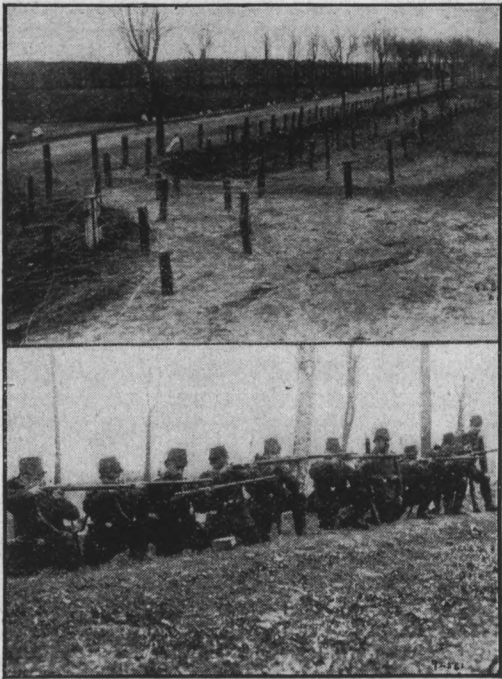
LITERATURE
POETRY
HISTORY and
INFORMATION

MICHIGAN FARMER
AND *LIVE STOCK* JOURNAL
PUBLISHED WEEKLY. ESTABLISHED 1843.

The FARM BOY
and GIRL
SCIENTIFIC and
MECHANICAL

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

WORLD EVENTS IN PICTURES.



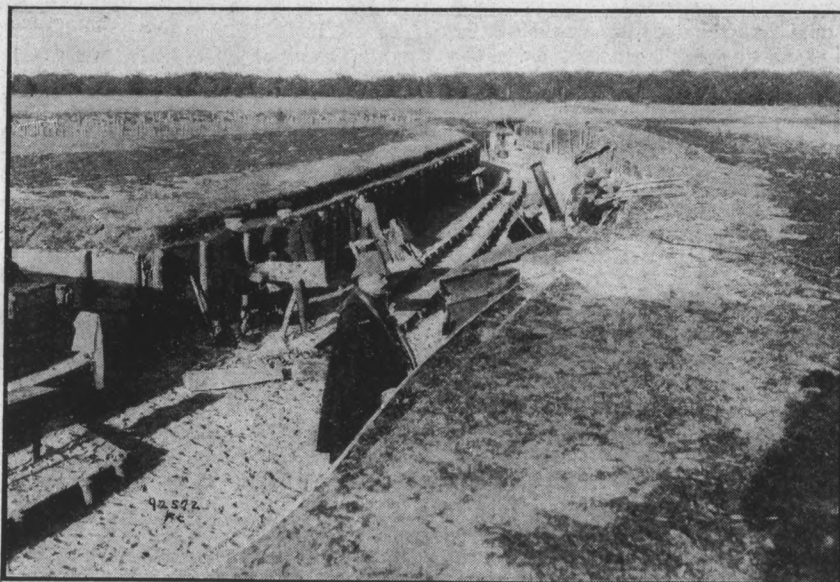
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The Fall of Tsingtoa being Celebrated by Japanese before Imperial Palace.

Winston of the Prairie

BY HAROLD BINDLOSS.

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Synopsis of Previous Chapters.

Farmer Winston, a bankrupt homesteader, accepts a proposal to simulate Lance Courthorne, an adventurer. Courthorne and his pals struggle with the police, kill Trooper Shannon, who leaves evidence pointing to Winston as the murderer, and smuggle through some illegal distillery products. To Silverdale, a settlement founded by Colonel Barrington, Maud Barrington, his niece and ward, has just returned from Montreal. The Colonel is worried over a fall in wheat prices, and also over the coming of Lance Courthorne, Miss Barrington's cousin, to Silverdale to claim a share of his father's estate. Maud Barrington learns more of her cousin's unsavory past. Winston, in the meantime, pushes on to Montana, is held for Courthorne by an officer, who discloses to him the belief that Winston is the murderer of Shannon. Mail for Courthorne is opened by Winston. Complying with instructions in the letter, he meets and confers with a lawyer respecting Courthorne's inheritance at Silverdale, visits the colony. Some of his actions fail to tally with Courthorne's reputation. He wins the good will of Dane, the Colonel's adviser. The real Courthorne, supposed to have been drowned during the smuggling, now reappears in Montana, meets Ailly Blake, whose life he had blighted and who is now engaged to one Potter, rancher. Winston, returning from Winnipeg, finds Miss Barrington at one MacDonald's, and in an attempt to reach Silverdale they are caught in a blizzard. The night is spent at a lonely building and the following day they reach home through the heroic efforts of Winston. Miss Barrington promises Winston to sow her land to wheat the following spring. He in due season, begins planting operations in spite of the Colonel's adverse criticism. Miss Barrington commends Winston for his successful efforts to break the gambling habits of Ferris, a young Englishman.

CHAPTER XIV.—(Concluded).

Then he turned as Mrs. Macdonald came up to him. "What are you doing here alone when I see there is nobody talking to the girl from Winnipeg?"

The man laughed a little. "I was wondering whether it is a good sign or otherwise when a young woman is, so far as she can decently be, uncivil to a man who desires her good will."

Mrs. Macdonald glanced at him sharply, and then shook her head. "The question is too deep for you—and it is not your affair. Besides, haven't you seen that indiscreet freedom of speech is not encouraged at Silverdale?"

In the meanwhile, Winston, crossing the room took a vacant place at Maud Barrington's side. She turned her head a moment and looked at him.

Winston nodded. "Yes, I heard," he said. "Why did you do it?"

Maud Barrington made a little gesture of impatience. "That is quite unnecessary. You know I sent you."

"Yes," said Winston, a trifle dryly, "I see. You would have felt mean if you hadn't defended me?"

"No," said the girl, with a curious smile. "That was not exactly the reason, but we cannot talk too long here. Dane is anxious to take us home in his new buggy, but it would apparently be a very tight fit for three. Will you drive me over?"

Winston only nodded, for Mrs. Macdonald approached in pursuit of him, but he spent the rest of the evening in a state of expectancy, and Maud Barrington fancied that his hard hands were suspiciously unresponsive as she took them when he helped her into the Silverdale wagon—a vehicle a strong man could have lifted, and in no way resembling its English prototype. The team was mettlesome, the lights of Macdonald's homestead soon faded behind them, and they were racing with many a lurch and jolt straight as the crow flies across the prairie.

There was no moon, but the stars shone far up in the soft indigo, and the grasses whirled back in endless ripples to the humming wheels, dimmed to the dusky blue that suffused the whole intermingling sweep of earth and sky. The sweetness of wild peppermint rose through the coolness of the dew, and the voices of the wilderness were part of the silence that was but the perfect balance of the nocturnal harmonies. The two who knew and loved the prairie could pick out each one of them. Nor did it seem that there was any need of speech on such a night, but at last Winston turned with a little smile to his companion, as he checked the horses on the slope of a billowy rise.

"One feels diffident about intruding on this great quietness," he said.

"Still, I fancy you had a purpose in asking me to drive you home."

"Yes," said the girl with a curious gentleness. "In the first place, though, I want to thank you. I made Dane tell me, and you have done all I wished—splendidly."

Winston laughed. "Well, you see, it naturally came easy to me."

Maud Barrington noticed the trace of grimness in his voice. "Please try to overlook our unkindness," she said. "Is it really needful to keep reminding me? And how was I to know what you were, when I had only heard that wicked story?"

Winston felt a little thrill run through him, for which reason he looked straight in front of him and shifted his grasp on the reins. Disdainful and imperious as she was at times, he knew there was a wealth of softer qualities in his companion now. Her daintiness in thought and person, and honesty of purpose, appealed to him, while that night her mere physical presence had an effect that was almost bewildering. For a moment he wondered vaguely how far a man might dare to go, with what fate had thrust upon him, and then with a little shiver saw once more the barrier of deceit and imposture.

"You believe it was not a true one?" he asked.

"Of course," said Maud Barrington. "How could it be? And you have been very patient under our suspicions. Now, if you still value the good-will you once asked for, it is yours absolutely."

"But you may still hear unpleasant stories about me," said Winston, with a note the girl had not heard before in his voice.

"I should not believe them," she said.

"Still," persisted Winston, "if the tales were true?"

Maud Barrington did nothing by halves. "Then I should remember that there is always so much we do not know which would put a different color on any story, and I believe they could never be true again."

Winston checked a little gasp of wonder and delight, and Maud Barrington looked away across the prairie. She was not usually impulsive and seldom lightly bestowed gifts that were worth the having, and the man knew that the faith in him she had confessed to was the result of a conviction that would last until he himself shattered it. Then, in the midst of his elation, he shivered again and drew the lash across the near horse's back. The wonder and delight he felt had suddenly gone.

"Few would venture to predict as much. Now and then I feel that our deeds are scarcely contrived by our own will, and one could fancy our

parts had been thrust upon us in a grim joke," he said. "For instance, isn't it strange that I should have a share in the rousing of Silverdale to a sense of its responsibilities? Lord, what I could make of it, if fate had but given me a fair opportunity!"

He spoke almost fiercely but the words did not displease the girl. The forceful ring in his voice set something thrilling within her, and she knew by this time that his assertions seldom went beyond the fact.

"But you will have the opportunity, and we need you here," she said.

"No," said Winston slowly. "I'm afraid not. Still, I will finish the work I see in front of me. That at least—one cannot hope for the unattainable."

Maud Barrington was sensible of a sudden chill. "Still, if one has strength and patience, is anything quite unattainable?"

Winston looked out across the prairie, and for a moment the demons of pride and ambition roared within him. He knew there were in him the qualities that compel success, and the

temptation to stretch out a daring hand and take all he longed for grew almost overmastering. Still, he also knew how strong the innate prejudices of caste and tradition are in most women of his companion's station, and she had never hidden one aspect of her character from him. It was with a smothered groan he realized that if he flung the last shred of honor aside and grasped the forbidden fruit it would turn to bitterness in his mouth.

"Yes," he said very slowly, "There is a limit which only fools would pass."

Then there was a silence for a while until, as they swept across the rise, Maud Barrington laughed as she pointed to the lights that blinked in the hollow, and Winston realized that the barrier between them stood firm again.

"Our views seldom coincide for very long, but there is something else to mention before we reach the Grange," she said. "You must have paid out a

(Continued on page 584).

Land O' Nod Stories.

By HOWARD T. KNAPP.

Billie Meets Tinker Teedle Tee.

BILLY BE BY BO BUM trudged through the White Forest without making any more noise than Slinker the Weasel, for the ground was covered with a thick carpet of snow. Every twig and branch of every tree and bush gleamed and sparkled with thousands of frost diamonds. There was not a sound to be heard except the rat tat tat of Redhead the Woodpecker hunting bugs in a hollow log, and the chattering of two red squirrels playing tag in the top of a big oak. As far as Billy could see, he was alone in the big woods. Even the brook that usually laughed and sang as it tumbled over its stony bed, now slipped silently along under a sheet of ice.

"Br-r-r-r, it's cold enough to freeze the tail off a brass monkey," said Billy, slapping his hands together to keep them warm.

"No, it isn't," said a squeaky little voice. "This is just the kind of weather that paints the roses in your cheeks and makes your blood tingle."

Billy was so surprised that he nearly jumped out of his shoes, for although he looked all around, he could not see anyone.

"Well, Billy Be By Bo Bum, aren't you going to speak to a fellow?" asked the same squeaky little voice, this time shriller and louder than before.

Billy was beginning to get frightened, and had just about made up his mind to cry when he heard a laugh right behind him. He spun around on his heel like a top, and what do you suppose he saw? A funny little old man no larger than your thumb, sitting astride a branch of a brier bush. He was so fat he looked for all the world like a lively puff ball perched on two stubby legs. In place of a hat he wore a weeny copper kettle, the handle of which was hidden under his whiskers. The cutest red coat and vest covered his chubby body, and the toes of his pointed shoes curled up until they nearly touched his knees. And most wonderful of all, a pair of butterfly wings were folded neatly on his back.

It was an elf, one of the good fairies who make their homes in the hearts of flowers and live on dew drops and honey, and are so wise they can tell you the history of every furry and feathered dweller of the White Forest.

At first Billy was so surprised that he could only stand and stare at the little old man. Then he remembered

it was impolite to stare at people, so he made a bow and asked:

"What is your name, sir?"

"I'm Tinker Teedle Tee," replied the elf. "I'm the oldest man in the world. I was old when the largest oak was still an acorn, and I knew everything that ever happened in the White Forest," and he nodded his head so hard the copper kettle bounced up and down at a great rate.

His eyes twinkled so merrily; such a kindly smile wrinkled his ruddy face, and in fact his whole appearance was so comical that Billy burst out laughing. He laughed so hard his breath knocked the fairy off his feet and sent him spinning through the air like a thistle down. But before he touched the ground he spread his wings and darted off through the woods. In a minute he came flying back and alighted on Billy's shoulder.

"Whew! That certainly was an awfully strong gust of wind," said the elf, wiping his face with the smallest handkerchief Billy ever saw. "I thought at first a cyclone had struck me."

"That was only me laughing," said Billy. "There's not a breath of wind stirring."

"Well, it rather upset me," grumbled Tinker, pretending to be very cross, but smiling in spite of himself. "You must be very careful how you act when you are with us little folks. But I don't want you to stop laughing, no siree, not a bit of it, for I would rather be blown away a hundred miles than see a little boy afraid to crack a smile."

"All right," replied Billy. "When I feel a laugh dancing around inside of me I'll turn my head the other way, so when Mr. Laugh comes bubbling out he won't blow you away."

"That's a good idea," agreed Tinker Teedle Tee, "and I'm sure you and I are going to be very good friends."

"I'm sure of it, too," said Billy, and next week I will tell you more about their adventures.

To Our Young Readers:

The "Land O' Nod Stories" will be a feature of every issue of the Michigan Farmer this winter. In the series Billy and Tinker will appear often. The reader who follows them will learn of frolics, mysteries, pranks, secrets, tragedies and what-not, in that marvelous and never-ending play on the great stage of nature. Become acquainted with these two persons, and get the thanks of every other boy and girl of the neighborhood by introducing the stories to them.

A HOLIDAY WEEK IN PRUSSIA.

By CHARLOTTE BIRD.

THE Christmas festival was at hand. Everybody in our pension was busy with something behind closed doors and an air of more or less mystery pervaded the house, and even the school. And there were many trips made down town. Certain mysterious proceedings were going on in the living-room, which was now locked. Those who watched, however, might have discovered packages, small, medium and large, being smuggled into the forbidden region.

Troops of children went about the streets from house to house, singing "Ein' Feste Burg ist Unser Gott," and receiving pennies for the same from those good-naturedly inclined. This money was not charity, for some of these children, at least, came from well-to-do families.

