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The Outlook For Michigan Stock Feeders.

By ROSCOE WOOD.

IT seems to be characteristic of human nature to attempt to foresee the future, to learn before we get to it what is to occur just ahead of us. If it were possible for mortal to accurately divine this with reasonable accuracy and surety the uncertainties of life would be largely eliminated and with them much of the pleasures. In the present instance if the cattle feeder or the sheep feeder could know now what the market for his product will be for the next six months he would know just how to proceed, and even then many would fail to take advantage and profit by their knowledge. Prophesying as to markets is only a guess, and favored of fortune indeed, is he who accurately forecasts more than half the time even approximately their course.

The only criterion that anyone has is what has been and it can only be understood when the more important accompanying conditions are considered in their proper relation. New

of their factory, and many more should who do not. It seems almost superfluous to recount the advantages of such procedure but the failure of so many to take advantage of its benefits impels us to call attention to some of those most evident. Climate and soil admirably adapted to live stock feeding, a large production of forage crops from which the largest monetary returns can be most economically secured in this way while the process of their transformation into meat carries with it the maintenance and improvement of the fertility of the soil and thus prevents depreciation in the efficiency and productive power of the factory, the largest cash markets in the world at the very doors of these feedlots, these factors should but emphasize the importance of the industry to every Michigan farmer. Add to these a large production of grain feeds and a

feeding is concentrated in small areas, as lamb feeding in the Fort Collins country of Colorado, it is far easier to consider supply than when it is scattered over much country, as is cattle feeding throughout the corn belt. Likewise demand must also be considered, and in this respect not only the actual consumers must be noted, but also their conditions as to wants and ability to supply those needs. Most men, and women and children, too, like beef, but how much they eat and whether it is a steak or a stew depends upon how much money they are making wherewith they can get the beef.

Supply and Demand.

There has been a loud and long-continued cry about scarcity of beef and the metropolitan press has howled about high prices, but because the city man can not get a porterhouse steak for the same price he could ten

feeders and tight money prevented many from filling feedlots, while the quarantine of the last two months has deterred many more. Judging from market receipts and ideas of well informed men the prospective beef supply is much less than heretofore.

The demand is undoubtedly less in some respects and larger in others. Industrial conditions are far from satisfactory, despite attempted press activities to the contrary, so that many people must curtail their allowance of beefsteak. On the other hand, the European war must undoubtedly create some demand for canned meats while our own people are likely to turn more to the cheaper cuts. Population in this country is increasing, and though their ability to buy may not increase proportionately, yet it is hardly possible that demand can materially decrease.

The Logical Deduction.

The meaning of all this to the man



The Future Supply of Fat Beeves and Other Meat-Producing Animals Must Come from the Farms Instead of the Range.

conditions are constantly arising and many of them develop suddenly and without warning. For instance, who could have foreseen the outbreak of the great European war or who can foretell either its immediate or ultimate effects upon the American live stock producer? Who could have foreseen three months ago the foot-and-mouth epidemic in this country and its baneful effects upon meat producers? These are but glaring examples of numerous untoward conditions that may arise at any instant and which but emphasize the complexity and impossibility of foretelling the future. Therefore what we may say regarding the outlook for the Michigan stock feeder is but a consideration of conditions as existing now and our understanding of their correlation and proportionate importance.

Michigan Favorably Situated.

Michigan's feeding industry is of large importance in her general agricultural operations. Through its channels many farmers market the products

proximity to several primary markets for various fattening feeds and you can easily see that but few sections are so favored by nature in making of them an unsurpassed feedlot as is this great state.

Factors in Determining Values.