At five o'clock in the evening in the thickening snowy dusk those so inclined went to church for the public religious exercises. An immense Christmas tree inside the altar rails was gaily lighted with candles and sparkled with tinsel. But it held no presents for anyone. The church service is very solemn and reverent and the real celebration is held privately in the homes.

Soon after the return from church everybody was summoned to the dining-room, which today had to serve for living-room. Everybody understood that now the opening of the festival was to take place. And the festival, according to German custom, would last a week.

In the dining-room what immediately struck the eye was a branch of a fir tree leaning against the wall from the top of a table. It was ornamented with tinsel which sparkled gaily in the light of the wax candles. About the foot of the branch on the table were packages of various sizes and shapes.

After the household had assembled, Fraulein von Waldau, the mistress of the pension home, stepped to the piano and in her own artistic manner began softly to play, "Die Heilige Nacht," the great German Christmas hymn, and all who do so joined in the singing.

As Fraulein von Waldau went on playing, the outer door opened noiselessly and, under the leading of one of the boarding teachers, a poor thinly clad woman with four children, entered. She was Fraulein von Waldau's laundress. The little party ranged themselves in a group near the door.

When the music ceased, the one small boy stepped forward and made what was, for such a little chap, a wonderful bow. This was the preliminary to a recitation, which he delivered in a monotone. Then the children sang and afterwards, beginning with a polite little "kurchey," each of the three little girls recited something.

At the end of these exercises Fraulein von Waldau went to the table, where the Christmas branch still shed its radiance, and began to distribute the packages among the members of the visiting family. There was a fine beef roast for the Christmas dinner, and also bread and other good things to eat. Besides, there were bundles of old clothing, contributed by the

boarders, still good enough to be remade into warm and pretty things for the family. Last of all, the Christmas branch was handed over that throughout the Christmas week this poor family also might have a daily reminder in their humble dwelling of Him who had come to bring "Peace on earth, good will to men." The family silently but gratefully withdrew.

There was now a pause in which the boarders returned to their rooms. But at eight o'clock began the real festival for the people in the house. Again, everybody was summoned down stairs but this time shown to the living-room, whose doors had been thrown invitingly open. In one corner sparkled the real Christmas tree, with its top touching the ceiling. It was properly gay with its shining tinsel and burning candles, its white and brilliantly colored balls, pictures and flowers. Everybody exclaimed with delight.

Around the sides of the room were ranged stands and tables, each covered with every sort of package, the presents of each person being in one marked collection. This was the supreme moment in the German Christmas celebration, when with glad face each examined his own gifts and admired those of the rest.

Merriment prevailed; some of the gifts were wrapped in many thicknesses of various kinds of paper, each of which must be separately unwrapped. Then just as the recipient was beginning to congratulate herself on getting something choice or dainty, she would perhaps reveal a tin whistle or a piece of candy.

In the presents there was every variety: toys, fruits, clothes, pictures, fancy work, pfefferkuchen, marchpane. The pfefferkuchen and marchpane, or as they call it, marzipan, are essential to the proper celebration of a German Christmas.

The pfefferkuchen is a kind of rectangular shaped ginger cookie with whole almonds pressed in fanciful designs into its upper surface. At the Christmas season in German bake-shops in America an imitation is made and sold. But the genuine article is said to come only from Nuremberg, though everywhere in Germany pfefferkuchen is made. If it is carefully packed in boxes, it will keep for a long time.

The marzipan, or marchpane, which is wholly unknown in this country, is about as delicious as anything which ever came in contact with a human palate. It is so rich that a little goes a long way. It is made of sugar, butter, and almond meal, kneaded like dough. It can be moulded readily into various shapes, a favorite one being that of a pig, valued as the gluckschwein. To insure good fortune one should keep one of these marchpane pigs till the next Christmas.

On such occasions the servants are not forgotten, but have their tables also, where they may rejoice with the rest. At this festival the cook and housemaid had their table together and it was generously loaded, as it should have been with so many people in the house.

When the presents had all been found and the names of the donors ascertained, everybody went around the room shaking hands with everybody else and expressing thanks for the beautiful presents received. And so the Christmas happiness reigned supreme. This pleasant hour was broken by the announcement of supper.

The meal for Christmas eve differs but little from the ordinary supper, except that, according to German custom, no meat is served. Fish takes its place in the form of delicious boiled haddock, served with melted butter.

It was one evening several days later that, while we were all in the dining-room, where the piano was, singing, Kriss Kringle came. He was not Santa Claus, though he looked the veritable image of him. He carried some nuts and candy in a basket and he had also a switch which was entirely unlike Santa Claus. But Kriss Kringle carries nuts and candy to good children and brings the switch to use on the others.

The nuts and candy Kriss Kringle threw on the floor, to get which there was a lively scramble in which everybody took part. And those who scrambled hardest, of course, got the most. Meanwhile, the old fellow plied his switch with a will.

The old man appeared to know everybody in the house, for he brought each a piece of marchpane or chocolate candy, wrapped in paper and correctly labeled. The oddest part was that each piece appeared to be adapted especially to the person whose name it bore. For instance, the woman university student got a little chocolate student smoking a long-stemmed pipe and wearing the scarlet cap of a well-known student fraternity.

One of the little English girls got it into her head that Kriss Kringle was nobody in the world but Fraulein Wagner, the housekeeper, all dressed up for the part. In fact, she flatly declared this to be a fact. And, true enough, Fraulein Wagner was nowhere in the company.

New Year eve, which is known in Germany as Sylvester Abend, ends the festival week and is a celebration in itself. It is not a good evening for unprotected women or, even, well dressed men to venture on the street. Kisses are apt to be snatched and silk hats knocked off and hilarity runs riot. But that need trouble no one who remains at home.

On this Sylvester Abend, Fraulein Wagner in her role as housekeeper, took charge of the entertainment. Again, when everybody answered the summons to come downstairs, the candles on the Christmas tree were gaily burning. But, instead of the stands and tables loaded with presents, in the middle of the floor stood a small table and on it a large porcelain wash bowl. A nearer inspection revealed water inside the bowl and, well above the water level all around the sides slips of paper were pasted with various fortunes written on them.

Fraulein Wagner had produced what looked like a long crochet hook, but she declared it to be a magic wand. In her other hand she showed us the ship of destiny; it looked like a half-shell of an English walnut with a tiny lighted piece of candle fastened into the middle. By means of these the future destiny of each person present was to be determined.

As the oldest person present, Fraulein von Waldau was entitled to the first trial. With as coy an air as any young girl might have disclosed she took the magic wand, with it agitated the water and daintily set the tiny craft afloat. All bent over the bowl and with rapt attention watched its gyrations. After floating two or three times around the outside of the bowl, it came to a halt. An inspection of the slip of paper over it revealed "Many New Boarders," at which Fraulein Waldau's face beamed with a profound satisfaction.

The implements of magic were now yielded to Mademoiselle, the boarder from Paris. After the preliminaries her boat rested under "Misfortune," at which Mademoiselle laughed and the rest looked sympathetically solemn. The same fate, she declared, had been predicted for her before, but she was superior to superstition.

Then the university student made her venture and was promised "A Speedy Marriage." This brought down the house, because everybody knew that a certain German gentleman of some social standing was decidedly fond of her society and had shown her attentions which had set them all to guessing. Amidst the merriment two or three even went so far as to congratulate her.

In the same way it was revealed that another was to become a famous author and still another was to win the doctor's degree at the university. But when it promised one of the plainest German teachers that she would some day be the wife of a member of the British Parliament, everybody became suspicious; after all, the thing must be only a fraud.

The chairs were drawn around the little tube-like iron stove for a chat till the midnight hour should come. At the last stroke of twelve all the bells in the city began to ring and a wierd kind of music it made. Everybody sprang up and shook hands with everybody else and wished him "Prosit Neujahr! Prosit Neujahr!" Doors and windows were thrown open and people rushed out into the streets and shouted out the good wish into the air. Everywhere on the streets one heard it, "Prosit Neujahr! Prosit Neujahr!" And thus was ushered in a new year with all which it was to bring to each.

The hour between twelve and one, the very first hour of the year, is held to be one of peculiar magic power. At this hour by bleiglessen one's future can readily be foretold. And now this test was to be tried.

In an old iron spoon a piece of lead was placed and melted over the heat of an alcohol flame. Then through the ring of an ancient door key—it had to be a key which had been long in the family—the fluent lead was quickly poured into the water which still stood in the wash bowl. The shape which the lead took in the bottom of the bowl, would determine the fortune of the one making the test.

But what could anybody make out of a little ball of lead or out of a flat, jagged disk of the metal. One could talk about making a trip around the globe or of inheriting many dollars. But it remained clear that this method of soothsaying left too much to the imagination to be entirely satisfactory. So, after a strenuous half hour of bleiglessen with no definite results like those with the wand and boat, everybody recalled that the night was well advanced. So, tired and sleepy, we shook hands and bade each other good night, and went upstairs to bed. And so ended that holiday week in Prussia.

Look backward only to correct an error of conduct for the next attempt.
—George Meredith.

THE OLD YEAR.

BY RUTH RAYMOND.

Time gathers to itself another holy ember

A rosary of happy golden days,
A circle finished with a glorified December.

A year that vanishes in memory's haze.

What progress have we made, what bold endeavor,

To sweep away the wrong and aid the good?

Have we been strong and true upholding ever

The claim of Universal Brotherhood?



"Who Took my Bowser?"

THE NEW YEAR'S CAKE.

BY CORA A. MATSON DOLSON.

Grandma told this tale to me,
Knitting, while we waited tea:

"In those days the parson deemed
His advice were best esteemed;
And in this, especially,
As to Kate Frivolity.

"For the secret it was out,
That the parson had grave doubt
If Miss Kate knew how to make
Bread or pudding, pie or cake.
And he thought a man should look,
When he married, for a cook.
But Miss Kate Frivolity
Vowed that not a pin cared she;
And the parson's nephew wooed her,
Though the staidest dames tabooed her.

"Now, the church folks were to pay,
On that Eve of New Year's Day,
A donation visit to
Parson J—, as church folks do.
The eventful night came round,
To the merry sleigh-bells' sound;
And the parson's rooms were filled—
Oysters stewed and coffee spilled.
Games were played and girls were
kissed,
Gifts poured in, fist by fist.

"'Mong the bundles, of all shapes,
Brought in sacks, and tied in tapes,
On a table, by itself—
Too high for the pantry shelf—
Stood a cake baked in a pan.
Card attached, whose message ran,
'Parson J— and family.
Maker, Kate Frivolity.'

"It was on a server placed,
By a snowy napkin faced,
That cake was a luscious sight,
Frosted beautifully white.
In its center was a heart
Pierced through by a cupid's dart;
And red roses, grouped around,
Traced upon the frosted ground,
Traced in colored sugar-sand.
Folks said that the cake was grand.

"At the noon of New Year's Day
A few friends of Parson J—
Gathered with him to partake
Of the decorated cake;
And the nephew, too, was there,
Waiting for a spicy share.

"First, beseeching thanks were paid,
Reference to the donor made:
Then the parson's daughter drew
A keen blade the deep cake through,
Lifted up a slice to sight,
Golden-hued and spongy light.
But her words dismay reveal:
'Father, this is made of meal!'
Yet the parson took the slice,
Buttered it and tasted twice.
Then he rose and gravely spoke:
'Though she seems inclined to joke,
Nephew, 'twould be wise to wed
One who makes such fine corn bread.'"

Grandma rolled her knitting up;
I made tea in each pink cup;
Grandma, eyes a-twinkle, said,
While her thin cheeks flushed with red,
"Grandpa put me up to make
That great, frosted johnnycake."

WINSTON OF THE PRAIRIE.

(Continued from page 582).

good many dollars for the plowing of
your land and mine, and nobody's ex-
chequer is inexhaustible at Silverdale.
Now I want you to take a check from
me."

"It is necessary that I should?"

"Of course," said the girl, with a
trace of displeasure.

Winston laughed. "Then I shall be
prepared to hand you my account
whenever you demand it."

He did not look at his companion
again, but with a tighter grip than
there was any need for on the reins,
sent the light wagon jolting down the
slope to Silverdale Grange.

CHAPTER XV.
The Unexpected.

The sun beat down on the prairie,
which was already losing its flush of
green, but it was cool where Maud
Barrington and her aunt stood in the
shadow of the bluff by Silverdale
Grange. The birches, tasseled now
with whispering foliage, divided the
homestead from the waste which
lie white and desolate under the
parching heat, and that afternoon it
seemed to the girl that the wall of
green shut out more than the driving
dust and sunglare from the Grange,
for where the trees were thinner she
could see moving specks of men and
horses athwart the skyline.

They had toiled in the sun-baked
furrow since the first flush of crimson

streaked the prairie's rim, and the
chill of dusk would loll upon the
grasses before their work was done.
Those men who bore the burden and
heat of the day were, the girl knew,
helots now, but there was in them the
silent vigor and something of the
sombreness of the land of rock and
forest they came from, and a time
would come when others would work
for them. Winning slowly, holding
grimly, they were moving on, while,
secure in its patrician tranquility, Sil-
verdale stood still, and Maud Barring-
ton smiled curiously as she glanced
down at the long white robe that
clung very daintily about her and then
towards her companions in the tennis
field. Her apparel had cost many dol-
lars in Montreal, and there was a joy-
ous irresponsibility in the faces of
those she watched.

"It is a little unequal, isn't it,
aunt?" she said. "One feels inclined
to wonder what we have done that we
should have exemption from the
charge laid upon the first tiller of the
soil that we, and the men who are
plodding through the dust there, are
descended from."

Miss Barrington laughed a little as
she glanced with a nod of comprehen-
sion at the distant toilers, and more
gravely towards the net. Merry voices
came up to her through the shadows
of the trees as English lad and Eng-
lish maiden, lissom and picturesque in
many-hued jackets and light dresses,
flitted across the little square of vel-
vet green. The men had followed the
harrow and seeder a while that morn-
ing. Some of them, indeed, had for a
few hours driven a team, and then
left the rest to the hired hands, for
the stress and sweat of effort that was
to turn the wilderness into a granary
was not for such as they.

"Don't you think it is all made up
to those others?" she asked.

"In one sense—yes," said the girl.
"Of course, one can see that all effort
must have its idealistic aspect, and
there may be men who find their com-
pensation in the thrill of the fight, and
the knowledge of work well done,
when they rest at night. Still, I fancy
most of them only toil to eat, and
their views are not revealed to us. We
are, you see, women—and we live at
Silverdale."

Her aunt smiled again. "How long
is it since the plow crossed the Red
River, and what is Manitoba now?
How did those mile furrows come
there, and who drove the road that
takes the wheat out through the gran-
its of the Superior shore? It was more
than their appetites that impelled
those men, my dear. Still, it is scarce-
ly wise to expect too much when one
meets them, for though one could feel
it is presumptuous to forgive its defi-
ciencies, the Berserk type of manhood
is not conspicuous for its refinement."

For no apparent reason Maud Barring-
ton evaded her aunt's gaze. "You,"
she said dryly, "have forgiven one of
that type a good deal already, but at
least, we have never seen him when
the fit was upon him."

Miss Barrington laughed. "Still, I
have no doubt that, sooner or later,
you will enjoy the spectacle."

Just then a light wagon came up be-
hind them, and when one of the hired
men helped them in they swept out of
the cool shade into the dust and glare
of the prairie, and when some little
time later, with the thud of hoofs and
rattle of wheels softened by the
bleaching sod, they rolled down a
rise, there was spread out before
them evidence of man's activity.

Acre by acre, gleaming chocolate
brown against the gray and green of
the prairie, the wheat loam rolled
away, back to the ridge, over it, and
on again. It was such a breadth of
sowing as had but once, when wheat
was dear, been seen at Silverdale, but
still across the foreground, advancing
in echelon came lines of dusty teams,
and there was a meaning in the fur-
rows they left behind them, for they

were not plowing where the wheat
had been. Each wave of lustrous
clods that rolled from the gleaming
shares was so much rent from the vir-
gin prairie, and a promise of what
would come when man had fulfilled
his mission and the wilderness would
blossom. There was a wealth of food
stored, little by little during ages past
counting, in every yard of the crack-
ling sod to await the time when the
toiler with the sweat of the primeval
curse upon his forehead should unseal
it with the plow. It was also borne in
upon Maud Barrington that the man
who directed those energies was either
altogether without discernment, or
one who saw further than his fellows
and had an excellent courage, when he
flung his substance into the furrows
while wheat was going down. Then as
the hired man pulled up the wagon
she saw him.

A great plow with triple shares had
stopped at the end of the furrow, and
the leading horses were apparently at
variance with the man who, while he
gave of his own strength to the utter-
most, was asking too much from them.
Young and indifferently broken, tor-
tured by swarming insects, and galled
by the strain of the collar, they had
laid back their ears, and the wicked-
ness of the bronco strain shone in
their eyes. One arose almost upright
amid a clatter of harness, its mate
squealed savagely, and the man who
loosed one hand from the head-stall
flung out an arm. Then he and the
pair whirled round together amid the
trampled clods in a blurred medley of
spume-flecked bodies, soil-stained jean,
flung-up hoofs, and an arm that swung
and smote again. Miss Barrington
grew a trifle pale as she watched, but
a little glow crept into her niece's
eyes.

The struggle, however, ended sud-
denly, and hailing a man who plodded
behind another team, Winston picked
up his broad hat, which was trampled
into shapelessness, and turned to-
wards the wagon. There was dust and
spume upon him, a rent in the blue
shirt, and the knuckles of one hand
dripped red, but he laughed as he
said, "I did not know we had an audi-
ence, but this, you see, is necessary."

"Is it?" asked Miss Barrington, who
glanced at the plowing. "When wheat
is going down?"

Winston nodded. "Yes," he said.
"I mean, to me; and the price of
wheat is only one part of the ques-
tion."

Miss Barrington stretched out her
hand, though her niece said nothing
at all. "Of course, but I want you to
help us down. Maud has an account
you have not sent in to ask you for."

Winston first turned to the two men
who stood by the idle machine. "You'll
have to drive those beasts of mine as
best you can, Tom, and Jake will take
your team. Get them off again now.
This piece of breaking has to be put
through before we lose again."

Then he handed his visitors down,
and Maud Barrington fancied as he
walked with them to the house that
the fashion in which the damaged hat
hung down over his eyes would have
rendered most other men ludicrous.
He left them a space in his bare sit-
ting-room, which suggested only grim
utility, and Miss Barrington smiled
when her niece glanced at her.

"And this is how Lance, the proflig-
ate, lives!" said she.

Maud Barrington shook her head.
"No," she said, "can you believe that
this man was ever a prodigal?"

Her aunt was a trifle less astonish-
ed than she would once have been,
but before she could answer, Winston,
who had made a trifling change in his
clothing, came in.

"I can give you some green tea,
though I am afraid it might be a good
deal better than it is, and our crock-
ery is not all you have been used to,"
he said. "You see, we have only time
to think of one thing until the sowing
is through."

BEFORE AND AFTER.

BY MILDRED M. NORTH.

Old Santa has come with his pack,
That wonderful, wonderful sack!
So many nice things
Old Santa Claus brings,
I'd think it would quite break his
back.

There are horses that walk,
And parrots that talk,
A monkey that climbs up a string;
There are airships that fly,
And dollies that cry
When you wind them up tight with
a spring.

There are autos that go,
And horns that will blow
With a beautiful ear-splitting noise;
There are trains that will run
And make lots of fun
For all of the girls and the boys.

There are books by the score,
Games a dozen or more,
And everything little folks prize;
A red sweater coat,
And a tame billy-goat,
A ball club for batting up flies.

Old Santa has gone with his pack,
I wish he would hurry right back
With a big pot of glue
And a mending-kit, too,
Of fixing I'd give him a stock.

There are cars that won't run,
And what under the sun
Has become of the stick for the top?
I've hunted since noon—
And my big red balloon
Went up in the night with a pop.

There's a wheel that is loose
On the train's red caboose,
It jumps from the track every time;
The engine won't go
And the whistle won't blom,
I'd sell the whole lot for a dime.

There are boats without sails,
And kites without tails,
And dogs that are blind in one eye;
There are carts without wheels,
And pigs without squeals,
I can't name the half if I try.

But wishing won't brings him I fear,
Tho' truly I wish he were here,
Or else that he'd passed
Some toys that would last
Until he comes back here next year.

Miss Barrington's eyes twinkled.
"And then?"

"Then," said Winston, with a little
laugh, "there will be prairie hay to
cut, and after that the harvest com-
ing on."

"In the meanwhile, it was business
that brought me here, and I have a
check with me," said Maud Barring-
ton. "Please let us get it over first
of all."

Winston sat down at a table and
scribbled on a strip of paper. "That,"
he said gravely, "is what you owe me
for the plowing."

There was a little flush in his face
as he took the check the girl filled in,
and both felt somewhat grateful for
the entrance of a man in blue jean
with the tea. It was of a very indif-
ferent quality, and he had sprinkled a
good deal on the tray, but Winston
felt a curious thrill as he watched the
girl pour it out at the head of the
bare table. Her white dress gleamed
in the light of a dusty window, and
the shadowy cedar boarding behind
her forced up each line of the shapely
figure. Again the maddening tempta-
tion took hold of him, and he wonder-
ed whether he had betrayed too much
when he felt the elder lady's eyes up-
on him. There was a tremor in his
brown fingers as he took the cup held
out to him, but his voice was steady.

"You can scarcely fancy how pleas-
ant this is," he said. "For eight years,
in fact, ever since I left England, no
woman has ever done any of these
graceful little offices for me."

Miss Barrington glanced at her
niece, and both of them knew that, if
the lawyer had traced Courthorne's
past correctly, this could not be true.
Still, there was no disbelief in the
elder lady's eyes, and the girl's faith
remained unshaken.

"Eight years," she said, with a little
smile, "is a very long while."

"Yes," said Winston, "horribly long,
and one year at Silverdale is worth
them all—that is, a year like this one,
which is going to be remembered by

all who have sown wheat on the prairie, and that leads up to something. When I have plowed all my own holding, I shall not be content, and I want to make another bargain. Give me the use of your unbroken land, and I will find horses, seed, and men, and we will share what it yields us when the harvest is in."

The girl was astonished. This, she knew, was splendid audacity, for the man had already staked very heavily on the crop he had sown, and while the daring of it stirred her she sat silent a moment.

"I could lose nothing, but you will have to bring out a host of men, and have risked so much," she said. "Nobody but you and me and three or four others in all the province is plowing more than half his holdings."

The suggestion of comradeship set Winston's blood tingling, but it was with a little laugh he turned over the pile of papers on the table, and then took them up in turn.

"Very little plowing has been done in the tracts of Minnesota previously alluded to. Farmers find wheat cannot be grown at present prices, and there is apparently no prospect of a rise," he read. "The Dakota wheat-growers are mostly fallowing. They can't quite figure how they would get eighty cents for the dollar's worth of seeding this year. Milling very quiet in Winnipeg. No inquiries from Europe coming in, and Manitoba dealers, generally, find little demand for harrows or seeders this year. Reports from Assiniboia seem to show that the one hope this season will be mixed farming and the neglect of cereals."

"There is only one inference," he said. "When the demand comes, there will be nothing to meet it with."

"When it comes," said Maud Barrington quietly. "But you who believe it, will stand alone."

"Almost," said Winston. "Still, there are a few much cleverer men who feel as I do. I can't give you all my reasons, or read you the sheaf of papers from the Pacific slope, London, New York, Australia, but while men lose hope, and little by little the stocks run down, the world must be fed. Just as sure as the harvest follows the sowing, it will wake up suddenly to the fact that it is hungry. They are buying cotton and scattering their money in other nation's bonds in the old country now, for they and the rest of Europe forget their necessities at times, but is it impossible to picture them finding their granaries empty and clamoring for bread?"

It was a crucial test of faith, and the man knew it, as the woman did. He stood alone, with the opinions of the multitude against him, but there was, Maud Barrington felt, a great undefinable difference between his quiet resolution and the gambler's recklessness. Once more the boldness of his venture stirred her, and this time there was a little flash in her eyes as she bore witness to her perfect confidence.

"You shall have the land, every acre of it, to do what you like with, and I will ask no questions whether you win or lose," she said.

Then Miss Barrington glanced at him in turn. "Lance, I have a thousand dollars I want you to turn into wheat for me."

Winston's fingers trembled, and a darker hue crept into his tan. "Madam," he said, "I can take no money from you."

"You must," said the little, white-haired lady. "For your mother's sake, Lance. It is a brave thing you are doing, and you are the son of one who was my dearest friend."

Winston turned his head away, and both women wondered when he looked round again. His face seemed a trifle drawn, and his voice was strained.

"I hope," he said slowly, "it will in some degree make amends for others I have done. In the meanwhile, there

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 gives the paper's regular subscription price. The second column price is for the Michigan Farmer and the other paper, both for one year. Add 50 cents when the Michigan Farmer is wanted three years, or \$1.00 if the Michigan Farmer is wanted five years. The third column price is for those who are paid ahead on the Michigan Farmer from one to five years and want the other paper only; such orders must be sent to us direct. All combination orders may be given to our agents or sent to us, as is most convenient.

Any number of other papers may be added at third column prices. Write for prices on publications not listed. We can save you money.

We send sample copies of the Michigan Farmer only.

Mention if you are a new or renewal subscriber. Renewals will be dated ahead from their present date.

Allow monthlies three to four weeks and semi-monthlies two weeks before making complaint, if not received. We forward orders day we receive them.

NAME OF PUBLICATION.	See explanation above.		
Daily, (6 a Week) on R. F. D. only.		\$	\$
Free Press, Detroit.....	2 50	2 50	
Journal, Detroit.....	2 50	2 50	
Times, Detroit.....	2 50	2 50	
Herald, Grand Rapids, Mich.....	2 50	2 50	
News, Grand Rapids.....	2 00	2 25	
Press, Grand Rapids.....	2 50	2 00	
Courier-Herald, Saginaw, Mich.....	2 00	2 00	
News, Saginaw.....	2 00	2 00	
Tribune, Bay City, Mich.....	2 00	2 00	
Blade, Toledo, Ohio.....	2 00	2 05	
News-Bee, Toledo, Ohio.....	2 00	2 00	
State Journal, Lansing, Mich.....	3 50	3 10	
Morning Tribune, Detroit, 1 year, Mich.....	2 00	2 00	
Tri Weekly Newspapers			
World, N. Y. City.....	1 00	1 20	75
Semi Weekly Newspapers			
Journal, Detroit, Mich.....	1 00	1 15	70
Weekly Newspapers			
Blade, Toledo, Ohio.....	1 00	1 00	55
Commoner, Lincoln, Neb.....	1 00	1 05	55
Enquirer, Cincinnati, O.....	1 00	1 05	55
Produce News, Chicago.....	1 00	1 05	55
Cattle, Sheep, Swine, Poultry, etc.			
American Bee Journal, Hamilton, Ill. (w).....	1 00	1 50	60
American Poultry Journal, Chicago, (m).....	1 00	1 20	75
American Poultry Advocate, Syracuse.....	50	80	35
American Sheep Breeder, Chicago (m).....	1 00	1 35	90
American Swineherd, Chicago, (m).....	50	75	35
Breeders' Gazette, Chicago, (w).....	1 00	1 45	95
Poultry Weekly, Boston, Mass.....	1 00	1 30	85
Fruit Belt, Grand Rapids, Mich.....	1 00	1 20	75
Green's Fruit Grower, Rochester, (m).....	50	80	35
Hoard's Dairyman, Fort Atkinson, Wis.....	1 00	1 20	75
Jersey Bulletin, Indianapolis, Ind. (w).....	1 00	1 35	90
Kimball's Dairy Farmer, Waterloo, Ia. (s-m).....	1 00	1 05	75
National Sportsman, Boston, Mass. (m).....	1 00	1 15	70
Poultry Keeper, Quincy, Ill. (m).....	50	80	35
Poultry Pointers, Grand Rapids, Mich.....	50	70	25
Poultry Success, Springfield, O. (m).....	50	75	25
Reliable Poultry Journal, Quincy, Ill. (m).....	50	50	35
Swine Breeder's Journal, Indianapolis, Ind. (s-m).....	50	80	35
Popular Magazines.			
Everybody's Magazine, N. Y. City, (m).....	1 50	1 60	1 15
Etude, Philadelphia, Pa. (m).....	1 50	1 60	1 15
McClure's Magazine, N. Y. City, (m).....	1 50	1 60	1 15
Musicalian, Boston, Mass. (m).....	1 50	1 55	1 10
People's Home Journal, N. Y. City, (m).....	50	55	40
Red Book Magazine, Chicago, Ill. (m).....	1 50	1 55	1 10
Review of Reviews, N. Y. City, (m).....	3 00	3 00	
Ladies' or Household.			
Delineator, N. Y. City, (m).....	1 50	1 60	1 15
Designs, N. Y. City, (m).....	1 50	1 60	1 15
Housewife, N. Y. City, (m).....	50	50	35
Ladies World, New York City.....	1 00	1 15	70
McCall's Magazine, N. Y. City, (m).....	50	75	30
Mother's Mag., Elgin, Ill. (m).....	1 50	1 55	1 15
Pictorial Review, N. Y. City, (m).....	1 00	1 00	60
Woman's Home Companion, N. Y. City, m.....	1 50	1 60	1 15
Woman's World, Chicago, (m).....	35	60	15
Today, Chicago (m).....	50	70	20
Religious and Juvenile.			
American Boy, Detroit, Mich. (m).....	1 00	1 00	55
Boys' Magazine, Smethport, Pa. (m).....	1 00	75	30
Little Folks, Salem, Mass. (m).....	1 00	1 20	75
Young People's Weekly, Elgin, Ill. (w).....	75	85	50
Youths Companion, Boston, Mass.....	2 00	2 25	2 00

NOTE—If the Michigan Farmer is wanted 3 years add 50 cents to the second column price, or \$1 if wanted five years.

are reasons why your confidence humiliates me."

Miss Barrington rose and her niece after her. "Still, I believe it is warranted, and you will remember there are two women who have trusted you, hoping for your success. And now, I fancy we have kept you too long."

Winston stood holding the door open a moment, with his head bent, and then suddenly straightened himself.

"I can at least be honest with you in this venture," he said with a curious quietness.

Nothing further was said, but when his guests drove away, Winston sat still a while and then went back very grim in face to his plowing. He had passed other unpleasant moments of that kind since he came to Silverdale, and long afterwards the memory of them brought a flush to his face. The excuses he had made seemed worthless when he strove to view what he had done, and was doing, through those women's eyes.

It was dusk when he returned to the

SPECIAL BARGAIN COMBINATIONS.

We have arranged here a list of special bargain combinations which will save you considerable on your reading matter. No substitution of other magazines which are the same price can be made. You must take the entire combination just as it is. You can make up your own club from the club list if none of these suit you, or add to any of these others at third column club list prices.

NOTE—The Michigan Farmer is figured in all combinations at three years, price \$1. All others are for one year only. If the Michigan Farmer is only wanted 1 year deduct 50 cents from the combination price, or if the Michigan Farmer is wanted five years add 50 cents. The other paper alone can be had from us another year at a reduced price.

Orders may be sent direct to us or through any of our agents.

Order by number. Address all orders to the Michigan Farmer or hand to our agents.

EXPLANATION—Wk. means the paper comes each week, mo. means each month, S.-mo. semi monthly. Dailies on R. F. D. only.

No. 1	No. 8
Michigan Farmer, 3 yrs., wk.....\$1.00	Michigan Farmer, 3 yrs., wk.....\$1.00
The American Boy, mo.....1.00	Poultry Pointers, mo......50
The Ladies' World, mo.....1.00	Boys' Magazine, mo.....1.00
	McCall's Magazine, mo......50
Regular price\$3.00	Regular price\$3.35
OUR PRICE ONLY \$2.00	OUR PRICE ONLY \$1.75
No. 2	No. 9
Michigan Farmer, 3 yrs., wk.....\$1.00	Michigan Farmer, 3 yrs., wk.....\$1.00
The American Boy, mo.....1.00	Choice of either:
Woman's World, mo......35	The Breeders' Gazette, Ameri-
Poultry Pointers, mo......50	can Sheep Breeder, Hoards's
	Dairyman.....1.00
Regular price\$2.85	Poultry Success, mo......50
OUR PRICE ONLY \$1.75	Boys' Magazine, mo.....1.00
No. 3	No. 10
Michigan Farmer, 3 yrs., wk.....\$1.00	Michigan Farmer, 3 yrs., wk.....\$1.00
Kimball's Dairy Farmer, S.-mo..1.00	To-Day's Magazine......50
The Ladies' World, mo.....1.00	Choice of one May Manton Pat-
	tern (see this issue).
Regular price\$3.00	Poultry Pointers, mo......50
OUR PRICE ONLY \$2.00	Boys' Magazine, mo.....1.00
No. 4	No. 11
Michigan Farmer, 3 yrs., wk.....\$1.00	Michigan Farmer, 3 yrs., wk.....\$1.00
Pictorial Review, mo.....1.00	Any Detroit Daily (except the
Boys' Magazine, mo.....1.00	News).....2.50
	American Swineherd, mo......50
Regular price\$3.00	Hand Book on the Sow......50
OUR PRICE ONLY \$2.00	Poultry Success, mo......50
No. 5	No. 12
Michigan Farmer, 3 yrs., wk.....\$1.00	Michigan Farmer, 3 yrs., wk.....\$1.00
Youth's Companion, wk.....2.00	Any Grand Rapids Daily.....2.00
McCall's Magazine, mo......50	Fruit Belt, mo......50
Poultry Pointers, mo......50	Kimball's Dairy Farmer, S.-mo..1.00
	Poultry Pointers, mo......50
Regular price\$4.00	Regular price\$5.00
OUR PRICE ONLY \$3.00	OUR PRICE ONLY \$3.50
No. 6	No. 13
Michigan Farmer, 3 yrs., wk.....\$1.00	Michigan Farmer, 3 yrs., wk.....\$1.00
The American Boy, mo.....1.00	Morning Tribune, Detroit Daily..2.00
McCall's Magazine, mo......50	Poultry Pointers, mo......50
Poultry Pointers, mo......50	
Regular price\$3.00	Regular price\$3.50
OUR PRICE ONLY \$1.90	OUR PRICE ONLY \$2.15
No. 7	
Michigan Farmer, 3 yrs., wk.....\$1.00	
Woman's World, mo......35	
Poultry Pointers, mo......50	
Fruit Belt, mo......50	
Boys' Magazine, mo.....1.00	
Regular price\$3.35	
OUR PRICE ONLY \$1.50	

ATTENTION.—On any one of these combinations you save the price of the Michigan Farmer three years and on some considerably more.

homestead, worn out in body but more tranquil in mind, and stopped a moment in the doorway to look back on the darkening sweep of the plowing. He felt with no misgiving that his time of triumph would come and in the meanwhile the handling of this great farm with all the aids that money could buy him was a keen joy to him; but each time he met Maud Barrington's eyes he realized the more surely that the hour of his success must also see accomplished an act of abnegation, which he wondered with a growing fear whether he could find the strength for. Then as he went in a man who cooked for his hired assistants came to meet him.

"There's a stranger inside waiting for you," he said. "Wouldn't tell me what he wanted, but sat right down as if the place was his, and helped himself, without asking, to your cigars. Wanted something to drink, too, and smiled at me kind of wicked when I brought him the cider."

The room was almost dark when

Winston entered it, and stood still a moment staring at a man who sat, cigar in hand, quietly watching him. His appearance was curiously familiar, but Winston could not see his face until he moved forward another step or two. Then he stopped once more, and the two, saying nothing, looked at one another. It was Winston who spoke first.

"What do you want here?" he asked. The other man laughed. "Isn't that a curious question when the place is mine? You don't seem overjoyed to see me home to life again."

Winston sat down slowly and lighted a cigar. "We need not go into that. I asked you what you want."

"Well," said Courthorne dryly, "it is not a great deal. Only the means to live in a manner more befitting a gentleman than I have been able to do lately."

"You have not been prospering?" and Winston favored his companion with a slow scrutiny.

(Continued next week.)



Woman and Her Needs

At Home and Elsewhere



Efficiency Gone Mad.

TURN these minutes into money," is the heading of an advertisement in a current magazine, showing how many minutes one wastes each day, and urging all readers to write at once to the advertiser for full instructions as to how to secure the Midas-touch and transform those precious moments into gold. In the course of a week one wastes 55 minutes waiting for meals, according to the table; 100 minutes loafing, 115 minutes day dreaming, 40 minutes telephoning and an hour worrying, to say nothing of the other precious moments frittered away in other ways. But with the possible exception of the hour spent in worrying, can anyone say that the time was wasted?

With all due respect to efficiency experts, I submit that loafing is man's inalienable right, not to be considered as a waste of time, and that the privilege of day dreaming is the one compensation for being a woman. How but by loafing can a man show his superiority to the tyranny of things? And how could a woman drag through the endless monotony of every-day tasks if she could not be transported by the magic of day dreams to a realm far removed from dish cloths and scrubbing brushes? Shall the efficiency experts tear from us these two props which help us to maintain our balance? Not while one day dreamer has a voice to protest.

Seriously, though, have we not gone too far on the subject of efficiency? To be sure, there can be no material success without it, but is business success the only thing in life to strive for, or in fact, the most important thing? Is it not more important to be happy and contented, to make life pleasant for those around us and to enjoy our friends while we have them with us? Your successful person is rarely a comfortable person to live with. He is too busy being a success to have time for enjoyment. And your terribly efficient woman keeps everyone about her in a turmoil in her mad effort to make every moment count.

We Americans never do anything by halves, and that is why we are a wonderful people. But we are a happy people? Are we even comfortable? Not many of us know the meaning of comfort or content, we are so seething with something which pushes us on to ever fresh attainments. We call it ambition, progress, advancing civilization. But isn't its right name Discontent? Having attained one thing we see a dozen others which we must have. Only to find when we achieve them that they but add to our burdens and make fresh effort necessary.

And the efficiency experts who would rob us of time for loafing and dreaming would make us worse. The trouble with us is that we do not take enough time now to loaf and dream. We plan for everything during the day except rest and pleasure, and we frown on the frivolous who break over our strict rules and insist on playing. But, really, they are the sane ones.

Our craze for efficiency carries us into deep waters. A school supervisor in Detroit was a crank on the subject of efficiency. "Make every minute count," was the theme he hammered

away at in all his talks with teachers, until behind his back they dubbed him "Old Efficiency." But they took his advice all too well. In due course of time his oldest daughter entered the high school, where her father's efficiency ideas had been raised to the nth power. She came home with her schedule of work at the end of the second day, a schedule which showed that her thoughtful teachers had provided work for 22 hours out of the 24.

It was a rude awakening for father, but it was effectual. He began to see that the human machine was not

made for efficiency, but that efficiency was made for the human machine. Or in other words, that we are not to exercise all our powers to see how much work we can do, but to see how easily we can do the amount necessary to keep us going in perfect health. Efficiency took on a new meaning to him, and he began to look into ways and means of making life a pleasure instead of a business.

Isn't it time that the majority of housekeepers took the same course? Instead of making a god of work, striving in every way to put the most business possible into our life, let's plan to put a little play into it too, and flout the efficiency experts who would rob us of time to dream and loaf.

DEBORAH.

THE BABY CONTEST.

IS Michigan proud of her babies? The instant response of parents to the Michigan Farmer's Baby Contest would indicate that she is proud to the superlative degree. The first mail after The Farmer was issued brought the names of five contestants and by the end of the sixth day that number had mounted to 161. Every mail since brings them in and there are yet two weeks before the contest closes January 1.

Unfortunately, some subscribers gathered the idea that this contest is open only to Michigan babies. The opening statement said "open to subscribers of the Michigan Farmer," which includes every state in the Union. No matter where you live, if you subscribe for the Michigan Farmer, your baby is a Michigan Farmer baby, and is entitled to enter the contest.

Remember that the age limit is exactly one year. Also remember to fill in all blanks. Some have had to be thrown out because the head measurement was omitted, others because the length of the baby today was left out. Every measurement today must be given.

In sending your filled-in blank do not forget to address to The Michigan Farmer. Several letters were addressed simply to "The Baby Contest Editor, Detroit, Mich., and many more may have been lost because of this imperfect address. Don't forget there are several papers and magazines published in Detroit and the postal authorities may get tired of trying to find out which paper is conducting a baby contest.

If you have not entered your baby enter him today.

The Help Problem in the Farm Home.

THIS is an age of problems. We have the woman problem, the suffrage problem, the child problem, the sex problem, the labor and capital problem, the liquor problem—you may go on indefinitely naming everything namable, from army worms to religion and label it a problem and you will but express the spirit of the age.

With the farm woman the problem of problems is the help problem. From all over the land goes up from farm homes the great cry, "Come over into Macedonia and help us." But sad to say, there is none to heed the cry and come to the rescue, as did the apostles of old. Or rather, while there are plenty to heed, plenty who need work as badly as the farmwife needs help, the bright glare of the city, with starvation wages, proves of more attraction than plenty and peace with the twilight of the country. Those who respond sporadically to the country's appeal for help, stay long enough to get hunger satisfied and a small "grub stake" and then flit again to the city.

The traveler over wagon roads sees tall posts with spreading arms and dangling wires running through country after county of lower Michigan, looking from a distance not unlike the windmills which dot Holland. On making inquiries regarding these, he finds they are the transmission wires of certain electric companies. Immediately, if he has been for a time in the city

and learned the possibilities of electric power, he asks:

"Why doesn't the farmer utilize this power? Here it is shooting through the country right above his farm and he needing it in house and barn. Why doesn't he arrange with the company to furnish him light and power?"

Several reasons can be given. The impracticability, from the company's side, of furnishing power unless sufficient subscribers take it to make it pay, lack of knowledge on the part of the community as to their possibilities, and last, but not least, the cost to the consumer. For, while the average farmer is willing to pay out any sum of money for improved machinery for the fields, the percentage who are willing to pay as much for machinery for the house is lamentably small.

The problem of help for the farm woman, if it is to be solved, will be solved, in Michigan at least, by electricity. And probably in no state could it be solved more cheaply, for in no state is there better means of furnishing electricity at so low cost. All over the state are lakes and rivers, which the thrifty electric companies have already gobbled up to furnish power for the manufacture of electricity. Community after community has practically given away its right to use its own water power, when by reserving that power the question of help for every family in the neighborhood might have been settled. Now, having given

away the greatest labor-saving device of the world, the next best thing is to buy it back as cheaply as possible. If there is any way of getting the power from a company in your neighborhood have it installed. After the initial expense of wiring, your regular monthly expense should not be more than \$2.00 for light and power for all the work of the house. Less than that in the city will light a ten-room house, run a washing machine, vacuum cleaner and electric iron. The same sum should do even more work in the country, where early to bed is the rule and lights go out at 8:00 or 8:30 p. m. sun time, as against 10:30 or perhaps midnight standard time, in town.

If you can not buy your power direct from a plant, install your own plant and make your own electricity. An engine, gasoline or oil, a dynamo, storage battery, switchboard and wiring, will furnish you with electric power and lights, while for a small additional outlay you can have water in your house as well, with bathtub and sink, washbowl, laundry tubs, etc., exactly as in the most modern city home. Six hundred dollars is a generous sum to allow for the whole cost of installing, plumbing and fixtures of all sorts, and if you want to buy a cheaper engine it can be done for even less.

A good two-horsepower engine, using either kerosene or gasoline, may be bought for \$175. For \$107 you can buy a gasoline engine, which, with gasoline at 11 cents per gallon, as it has been this summer, would be much cheaper. But as we have no way of knowing that gas will continue at this price it is safer to buy the oil engine. Your dynamo will cost you \$62.50; switchboard \$70 and storage battery \$82, and these will all be installed for you free of charge by the company selling the outfit, you to build your own foundation. Wiring the house and fixtures are extra, and the wiring will cost but little. For your chandeliers you can pay as much or as little as you like.

So much for the installing of electricity. If you wish your water pumped in by the same system you can get your pump for \$38.50 and a tank holding 420 gallons of water for about \$59.50. These tanks can be placed in your cellar and water forced to every room in the house.

This brings the cost of power and water up to \$487.50, leaving you \$112.50 for plumbing and wiring. While this is not a large sum for fitting your house with tubs and electric fixtures, you can do the work for that amount with moderate priced fixtures. You can lower the cost of installing the power by buying a cheaper engine, though it is not advisable to buy one which will need constant attention to keep it in running order. It is cheaper in the long run to put in a good engine and economize on tubs and chandeliers.

I can hear the wail of "extravagance" which goes up from many homes at the thought of spending \$600 for electric lights and a bathtub. But when you sit down soberly and figure up just how much it means in the way of time saved to have water anywhere in the house by simply turning a faucet, is it so extravagant? And when, in addition, you consider that the electric current will do your washing, cut the labor of housecleaning in half by

enabling you to use a vacuum cleaner, cut down the time and labor of ironing, so that the week's ironing is practically a play spell, is it so foolish a thing? Is not a silent servant, who does not eat and stays put and works for \$2.00 a month, cheaper than a human being with an appetite and a demand for \$4.00 or \$5.00 a week? Is not \$600 for electricity and water cheaper in the end than \$150 or \$200 for an operation, made necessary by overwork, plus all the preceding and following doctor bills?

The cost of the service to many farmers, it must be admitted, seems prohibitive. But after all, is it? Last

summer I sat one Sunday afternoon on the well-kept lawn of a country home. From 2:00 o'clock to 7:00 we counted 45 automobiles passing. As each one went by the host told me who was driving the machine, they were all of the surrounding country. In 39 out of the 45 cases he added, either, "He mortgaged his farm to buy that machine," or, "He borrowed the money from the bank on this year's crop."

Thirty-nine out of 45 farmers borrowed the money to buy something he didn't need. Just how many would have borrowed a cent to lessen his wife's work?

DEBORAH.

Michigan's Happy Babies—No. 6.

By DEBORAH.

A NUMBER of proprietary, or patent baby foods are on the market, most of which are good in their place, and a help to the mother of a bottle-fed infant, if used judiciously. Before using any of these foods, however, it is advisable to know just what is in them and how they are prepared. For obvious reasons they can not be mentioned by name in an article of this sort.

As a general proposition, most of these baby foods are largely made from starch, either malted or baked, and in most cases the starch is obtained from wheat flour. A few foods are made up of barley or oats, but in nearly every case the package will mention this fact. Unless the package states positively that the food is made of another starch it is usually safe to assume that wheat starch has been used.

In some cases these starches are put on the market without the addition of any other food element. Other foods have the starch mixed with dried milk, dried egg, sugar or malt. In the foods made with baked starch the flour is made first into thin cakes, perforated, and then baked until thoroughly done. The cakes are then powdered. Baking ruptures the starch cells and makes the starch more easy of digestion.

In choosing a patent baby food for your baby, remember that malted starches are loosening, while baked starches have the contrary effect. It is sometimes necessary to use both a baked and a malted starch in order to keep the child's bowels in good condition. If you have been using a baby food made of malted starch and it does not agree with your baby, be sure, in making a change, to choose a food in which the starch is baked.

Sometimes a child who can take none of the baby foods, either malted or baked, will thrive on a boiled starch prepared at home. All the cereals are called upon when this is the case. Some babies thrive on oatmeal water, though fewer babies can digest oats than is popularly supposed. If you use oatmeal, remember that it contains from eight to ten per cent fat. If there is a disturbance of the digestive organs after starting it, reduce the quantity of cream. If this does not remedy the trouble, reject the oatmeal water and try another starch.

Rice and barley water can be taken by more babies than oatmeal. In fact, it is better to try one of these starches first than to try the oatmeal. Arrow root, tapioca and wheat flakes are all good. Always remember to use that one best suited to your own baby.

To make the starch water follow the rules given below.

For oatmeal water use two tablespoonsful of rolled oats with one pint of boiling water. Boil one-half hour directly over the fire, or cook one hour in a double boiler. The double boiler is preferable as it insures against scorching. Rice grains should be cooked two hours on the stove or three in a double boiler, allowing one tablespoonful to a pint of boiling wa-

ter. Rice flakes need one-half hour boiling or one hour in the double boiler, also allowing one tablespoonful to the pint of boiling water. Wheat flakes require two tablespoonsful to the pint and should be boiled a half-hour or cooked in the double boiler an hour. Arrowroot and tapioca take one tablespoonful to the pint and can be cooked one-half hour directly on the stove.

When thoroughly cooked, add enough water to keep the amount one pint and strain through a cheesecloth. Add one teaspoonful of the water to two or three bottles the first day, for babies three months old or younger. If after two days the baby is not colicky or gassy, gradually add a teaspoonful to every feeding. Reduce the amount of plain boiled water used by the amount of starch water added. In most cases it is necessary also to reduce the amount of sugar, as the starch is converted into sugar in digesting.

EARNING MONEY AT HOME.

BY GRACIA SHULL.

I have several interesting ways of earning money at home, and will tell you a few of them. I originate and make pretty patterns in crochet edgings, insertings, medallions and initials, and sell these six for 50 cents, advertising in the local and city papers and deliver by mail.

Then I make candle shades of rice and crepe paper and decorate with water colors, pressed leaves, flowers, holly, etc., which sell at ten cents each to my neighbors and friends.

Pure linen handkerchiefs, collars, cuffs, jabots, etc., with rolled hem and crochet edge sell at from 25 cents to \$1.00 each. Pop corn balls rolled in clear syrup sell two for five cents. Potato chips bring five cents per small bag. Braided or woven rag rugs both white and colored, with woven or stenciled borders, sell easily, at \$1.25. Hand-made place cards, favors, invitations, etc., bring \$1.00 per dozen.

Each year I hold a sale in my large front rooms and hall. Aside from the needlework and handicraft, I sell pies, cakes, cookies, rolls, brown and white bread, doughnuts, plum puddings, fruit cakes, jams, jellies, canned fruits and vegetables, fresh vegetables, apples, pickles, etc.

I take orders for roast ducks, geese, turkeys, chickens and squab. A great many things are delivered by parcel post and I find it such a convenience. My customers are people of all classes, coal heavers, street cleaners, business men, bankers, doctors, and society people. I have conducted these sales in my home for seven consecutive years and never have a thing left over. At these sales I receive special prices for butter, eggs, sausage, fresh pork, beef, mutton, etc. I make my fruit cakes and plum puddings by my own special recipe and make them several weeks ahead of time. It is hard work, and requires skill, neatness, and above all, system, but I have cleared as much as \$387 at one of my sales, so you see it pays.

RED SPIDER ON PLANTS.

Since the house plants are housed for the winter, insects will no doubt soon commence their destructive work, and none is more difficult to combat than the red spider. As a rule this very troublesome pest is seldom known to be present until it has done considerable damage. The first hint of its arrival is usually the dropping of the leaves of some favorite plant.

The red spider is such a small insect as to be scarcely visible to the naked eye. Its first point of attack is generally the under side of the leaves. The plants which have at any time been checked in their growth are usually the first to be attacked by the pest, especially if the check has been caused by dryness at the roots or top. A dry atmosphere, such as is usually found in the ordinary sitting-room, is the home of the red spider, and unless the pest has got a very strong foothold, it cannot exist in a moist atmosphere. If it has once got spread over the most of the plants, setting them in a moist atmosphere will not in itself destroy it, nor will syringing with water clean off the pest, as is popularly supposed.

We have found that to thoroughly rid plants of the red spider after it has once gained a foothold, moderately strong soapsuds will answer. We apply with a syringe, and in the evening, keeping the atmosphere close during the night. Two or three such treatments will destroy them entirely. We use the same method when the pest attacks our cucumbers and tomatoes in the forcing house.—A. B.

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Farm Commerce.

Dealers' Choice of Apple Varieties

By J. W. FISHER.

THE orchardist not only wishes to know which variety of apples will grow best on his particular soil, but also the most marketable apple. There is small advantage in growing a large crop of fruit when that crop will net the grower less than a smaller crop of another variety having greater market value. Growing the fruit is but one-half the battle; the other half is to transform that fruit into a negotiable medium of exchange.

Prominent commission men, representing all the large markets of the middle west, were asked three questions relating to the best varieties of apples to sell. It must be borne in mind that the apple most in demand upon a particular market is not always the variety which nets to the grower the greatest amount. If the commission men who have chosen certain varieties because of the demand for them and of their natural selling points, would also choose the very same varieties to be planted in commercial apple orchards of their own, there should not remain much doubt but that they were firmly convinced that these varieties could not be surpassed. And yet this is just the evidence that these market men have given in support of the varieties chosen in last week's article in this series as being the best commercial varieties of apples to plant in the average Michigan orchard. These varieties were Northern Spy, Baldwin, Rhode Island Greening, Oldenburg, (generally known as the Duchess), Red Canada (commonly called Steele Red), and Tompkins King; with possibly the additional four varieties, Wealthy, Maiden Blush, Yellow Transparent and the Russets, (Roxbury and Golden).

The first question presented to the market men for their opinion was worded, "What varieties of Michigan apples are most called for on your market?" The following table shows the results of this inquiry. The numbers following each variety show the number of men who named that particular apple as being one of those most called for on his market.

Table No. 1.—Showing the apples most called for on middle west markets:

Northern Spy	71
Baldwin	64
R. I. Greening	41
Oldenburg	28
Red Canada	25
Tompkins King	24
Wealthy	14
Wagener	12
Maiden Blush	10
Russets (Golden and Roxbury)	9
Yellow Transparent	7

The figures have much significance when it is understood that 76 men in all gave answers to this first question, for it is seen that but five men out of all who expressed an opinion failed to mention the Northern Spy. This may be due to the fact that the Spy is produced in sufficient quantities for the market, owing to the long time taken to come into bearing, but it nevertheless should make thinking growers consider the advisability of a wider planting of this high quality variety.

The market value of the Northern Spy is further emphasized by the answers to the second question which was worded, "What varieties of Michigan apples command the highest price on your market?" This was for the purpose of ascertaining whether high prices accompanied the superior demand for these varieties mentioned in last week's article. The question was

answered by 73 men whose choice ranked as shown in Table No. 2.

Table No. 2.—Showing the apples which command the highest price on the markets:

Northern Spy	59
Tompkins King	22
Red Canada	21
Baldwin	12
Oldenburg	9
R. I. Greening	8
Wealthy	6
Yellow Transparent	5
Russets (Golden and Roxbury)	4
Maiden Blush	3
Jonathan	3

It will be noticed that the Northern Spy again tops all varieties as the market favorite for high prices, and among the winter apples trade quotations generally bear out this theory. It must be remembered that this survey has to do with Michigan apples, for some may wonder why the Jonathan is not ranked higher in this list of varieties which bring in the money. Also the Jonathan does not have the range of selling season possessed by the Northern Spy.

And finally we come to the consideration of the varieties which the market men themselves would choose for a commercial apple orchard to be



Michigan Farmers are Getting Good Prices for Good Horses and the Future Market Seems Very Promising.

financed with their own money. This should surely clinch the fairness of their choices in the former questions. This final question was worded, "What five standard varieties of apples would you personally plant in a commercial orchard in Michigan?" In response the answers of 62 men were received, with a consequent rating of varieties, shown in Table No. 3.

Table No. 3.—Varieties selected by market men for planting in a commercial orchard of their own:

Northern Spy	58
Baldwin	53
R. I. Greening	38
Oldenburg	35
Tompkins King	25
Red Canada	18
Maiden Blush	12
Wealthy	12
Russets (Golden and Roxbury)	10
Wagener	10
Yellow Transparent	7

It will be noticed that but four of the men who answered this question failed to mention the Northern Spy. In every one of the three tables the leadership of this apple in the estimation of the trade, is so marked as to deserve grave consideration by Michigan orchardists. The Northern Spy may be long in coming into bearing, and may have other faults, such as tenderness of skin, but the grower with high-grade Spies, honestly packed, will not have to go in search of a market for his fruit.

The reason for setting down the answers to the three questions in tabu-

lar form is now apparent, for a close study of these tables will disclose the interesting fact that the six varieties mentioned at the beginning of this article as the best commercial varieties from the marketing standpoint, are in each case the leaders in each table, though they may vary in order. Furthermore the additional four varieties which were mentioned as possibilities were in each table included among the first eleven varieties. No more convincing argument of the marketing trade. Their most important requirement would seem to be the selling ability of the different varieties, with the secondary requirement of the demand for these apples at the

In asking the commission men this last question, as to which varieties they would personally plant in an orchard of their own, they were also asked to state the reasons why they had selected the different varieties, in an effort to ascertain what qualities in apples were most desired by the marketing trade. Their most important requirement would seem to be the selling ability of the different varieties, with the secondary requirement of the demand for these apples at the

Need More than Good Products Honestly Packed.

THE question of marketing is easily the paramount one among farmers today, and the subject received its due share of attention at the recent meeting of the State Horticultural Society in Kalamazoo. One hesitates to take issue with those of wide experience, whose friendship he esteems and whose opinions he respects and values, but the claim that

trade centers. Other important points mentioned were the bearing habits of the tree, quantity of fruit borne, keeping quality of the fruit and the fact that Michigan produces the best quality apples for certain varieties over any other district.

The commission men claimed that the following varieties could be raised to a higher degree of perfection in Michigan than in any other state. Northern Spy, (five answers); Baldwin, (four); Rhode Island Greening, Tompkins King and Wagener, (three each); Oldenburg and Red Canada (two each); McIntosh, Hubbardston and Maiden Blush, (one each). The Baldwin and the Northern Spy received the most mention as to good points both being mentioned as exceptionally good sellers, always in demand and also as being good bearers and keepers.

Next week's article will consider the average age and acreage of the different varieties as reported by the Michigan growers answering the survey questions.

is, the average grower is occupied with putting up his fruit and has neither the time nor experience to enable him to look after marketing very largely, and he is dependent on but two ways of disposing of his products—either selling to buyers or consigning to commission houses. Both of these classes of dealers are aiming to corral any extra profit that may accrue from fancy fruit. Neither is doing much in the way of working up regular custom for special brands.

An illustration of this theory put into practical execution may be interesting. The Fennville Fruit Growers' Exchange started in putting up their apples according to the provisions of the Sulzer law. Apples that season were especially fine in quality. Those who put the fruit up in the usual way were able to make a good choice grade, and very few indeed had to be culled out. But when we came to put them up with all the small fungus specks, those with small curculio bites, those that lacked color and those disqualified by other slight defects discarded, 50 per cent or more had to be put in a lower grade. And when it came to selling it was extremely difficult to get any material advance in price for this fancy pack over the choice grades as others put them up. One car in particular went to a city of considerable size and it was expected this would open an outlet for more; but when the buyers were called on a second time they expressed satisfaction with the quality but said they could buy apples for less money that would satisfy their trade. Brokers, too, who bought on track were not disposed to encourage Exchange methods and they paid the farmers about as much for the ordinary pack as the Exchange asked them for the fancy Sulzer grade. And then we had half of our apples on hand which we had discredited by taking out the very best and had to accept 40 to 60 cents less per barrel for them, although they were still a very good quality. And, besides, there is considerable high priced extra labor involved in grading and putting up this fancy grade.

Altogether those with whom I have talked agree with me that it did not pay to put up this fancy grade of apples. Far be it from me to discourage straight and honest work in putting up fruit. Every dishonestly put-up package gives the trade a black eye, and the person who uses that package mistrusts the next 50 he buys. But my contention is that some much more energetic means than skill in growing and honesty in packing are required to profitably market our fruit.

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BERKSHIRES Choice spring boars and gilts, priced to move quick. Farmers stock. ELMHURST STOCK FARM, Almont, Mich.

BERKSHIRES—Twenty-four choice gilts, yearling and mature sows, bred for spring farrowing priced to sell. B. B. REAVEY, Akron, Michigan.

ROYALTON BRED BERKSHIRES—Six weeks old pigs, both sexes, registered stock with papers, at farmers prices. D. F. VALENTINE, Supt., Temperance, Michigan.

Anything in Reg. Chester White Swine. 10 weeks old pig, Reg. Holstein Herd Bull cheap. RAY B. FARHAM, Bronson, Michigan.

CHESTER WHITES. August and September pigs, from sires as Chickasaw Bud, Modeler, Bronson King. A certificate of registry with each pig. John Gintling, Bronson, Michigan.

HAMPSHIRE Swine—Breeding stock of all ages from my pen and five W. I. W. for breeding. Inspection invited. Floyd Myers, R. 2, Decatur, Ind.

HAMPSHIRE SWINE—Choice young stock for fall breeding, both sexes, prices reasonable. West Wind Farm, Pontiac, Mich. E. P. HAMMOND, Owner. N. A. WISER, Manager.

O. I. C.—Bred sows and spring pigs, large and growthy. Pairs and trios, not bred, for sale. Write your wants. GLENWOOD STOCK FARM, Zeeland, Mich.

O. I. C. Swine—Service boars, also gilts of Spring farrow, place your order with me before they are sold. Get my price on pairs and trios of Aug. and Sept. farrow. A. J. GORDEN, R. No. 2, Dorr, Michigan.

O. I. C. and Chester White Swine.

We won this year at Ill. State Fair, nine first prizes, four second and five third prizes, including both Grand Champions; at Wis. we won twelve first prizes, five seconds and all Champions. We have over 700 pigs on hand of every age. All stock is shipped on their own merits. O. I. C. ROLLING VIEW STOCK FARM, R. No. 2, Cass City, Michigan.

O. I. C's—Spring pigs, pairs and trios, no. 1, from state fair winners. Write your wants. AVONDALE STOCK FARM, Wayne, Michigan.

O. I. C. Boars ready for service. Also spring gilts, stock recorded in Goshen Ind. H. W. MANN, Dansville, Michigan.

O. I. C's—Serviceable boars weighing 150 to 300 lbs. Prices right to move them. I pay express. G. P. ANDREWS, Dansville, Michigan.

O. I. C.—10 good boars, \$18 to \$25 each. One very choice boar \$30. Registered free. C. J. THOMPSON, Rockford, Michigan.

O. I. C's—STRICTLY BIG TYPE. For 12 yrs. I have been breeding for size and length with quality. Lengthy Prince one of the largest boars the breed ever produced, heads our herd, assisted by White Monarch and Frosts Choice, 2nd prize under six months bar at Mo. Inter State Fair 1914. Stock for sale at all times, prices reasonable. Address, NEWMAN'S STOCK FARM, R. No. 1, Marietta, Mich.

O. I. C's—Nothing for sale at present. Satisfaction always guaranteed. A. R. GRAHAM, FLINT, MICHIGAN.

O. I. C.—Spring fall pigs ready to ship. We have some fine fall pigs ready to ship. JOHN BERNER & SON, Grand Lodge, Michigan.

O. I. C's—I have extra fine lot of last spring boars and a lot of this fall pigs, either sex, not akin, will have a bred sow sale in Jan. 1/4 mile west of depot. OTTO B. SCHULZE, Nashville, Mich.

O. I. C's—Large bone kind. Taking orders for September pigs. Shipped O. O. D. J. W. HOWELL, Elsie, Michigan.



O. I. C.

SOW WEIGHED 932 LBS. AT 23 MONTHS OLD

IONIA GIRL

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

O. I. C. Choice Gilts for Spring Farrow. Not bred. May pigs. Choice serviceable boars the long bodied kind. ALVIN V. HATT, Grass Lake, Mich.

O. I. C's—Good thrifty stock for sale at all times. Choice sows bred for Spring farrow. TED DRAPEL, Munith, Michigan.

O. I. C's—We can ship you some extra good young sows, bred to registered hog. Registered in your name free for \$40 each. If you want quality try one of them. Three of my sows raised 80 pigs this season. I can furnish for 12 years I have shipped O. I. C. hogs from East to West and from North to South. J. R. WAY, R. 2, Pompano, Michigan.

DUROC JERSEYS—Fall pigs either sex, sows bred for spring farrow and Bronze Tom Turkeys. Bert Sweet, R. No. 1, Hudsonville, Mich.

Duroc Jersey Boars

From Prize-Winning Stock.

Write, or better still, come.

Brookwater Farm, Ann Arbor, Mich., R. F. D. 7.

Duroc Jerseys—15 spring boars and 15 sows; also 60 fall pigs from the principal strains; pairs and trios. S. C. STAHLMAN, Cherry Lawn Farm, Shepherd, Mich.

DUROC JERSEYS—Aug. and Sept. pigs with plenty of size and great quality. Also gilts bred to prize winning stock. F. J. DROD, R. No. 1, Monroe, Mich.

DUROC JERSEYS, Spring Pigs for Sale

CAREY U. EDMONDS, Hastings, Michigan.

Duroc Jerseys—Aug. pigs either sex. Also 3 Holstein bull calves and White Wyandotte roosters at reasonable prices. E. H. MORRIS, Monroe, Mich.

DUROCS—A few good boars, weight 200 lbs. \$25. Can ship anywhere in Mich. About 30 gilts will be bred for April, best blood lines. Also Holstein Calf, H. G. Keesler, R. No. 5, Cassopolis, Mich.

DUROC JERSEY—Bred gilts for March and April farrow; bred right and priced right. W. C. TAYLOR, - Milan, Michigan.

DUROC JERSEYS—Spring pigs of either sex at reasonable prices. Pairs not akin. W. J. BAUMAN, Burr Oak, Michigan.

DUROC JERSEYS—35 fancy boars and gilts of popular blood lines, good individual quality. Special prices for 30 days. JOHN MCCOLL, Sta. A. R. 4, Bay City, Michigan.

POLAND CHINAS—Spring pigs either sex.

Markets.

GRAINS AND SEEDS.

December 22, 1914.

Wheat.—This cereal advanced rapidly the past week. Foreign demand continues to be a strong factor in the market, and when accompanied by a restriction of deliveries by farmers to primary elevators, buyers were so anxious to secure supplies that prices were easily advanced. On Monday cash wheat reached the highest point of the year in Chicago. The domestic demand has also been a bullish influence; large orders for flour are coming to American mills, and this has compelled millers to go upon the market for raw material. The visible supply in the United States decreased over a million bushels. Statistics show that over twelve million bushels of wheat were shipped from North America last week, which is the high record for a single week from this continent. One year ago the Detroit market was paying 98½¢ per bushel for No. 2 red wheat. Quotations for the past week are:

	No. 2 Red.	No. 1 White.	May.
Wednesday	1.18½	1.15½	1.24½
Thursday	1.19½	1.16½	1.26
Friday	1.20	1.17	1.26
Saturday	1.22	1.19	1.28
Monday	1.24½	1.21½	1.29½
Tuesday	1.26½	1.23½	1.31½

Chicago, (Dec. 21).—No. 2 red wheat \$1.23½@1.25; Dec., \$1.24½; May \$1.27½c.

New York.—No. 2 red \$1.32½; May \$1.35½c.

Corn.—The statistical situation of this cereal is more bearish than that of wheat. The visible supply for the United States shows an increase of over 3,000,000 bushels and the federal crop report shows that the 1914 crop in seven surplus corn states amounts to 227,329,000 bushels more than were harvested a year ago. In spite of this, however, the strong position of the wheat market and the urgent call for cereals abroad have not only maintained prices on last week's level, but affected a substantial advance. One year ago the local price for No. 3 corn was 66½¢ per bushel. Quotations are as follows:

	No. 3 Mixed.	No. 3 Yellow.
Wednesday	65	66
Thursday	66	67
Friday	66½	67½
Saturday	67	68
Monday	67½	68½
Tuesday	68	69

Chicago, (Dec. 21).—No. 2 yellow corn 65½@66c; Dec., 64½c; May 70½c per bushel.

Oats.—This grain has gone up with wheat and corn. While the strong tone of the market is due in part to the supply and demand situation, the chief strength comes from the firm wheat market. There are reports of further demand from European countries. The visible supply decreased a half-million bushels the past week. One year ago standard oats were quoted on the Detroit market at 42½¢ per bushel. Quotations are as follows:

	No. 3 Standard.	White.
Wednesday	51	50½
Thursday	51½	51
Friday	51½	51
Saturday	51½	51
Monday	52	51½
Tuesday	52	51½

Chicago, (Dec. 21).—Standard oats 49½@50c; Dec., 48½c; May 52½c.

Rye.—Although a cent decline is noted in the quotation for No. 2 rye, the market is firm with the foreign demand good. The above grade is quoted at \$1.09 per bushel.

Beans.—Cash beans have advanced another 10c with the market firm at the new prices. Dealers seem optimistic of the future. At Greenville farmers are selling on a \$2.35 basis. Detroit quotations are: Immediate and December shipment \$2.55; January, \$2.60. Chicago advanced prices for best grade. Pea beans, hand-picked, choice are quoted at \$2.70@2.80; common at \$2.40@2.55; red kidneys choice, at \$3.25@3.50.

Clover Seed.—Transactions are on a higher basis with the tone firm and business moderate. Prime spot and December \$9.45; March \$9.70; prime alsike sells at \$9.25.

Toledo.—Higher. Prime cash and December \$9.42½; March \$9.60; prime alsike \$9.27½.

Timothy Seed.—Prime spot \$3.10 per bushel.

FLOUR AND FEEDS.

Flour.—Jobbing lots in one-eighth paper sacks are selling on the Detroit market per 196 lbs., as follows: Best

patent \$6.20; second \$5.80; straight \$5.25; spring patent \$6.50; rye flour \$5.80 per bbl.

Feed.—In 100-lb. sacks, jobbing lots are: Bran \$25; standard middlings \$25; fine middlings \$32; coarse corn meal \$28; corn and oat chop \$25 per ton.

Hay.—Quotations are steady. Carlots on track at Detroit are: New, No. 1 timothy \$16@16.50; standard \$15@15.50; No. 2, \$15@15.50; No. 1 clover and mixed \$13@13.50.

Chicago.—Demand good, offerings fair. Choice timothy \$16.50@17; No. 1, \$15@15.50; No. 2, \$12.50@13.50.

New York.—Firm. Prime \$21.50; No. 1, \$21; No. 2, \$19@20 per ton.

Straw.—Steady. Rye \$7.50@8; oat straw \$7@7.50; wheat straw \$7@7.50 a ton.

DAIRY AND POULTRY PRODUCTS.

Butter.—Market continues firm at an advance of 1c over last week's prices. Extra creamery 33c; firsts 30c; dairy 21c; packing stock 20c lb.

Chicago.—Trade is steady and supply ample, especially for poor grades. Prices higher. Extra creamery 33c; extra firsts 31@32c; firsts 28@29c; seconds 24@26c; packing stock 20½@20¾c.

Elgin.—Market firm for high-grade stock; 1c higher than last week, or 33c per lb.

Eggs.—Market firm, with prices 1c higher than last week. Fresh stock sells at 34c per dozen; current receipts 30¾c.

Chicago.—Market especially firm for strictly fresh stock because supply is limited. Dealers are using storage eggs in preference to the ordinary firsts. Prices slightly lower. Miscellaneous lots, cases included, 23@32c; ordinary firsts 30@31c; firsts 33@33½c per dozen.

Poultry.—Market continues firm, with no change in prices. Prices are as follows: Springs 12@12½c; hens 8@12c; ducks 14½@15c; geese 12@13c; turkeys 18@18½c.

Veal.—Quoted steady at 11@11½c for fancy and 8@9c for common.

Pork.—Market steady for dressed hogs, light weights selling at \$8.50@9 per cwt; heavy \$7@8.

FRUITS AND VEGETABLES.

Apples.—Trade is steady but quiet. Common storage stock plentiful and prices unchanged. Baldwins \$2.25@2.50 per bbl; Greenings \$2.75@3; Spy \$3; Steele Red \$3.50; No. 2, 40@50c per bushel.

Chicago.—Prices on common storage are lower as it is realized that it must be moved. Quotations below are for common storage stock except for Jonathans. Refrigerator stock sells from 50c@1 above these prices. Baldwins \$1.75@2; Kings \$2@2.25; Wageners \$1.75@2; Jonathans \$3.50@4; Greenings \$1.75@2.25; Northern Spy \$2@2.25; Western box apples are selling for 75c@2.25 per box.

Potatoes.—Market steady with no change in prices. Carlots 35@38c per bu; in bulk 40c per bu. in sacks; at Chicago the market is steady at last week's prices. Michigan white, in bulk, are quoted at 35@42c per bu; at Greenville, Mich., 25c in bulk.

WOOL.

A fair volume of business was done in wool centers the past week. In some grades the stocks are almost depleted. While the demand for manufactured goods has been of limited character, it is expected that this condition cannot long prevail, and that larger orders will soon be forthcoming. Any increased call from consumers should send wool values up rapidly. There has been an improvement in the inquiry for fleece wools. Quarter-bloods have sold in Boston at 29c; ¾-clothing at 25c; delaines XX at 30@31c; unwashed delaines 24@27c.

GRAND RAPIDS.

Poultry and farm produce is being offered quite freely this week, owing in part to the good sleighing. Turkeys are about 2c below last year's prices for the holidays. The potato market continues very dull, with price to the trade around 20c. Beans are still in good demand with prices at different points ranging from \$2.25@2.50. Wheat advanced 2c for Tuesday's buying.

DETROIT EASTERN MARKET.

Although the weather continues cold a fairly large market prevailed Tuesday morning. The variety of produce was limited, apples being more liberally offered than any other product. Prices for this fruit range from 50c@1 per bushel. Potatoes sold from 40@45c; cabbage 45c; celery 20@25c per bunch; eggs 45c per dozen; pork \$10 per cwt; loose hay moves slowly at former values.

THE LIVE STOCK MARKETS.

Buffalo.

December 21, 1914.

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

Receipts here today as follows: Cattle 80 cars; hogs 150 d. d.; sheep and lambs 80 d. d.; calves 700 head.

With about 80 cars of cattle on the market here today, after the terrible slump of last week and our butchers all claiming they were choked to death with beef that they could not sell, our market was barely steady with last Monday and everything that was sold was sold at bidders' price, and the market was slow and draggy from start to finish. However, at the close about everything is cleaned up and we think after another week, which will give our butchers a chance to unload some of the beef in their coolers, the trade will be livelier. Our advice at the present is to ship no cattle for next Monday's market unless possibly compelled to do so.

We had a flood of hogs here today, estimates being placed at 30,000 head, and with conditions bad for handling so large an amount, a good deal of the stock did not get yarded in time for market and it looks to us like from 7,000 to 10,000 hogs are going over unsold. It was generally a 7c deal for mixed grades of hogs; a few yorkers and lights selling from \$7.10@7.35, and strictly pig weights up to \$7.50. Roughs generally 6c; stags \$5@5.50. Trading was fairly active and buyers took hogs right up to dark tonight, but with so many to be offered for tomorrow's market, we cannot see any improvement for a few days at least. Being right on to the holidays and everybody filled right to the neck, light marketing will help the trade considerably for the balance of this week. Next week we should have a different deal.

The market was slow today on lambs and sheep, with prices 50c lower on lambs than the close of last week; choice handy lambs selling at \$8.25@8.35; top Michigan lambs from quarantined counties \$7.75. We look for steady prices last of week.

We quote: Lambs \$8.25@8.35; cull to fair \$5@8; yearlings \$6@7; bucks \$4@4.50; handy ewes \$5@5.25; heavy ewes \$4.75@4.85; wethers \$5.50@5.75; cull sheep \$3.50@4.25; veals, choice to extra \$9.75@10; fair to good \$7.50@9; heavy calves \$6@8.

Chicago.

December 21, 1914.

Cattle. Hogs. Sheep.
Receipts today.. 6,000 57,000 18,000
Same day 1913..17,574 37,072 20,231
Last week

THIS IS THE LATEST 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.

The State Live Stock Sanitary Commission on December 16 raised the quarantine on all townships in Michigan, but since this order was issued the ban has again been placed on a few townships in Saginaw county and they are now quarantined again. Live stock from all other parts of Michigan may now be unloaded in the Detroit Stock Yards, providing, of course, that the cars bear placards showing that they have been cleaned and disinfected since November 5. This refers only to live stock originating in the state of Michigan for Detroit, and that the federal quarantine against interstate shipments is still on. Also that no live stock from Detroit stock yards can go out except to packers and butchers in Detroit. Live stock killed direct to packing plants must be sent there and not unloaded in stock yards. There will be no market at these yards Friday next, Christmas Day. Anything arriving will be cared for, but the scales will be closed and no business will be done.

DETROIT LIVE STOCK MARKETS.

Thursday's Market.
December 17, 1914.
Cattle.

Receipts 728. Market steady with Wednesday; canners, bulls and Christmas cattle same as last week; all other grades 10@15c lower.

Best heavy steers \$8@8.50; best heavy weight butcher steers \$7@7.50; mixed steers and heifers \$6@6.50; light butchers \$5.50@6; best cows \$5.75@6.25; butcher cows \$5.25@6; common cows \$4.25@5; canners \$3@4; best heavy bulls \$6@6.50; bologna bulls \$5.50@5.75.

Spicer & R. sold Rattkowsky 3 cows av 1063 at \$5.50, 2 do av 910 at \$4.25; to Breitenbeck 20 butchers av 1057 at \$6.75.

Roe Com. Co. sold Rattkowsky 1 cow wgh 1090 at \$5, 5 do av 850 at \$5.50, 2 heifers av 675 at \$5, 4 cows av 1150 at \$5.50, 2 do av 1040 at \$4.50, 3 do av 1000 at \$5.50; to Kamman B. Co. 4 steers av 1050 at \$7.50, 13 butchers av 750 at \$7; to Rattkowsky 2 cows av 900 at \$5.50; to Sullivan P. Co. 20 steers av 938 at \$8.35, 21 do av 979 at \$8.35; to Kamman B. Co. 4 do av 1060 at \$7.50, 13 butchers av 820 at \$6.50; to Mason B. Co. 4 cows av 770 at \$5.50; to Sullivan P. Co. 6 canners av 908 at \$4, 4 steers av 935 at \$7, 3 canners av 803 at \$3.25, 4 do av 905 at \$3.60; to Kull 14 steers av 1140 at \$8.50, 1 do wgh 1320 at \$8; to Thompson Bros. 3 bulls av 1663 at \$6.40, 2 cows av 575 at \$3.75; to Sullivan P. Co. 7 cows av 943 at \$4, 4 do av 955 at \$4, 2 butchers av 795 at \$6; to Thompson Bros. 18 do av 773 at \$6.50; to Goose 1 bull wgh 1040 at \$5.25; to Applebaum 1 cow wgh 960 at \$5, 2 do av 1180 at \$6.

Haley & M. sold Bresnahan 3 heifers av 660 at \$6, 4 do av 702 at \$6.10; to Wohler 2 steers av 1065 at \$7.25, 1 do wgh 780 at \$6; to Feldman 2 cows av 1115 at \$5.15; to Sullivan P. Co. 2 do av 855 at \$3.50, 2 do av 1015 at \$4; to Shaparo 2 butchers av 505 at \$5.75, 11 cows av 1045 at \$5.25; to Hoffend 7 butchers av 620 at \$5.25; to Rattkowsky 2 cows av 1040 at \$4.85, 2 do av 1030 at \$5.75, 4 do av 1050 at \$5.05; to Resnick 1 bull wgh 1650 at \$6.20, 1 cow wgh 810 at \$3.60; to Parker, W. & Co. 4 cows av 820 at \$4; to Rattkowsky 7 do av 1170 at \$5.75, 2 do av 1080 at \$5; to Mason B. Co. 2 steers av 955 at \$7.25; to Thompson Bros. 3 butchers av 690 at \$5, 15 do av 880 at \$6; to Ratner 1 cow wgh 1060 at \$4.75, 1 do wgh 1170 at \$6.25; to Feldman 2 do av 1070 at \$5.50, 1 do wgh 1190 at \$5; to Applebaum 2 heifers av 625 at \$5.75; to Resnick 2 cows av 1020 at \$5.

One Christmas steer wgh 1240 lbs. was sold to Thompson Bros. at \$10.

Veal Calves.

Receipts 524. Market steady. Best \$9@9.50; others \$6@8.50.

Bishop, B. & H. sold Thompson Bros. 2 av 130 at \$7, 6 av 170 at \$9.50; to Mich. B. Co. 11 av 185 at \$8.50; to Sullivan P. Co. 2 av 170 at \$9, 6 av 165 at \$9; to Newton B. Co. 13 av 160 at \$9, 2 av 180 at \$9.50, 4 av 155 at \$8, 1 wgh 160 at \$8; to Hammond, S. & Co. 12 av 180 at \$8.50, 12 av 150 at \$8; to Rattkowsky 7 av 160 at \$8.50; to Applebaum 8 av 145 at \$9.50; to Rattkowsky 9 av 165 at \$9.50; to Goose 4 av 180 at \$9, 1 wgh 140 at \$9.50.

Sheep and Lambs.

Receipts 5,567. Market steady with Wednesday; 25@50c higher than last week. Best lambs \$8@8.25; fair do. \$7.50@7.75; light to common lambs, \$6.50@7; fair to good sheep \$4.25@4.75; culls and common \$3@4.

Spicer & R. sold Parker, W. & Co. 17 lambs av 75 at \$8; to Sullivan P. Co. 32 do av 55 at \$6.50, 13 do av 40 at \$4.50.

Roe Com. Co. sold Barlage 21 lambs av 65 at \$7.50, 34 do av 90 at \$7, 31 sheep av 120 at \$4.25; to Sullivan P. Co. 44 do av 85 at \$3.75, 82 lambs av 75 at \$7.50; to Newton B. Co. 112 lambs av 75 at \$7.85, 10 sheep av 100 at \$4.

85 Christmas lambs av. 86 lbs. were sold to Mich. B. Co. at \$8.60.

Hogs.

Receipts 11,581. Market steady; \$7.10 at the yards.

Bishop, B. & H. sold Hammond, S. & Co. 3150 av 200 at \$7.10.

Roe Com. Co. sold Sullivan P. Co. 480 av 190 at \$7.

Haley & M. sold Parker, W. & Co. 750 av 200 at \$7.10.

Spicer & R. sold same 465 av 200 at \$7.10.

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 someone else. When reply by mail is requested, it becomes private practice, and a fee of \$1.00 must accompany letter.

Swollen Thigh—Obstructed Breathing.—I have a ten-year-old horse that has swollen thigh, there is also some swelling below hock, and I have noticed him breathing a little hard. W. S., Uby, Mich.—Apply one part tincture iodine and five parts camphorated oil to throat and swollen leg once a day. Give him a teaspoonful of powdered nitrate of potash at a dose in feed once a day.

Enlarged Pastern.—I have a colt that cut pastern when tangled in a wire fence; wound has healed but pastern gradually enlarges, causing colt to go lame. T. V., Midland, Mich.—Apply one part iodine and nine parts fresh lard to pasterns every day or two, and give colt 30 grs. of potassium iodide at a dose in feed two or three times a day.

Vaginal Polypus.—When my 11-year-old mare is lying down a little blood comes from vagina. She was bred in July, is supposed to be with foal and is in good condition. B. N. P., Colling, Mich.—Doubtless there is a small polypus in vagina that will perhaps do no harm; however, you might dissolve ½ oz. powdered alum in a quart of tepid water and inject some into vagina daily.

Swollen Sheath.—Whenever my six-year-old horse stands in stable without exercise, his sheath swells, but when exercised it all leaves. C. W. L., Greenwood, Mich.—Mix together one part powdered sulphate iron, one part powdered nitrate of potash and two parts of ground gentian and give him a dessertspoonful at a dose in feed two or three times a day. Be sure and exercise him every day, and don't feed him too much grain when he is not working, and keep his bowels active.

Collar Boil.—I have a mare that has had a loose, flabby swelling on shoulders for the past six months and when worked it is raw. The bunch is soft and feels to the touch as if it was loose flesh and skin. A. M., Cairo, Mich.—Cut out entire bunch, removing most of skin covering flabby swelling, then apply one part iodoform and nine parts boric acid to sore twice a day, then it will get well.

Nail Puncture.—Young work mare stepped on rusty nail five weeks ago. She was treated by a Vet. for three weeks; he cut some of the frog away and the foot healed nicely, but she is yet tender and shows some lameness. E. J. P., Mt. Clemens, Mich.—I fully believe if you will be patient and apply lanolin to hoof once a day, she will gradually be relieved of foot soreness; however, it is good practice to use leather sole filling bottom of foot with pine tar and oakum.

Swollen Neck and Shoulder.—A few mornings ago we found one of our calves with swollen neck its entire length; also right shoulder was some swollen. There is now a large bunch on neck where the trouble appears to be centering. L. M. H., White Cloud, Mich.—Apply spirits of camphor to

swollen muscles two or three times a day and if bunch softens, fluctuates on pressure, open it and allow fluid or pus to escape. Also give him a teaspoonful of hypo-sulphite of soda twice a day. If his bowels are constive give him either castor oil or epsom salts to open them.

Lack of Vitality.—What is the best feed to give a boar hog to put vim in him? M. P. K., Oxford, Mich.—Your hog is perhaps weak on account of being fed too much corn, fat-producing food and not enough protein. He should also be exercised, fed some oats, oil meal, eggs, roots and tankage.

Indigestion.—Pigs 11 weeks old do not appear to thrive and some of them have not done well since I commenced feeding them, which was six weeks ago. Some of them have a very poor appetite and I might add that some of my older hogs are inclined to eat sand. T. W. P., Grant, Mich.—Feed your hogs some tankage, roots and green feed; also give them equal parts bicarbonate soda, ginger and gentian—a teaspoonful to each full-grown hog and a teaspoonful to every four or five of your small ones.

Punctured Sole.—I have a horse that has a small hole in sole of foot near toe, which oozes pus. I have been applying peroxide of hydrogen to heal it, and have also used iodine and alcohol as a dressing. A. J., Eaton county, Mich.—Apply one part iodoform, one part powdered alum and six parts boric acid once a day, covering sole with oakum and a bandage.

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A. J. PLATT, MFR.

BOX J STERLING, ILL.

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Grange.

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

ANNUAL STATE GRANGE MEETING.

(Continued from last week).

Wednesday morning after some time had been given to presentation of resolutions and their assignment to the proper committees the chaplain and the overseer gave their reports. In presenting his report, Overseer Frank E. Moi said that the State Grange represented fifty thousand of the best citizens of the state. The objects of the Grange were to improve the financial, educational and social condition of the rural people. We are no longer savages living isolated lives, but, being gathered in communities, our interests are mutual. Farming is the basis of industry, and farmers are silent partners in the great structures of exchange and commerce. In speaking of co-operation Mr. Moi said there are great advantages in working together. Collective forces expended collectively could accomplish great results. One of the common causes of discouragement in the farming business arises from the failure of the farmer to utilize local and neighborhood experiences. Local Granges offer excellent opportunities to disseminate such experiences. Many of the questions which go to the colleges and experiment stations could better be answered at the Grange meetings on account of the varied experiences of the Grange members. The Grange in order to make itself the still greater factor in rural work should especially emphasize the public service phase of its work. Fifty years from now public service will be dominant in all rural organizations. The farmer should take his attention for awhile from the commercial and practical and devote some of his time to the beautifying and making more attractive the farm home. People have generally been attracted by things remote from them, but real leadership consisted of attacking the common problems at hand. One of these is the waking up of sleeping members of local Granges, so that their energies may be spent for public welfare. Other things close at home which need attention are roads, diseases of trees, drainage and other common rural problems. Any man can concentrate the sentiment of the community on one of its problems and thereby accomplish some good for the community.

The Report of the Chaplain.

The Chaplain, Mrs. O. J. C. Woodcan, said that there has developed in the Grange a spirit of courage and reciprocity which was hard to credit to any one person. She spoke of the good work done by the Worthy Master, backed by the subordinate officers and executive committee; the finance and woman's work committees have also done much good. During the past year the chaplain spoke at nineteen meetings, at which she especially endeavored to impress the strong love for the order. She also tried to impress the fact that he who fights alone fights against odds.

After these reports were given, Col. Mott of the northern peninsula spoke on the opportunities and advantages offered by that part of the state.

The Lecturer's Program.

The Wednesday afternoon session was turned over to the lecturer. The chief features of the session were the lecturer's report, an address by Mr. Lockard, chaplain of the Jackson state prison, on "The Shackles of the World," which was most impressive and interesting, and the milking song by a chorus of ladies. In her report Miss Jennie Buell spoke of the progress that has been made in work during the six years she occupied the office. She noted the growing habit of the Grange to unite with other organizations, especially with civic organizations, in the work for common good. On the Grange programs, co-operation and matters of social welfare, legislation and other rural problems were receiving serious consideration. The rural people have become interested in subjects of vital interest to all classes and through this interest have found themselves on common ground with people with whom they thought they had little sympathy. An increasing number of Grange-trained men and women are being called upon to work under the auspices of other organizations which shows the value of Grange training. The Grange has come to realize the value of special training for rural social service. Many communities are suffering from unskilled leadership and often from the want of it. The lecturer has urged a program every meeting and said that the real Grange program should be a clear cut, carefully worked out policy for several months or for a year or longer. This policy should be constructive and should have in mind things to be accomplished by the Grange. The Grange has come to years of maturity and its plans should also be those of maturity. Miss Buell closed, thanking those who had given her assistance and asking them to give her successor the loyal support that has been given her.

Fifth and Sixth Degrees Conferred.

Wednesday evening was devoted to the conferring of the fifth and sixth degrees, and the invitation addresses of the representatives of the various cities desiring the next annual state meeting. Among the cities represented were Grand Rapids, Jackson, Muskegon, and Lansing. The fifth degree was conferred in an excellent manner to ninety-seven candidates by the Branch County Pomona. One hundred and eighty-seven candidates were most impressively given the sixth degree by the state officers. In this degree the new paraphernalia costing \$400, was used for the first time.

Thursday morning was given over to the reports of the state officers, among them being the steward's by T. E. Niles; Pomona's by Ida O. Hansen; Flora's by Mrs. H. C. Anderson, and Ceres' by Mrs. A. J. Freeman. Flora urged the beautifying of the home grounds by flowers and shrubs, and also the wider observation of Arbor Day. Ceres spoke of the life of the farm woman, stating that her condition could be greatly improved. Hard work and monotony, often the lot of the farmer's wife, was working injury to her, as proven by the records of the insane asylum showing that the majority of women inmates were those of the rural communities.

Treasurer's Report Shows Grange Prosperous.

The treasurer's financial report, a summary of which is given here, shows that the State Grange is in a very good financial condition. The treasurer said that although the invested funds of the Grange were large it should not undertake any unnecessary work which would insure financial expenditure. The Grange should endeavor to increase its invested funds, for in a large reserve there was strength. He said that organization with \$50,000 behind it would be much more influential than one not having financial resources. The Michigan State Grange leads all states in its resources. In membership it is third, having 48,544 members. In membership dues paid to the National Grange, there was an increase of about \$37. This increase is more than the total amount paid by some State Granges into the National Grange.

Summary of Financial Statement.

For the Year Ending Dec. 1, 1914.

Invested Securities.

Bonds and securities on hand Dec. 1, 1913.....\$42,500.00

Bonds and securities paid... 500.00

Bonds and securities on hand hand Dec. 1, 1914.....\$42,000.00
Notes added during year.... 4,000.00
Cash on hand Dec. 1, 1914.. 1,903.49
Interest due and uncollected 450.00

Total invested funds.....\$48,353.49
Cash on hand in general fund 1,244.55

Total resources of Michigan State Grange, Dec. 1, 1914..\$49,598.04

Invested Funds, Cash Balance.

Cash on hand Dec. 1, 1913..\$ 5,173.05
Interest received 1,730.44
Bonds paid 500.00

Total\$ 7,403.49

Transferred to general fund\$1,500.00
Notes of Patrons Fire Insurance Co. 4,000.00 5,500.00

Cash on hand Dec. 1, 1914..\$ 1,903.49
Interest due and uncollected 450.00

Total cash resources.....\$ 2,353.49

Classification of Receipts.

On hand Dec. 1, 1913.....\$ 2,117.35
From co-operation 5,081.60
Fifth and sixth degree fees at State Grange..... 211.50
Transferred from invested funds 1,500.00
Dues 11,650.57
Supplies sold 653.38
National Grange extension fund 285.00
Miscellaneous 62.16

Total receipts\$21,561.56

Classification of Disbursements.

Session of State Grange, 1913\$ 6,283.09
Expenses of executive committee 732.67
National Grange—sixth degree fees 82.50
National Grange—dues..... 2,432.05
Fifth degree fees returned to Pomona Grange..... 9.50
Supplies purchased 453.72
Printing and Stationery.... 880.96
Salaries State Grange officers 2,780.00
Co-operation 1,059.09
Organization 289.59
Supervision 2,037.85
Rallies 707.70
Lecturer's department..... 298.90
Secretary's office expenses.. 284.48
Woman's Work committee.. 164.04
Loan to Grange Assurance Association 500.00
Legal counsel 500.00
Sending Michigan Patron to Grange officers 197.60
Miscellaneous 623.27

Total disbursements\$20,317.01
Balance, cash on hand Dec. 1, 1914 1,244.55

\$21,561.56

Secretary Urges Farmers to Develop Esthetic Side of Rural Life.

In his report Secretary J. W. Hutchins reviewed his eight years service as secretary, of which this year will be the last. He spoke of his heartfelt interest in the Grange work and of the good his participation in it has done him. He urged that the farmers make their homes more attractive, so as to counteract the influences which draw the young men and women of the farm to the city. One of the highest Grange functions accomplished by the Grange losing its self-consciousness, and intensely interesting itself in the good it can do. It should not feel sufficient unto itself, but take active interest in all movements for rural advancement. While Secretary Hutchins is to step from active work into the private ranks, his interest and energies will still be put forth to assist in all that the Grange is endeavoring to accomplish. The Worthy Master commented upon the good work of Secretary Hutchins, stating that he had found him a valuable friend and co-worker. Their ideas with reference to the Grange were similar, and the counsel and advice the secretary had given him has been of untold value to him.

The report of the woman's work committee by Mrs. Curtis, of Charlotte, urged more interest in civic improvement, the improvement of schools, and a stricter censorship of moving-picture films. She spoke of the endeavors of the committee along these lines, and also of the work the committee had done at the fairs.

(Continued next week).

Farmers' Clubs

Address all communications relative to the organization of new Clubs to Mrs. J. S. Brown, Howell, Mich.

THE ASSOCIATIONAL MEETING.

Secretary's Report.

(Continued from last week).

The executive meeting in Durand September 22 was the only one held during the year and was called to order by President McBride, with president, secretary and treasurer, corresponding secretary, Directors Robb, Harmon and Hamline, and Ex-president J. D. Leland present.

The secretary's financial statement and treasurer's report were approved as read.

The Senate Chamber, and December 1-2, were selected as place and date for the 1914 annual meeting.

Moved and supported that we secure the Greenbush Quartet if possible. Carried.

Moved and supported that the Tuesday evening session be held in the church parlors following the banquet, and consist of a round-table and general social "get acquainted" meeting. Carried.

Moved and carried we request A. B. Cook to conduct the Local Club Workers' Conference.

Moved and carried that the various details be left to the secretary.

Moved and supported that R. J. Robb's bill of \$5.50 for expenses of Boys' and Girls' Contest be allowed and paid. Carried.

Adjourned till annual meeting, December 1-2.

The annual reports were mailed on March 15 and there are still some copies on hand. The executive board strongly urges the election of local Club officers in November or December so the annual reports can be printed in January.

Copies of the 1914 programs, report blanks and credentials were mailed November 9 to local Club secretaries, and programs to Club presidents, Associational officers, ex-officers, many interested people and various daily papers.

All requests and letters have been promptly answered to the best of your secretary's ability.

The Farmers' Club page in the Michigan Farmer grows more interesting every year with the reviews of Club work in other states and the local Club reports.

Tuscola and Shiawassee County Associations are doing good work, Looking Glass Valley Club maintaining a fine lecture course and some Clubs trying the co-operative buying and selling plan.

Your secretary has written all delinquent Clubs, with a result of \$29.90 for 1913 dues.

The following statistics are based on returns from 66 report blanks returned November 30, 1914:

One hundred and twenty-eight Clubs with at least 10,000 members, as compared with 120 Clubs with approximately 8,900 members one year ago.

Number of meetings held during the year, 661.

Average attendance, 52.

Twenty-three Clubs use yearly programs.

Twenty Clubs have Club fairs.

Seventeen Clubs have temperance meetings.

Forty-five Clubs have picnics.

Forty-eight secretaries take Michigan Farmer.

Forty-one Clubs sent delegates to the 1913 annual meeting.

Eight Clubs sent Junior Club contests.

Ninety-one Clubs paid 1913 associational dues.

Fifty-two deaths have occurred.

Your secretary has conscientiously endeavored to give her level best service to the association and the work has become very dear to her. The many pleasant associations formed more than compensate the hours and days of really trying labors, for the many hours at the desk are not play by any means. She wishes to thank you for the uniform courtesy and co-operation during her five years' official work and extends to one and all the compliments of the coming holiday season, and kindest wishes for prosperity in the coming years.

May our local Clubs receive new impetus from the delegates, and Club extension become a live issue. The following quotations from a former secretary's associational report is very pertinent at this crisis in our history:

"While the State Association is an offspring of the local Clubs no unprejudiced person will deny that the State Association is the most potent factor in the organization of new Clubs. The Michigan Association has a work to perform, the principles it stands for are grand, noble opportunities lie before, but its usefulness and

prosperity will be marked wholly by the loyalty and good-will of the local Clubs."

All of which is respectfully submitted.

MRS. C. P. JOHNSON,
Secretary.

CLUB DISCUSSIONS.

Hold Corn Contest.—The Salem Farmers' Club held their "Corn Contest" in connection with their November meeting at the town hall. A good number assembled. The program was good, consisting of music and other exercises, also a talk by Robt. Ross, on the co-operation of parents. He said the contest would have been a greater success had all the parents encouraged the boys, and advised them as to the cultivation of their corn. Not only in that but in all the interests of the boy he constantly needs the help and co-operation of his parents. The prizes were distributed as follows: For boys over 14 and under 16, Daniel Dixon received the first prize of \$10 for the best 10 ears of yellow corn raised by himself. La Verne Thompson received the second prize of \$5.00 for same. For boys under 14 years, Miller Ross received the first prize of \$10 for best 10 ears, raised by himself. Irving Johnson received

\$2.50 for best 10 ears of white or yellow corn. Deforest Thompson received also \$2.50 for the best 10 ears exhibited. That the meeting was a success was due largely to the efforts of the committee, Robt. Ross, of the Farmers' Club, and Fred Bird, of the Gleaners' Arbor.—H. C. Thompson, Cor. Sec.

Re-elect Old Officers.—The Wells-Dayton Farmers' Club met at the hospitable home of S. G. Ross for their December meeting. It being Christmas month the home was decorated with Christmas colors. There were nearly 50 members and visitors present and all seemed jolly, if the day was dark and cloudy outside. After the bountiful dinner, which was served by Mrs. Hiram Johnson, the meeting was called to order and on account of election of officers a very short program was rendered. The members then proceeded to elect officers, all old officers being re-elected. Mr. Floyd Turner, who helped organize the Club, was called on for remarks, also James Dawson, who had been in a great many states and having just returned from the northwest, gave the farmers some good advice. He says Michigan is the best all around state. He advises the man with a family to stay right here in Michigan, but if one wants to gamble to go to the northwest. The January meeting will be gentlemen's meeting, and the men will serve the dinner,

also the program. S. G. Ross will be chef and James Werden will furnish the program and the ladies will sit up and take notice, and will know how many gentlemen cooks there are in the Club. The meeting will be held at the Hunter home in Dayton.—Mrs. S. G. Ross, Cor. Sec.

Hold Annual Meeting.—The annual meeting of the Napoleon Farmers' Club was held at the home of Mrs. B. R. Tracy, there being about 60 in attendance. The forenoon session consisted of the opening exercises and transaction of regular business, the most important items being the adoption of resolutions on the death of Mrs. Hattie Crego and Mrs. Diana Palmer, and the annual reports of secretary and treasurer. An excellent chicken-pie dinner was then served by the hostess and her helpers, after which the Club was recalled to order by President Covert, and the regular program taken up. M. E. Russell opened the discussion of the subject, "Does the farmer get the full value of his dollar?" and was followed by M. C. Rogers and L. G. Palmer. Little Thelma Russell recited "Big and Little Things," in a pleasing manner. The following officers were then elected for the ensuing year: President, M. H. Covert; first vice-president, J. C. Jester; corresponding secretary, Mrs. Nellie Russell; recording secretary, Miss Lora Carpenter; treasurer, Mrs. Augusta Hackett.

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Why any one interested in farming should go

Here are four plain reasons why you ought to go to the Exposition at San Diego next year. Give them the careful consideration they deserve—everyone of these reasons is figured from your point of view.

The practical things you will see and learn—new ideas, new methods, new facts—if applied to your own operations will repay many times the comparatively low cost of the trip.

1—All kinds of the newest and most perfected farm machinery may be studied in the Exposition buildings, and in operation on the land.

2—There will be complete demonstration of "big" farming—carried out in actual work on a colossal scale; the newest efficiency methods that have made farming a big business will be visible in every detail.

3—For the smaller farmer there will be a perfect demonstration of intensive farming; the kind where very little land can be made to support a family comfortably. There is science in this; you'll see it at its best. Five acres with fruit trees, vegetable plants, vineyard, poultry yard—all producing.

4—And best of all, you'll get inspiration, "freshening up" if you need it, exhilaration. The things you see will send you back home with a new "punch" in your own work; there's no doubt about it. No matter how well you're doing you will learn things that will make your farming business better.

And there are hundreds of other reasons why you'll like to go—why you'll have the best time of your life. It's a wonderful Exposition; beautiful beyond any description; there are endless things contrived to entertain you, amuse you, thrill you with their charm and fascination. Railroads and hotels are going to meet you more than half way; it's not an expensive trip. Begin to plan for it soon; you will always be glad if you come.

Five hundred miles to the North lies San Francisco where during the greater part of 1915 will be held another Exposition, also celebrating the opening of the Panama Canal, the two supplementing each other.

When California celebrates, the Golden State's enthusiasm requires two outlets.

On up the coast and across the Rockies, in the deserts and forest, on the plains and the valleys that fill the West, there are other sights which make all other lands commonplace.

It is the Great West of the Grand Canyon, the Yosemite, the Yellowstone, the Painted Desert, the Great Trees. It is the West that you should see, and 1915 is the time for you to see it, when California with her two expositions offers you the opportunity and special rates.

Open January 1

See that your ticket in 1915 reads San Diego

"Oh! España, como mi joven, corazón por ti latía en tiempos pasados."—Longfellow.
"How much of my young heart, O Spain, went out to thee in days of yore?"—Longfellow.

1915
All the
Year