The two great factors in determining market values are supply and demand. Everybody knows, that, but few men seem to fully realize that this is a large world and that there are many people and many conditions involved in composing the aggregate. A neighborhood, a township, a county, a state, a nation but represent the successive increasing gradations each of which influence the whole in proportion to their size and relative importance. For instance, the supply of fat cattle from all Michigan for a year is of relatively small importance to the American beef markets; and yet the supply of fat lambs from a few counties at a certain season makes a marked impression upon the largest markets at those times. Where much

or fifteen years ago, in spite of the fact that every product in whose manufacture he may be concerned, either directly or indirectly, has doubled and tripled and in many cases increased in value in even greater proportion, immediately this cry of scarcity, of high price, of trust, even of boycott. True enough, beef has been diminishing in supply, but it was because the producer could not secure a profit from making it. When he could sell his corn at the elevator and get more money than he could by feeding steers, what could be expected? And yet, go to the Omaha or Chicago market on any Monday and you will think there is plenty of beef. The course of the markets during December did not indicate much scarcity. And yet the total cattle receipts for 1914 at Chicago, which is the largest live stock market in the world, are the smallest in thirty years. Likewise the number of cattle on feed is considered by men best posted to be less than in several years. High prices of

feeding cattle must be clear. A fairly remunerative market is the probability. That it may be erratic and have low spots is not to be gainsaid, if December markets are any criterion, but most experts insist that scarcity and high markets follow gluts and slumps. The level-headed farmer feeder has no reason to get excited, but rather to feed his cattle to the best of his ability. When they are ready for market, or nearly so, he can exercise ordinary business judgment and sell when he can secure a fair price.

Our Lamb Feeding Industry.

Michigan is the pioneer sheep and lamb feeding state. It was her good farmers who were the first to raise fat lambs for market and they were also the first to see and develop the possibilities of fattening range lambs that were not fit for the block. Some of these pioneer feeders made large profits, but with the advent of ever-increasing competition for feeders, combined with a supply which did not

(Continued on page 62).

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Planning for the New Year.

It is well, and indeed helpful, for every farmer to study the season with reference to his work. It means the difference between driving and being driven. Business men have learned the necessity of buying stock and planning their business with reference to the season. If farmers are to familiarize themselves with their work and put it on a systematic basis right now is the time to make plans for the season's work. In the general management of his farm every farmer understands that he must plant in the spring, cultivate in the summer and harvest in the fall, but there are more definite distinctions that should be considered in his calculations. There is always an economical time for doing certain things on the farm and there are times when the doing of certain kinds of work conflicts with other work.

chunks that cannot be broken up and spread properly.

Plans should be made to grow young stock during the winter when they can have better care than during the spring and summer months. Young colts and calves that are properly fed and cared for during the winter months are ready to go out in the pasture as soon as the grass becomes somewhat hardened along in June. When we come to the smaller kinds of stock, such as lambs, pigs and chickens, plans must be made to have them come as early as consistent with the seasons and our conveniences for handling them when they arrive.

As you consult your plans for the coming season's work you will find yourself continually making notes in your "efficiency" book and what is more to the point, studying it ahead. A farm run on schedule time is a joy, and it can be done easily if you only think so.

Get a memorandum book right away. If the country store does not keep a good, large one—two or three pages for each week in the year, send to the city. "Nonsense, not practical," you say; "we are not prophets." Quite true, but the seasons are before you. You have formulated a general idea of the big things of the year. You know the things that must be done as well as the things you contemplate doing. If your brood mares are to have colts you know that your team ought to be planned so that you can spare their services at that particular time. You should know when the calves, pigs and lambs are to arrive so that if you are called away suddenly you can leave them in charge of a competent man, or if you are at home you can make plans for their reception.

One of the most valuable features of this "efficiency" book is that the slack times as well as the busy times are pointed out ahead. Many bits of work that can be done a few weeks ahead of time can be done during the slack season. The work for the whole year is done easier, with less anxiety, less rush, less expense and more profit if these odd jobs are done a few days or even a few months behind time as is so often the case when the farm is managed on a short-sighted schedule. Even the most industrious of men will fall far short of their possible accomplishments unless the entire farm is managed on a systematic basis. This system must be planned to furnish steady and profitable work for the men and equipment every week day during the year. It is the man with the faculty of keeping everything going along smoothly and steadily that gets his work completed on schedule time. It is not spasmodic effort to do two days' work in one and drive the men and teams beyond their strength, but the big average that counts most at the end of the year. The odd minutes, hours and days saved now and again tell mightily in summing up the results on the year's work.

If you are going to build or repair your buildings you can plan to haul the material before the roads are soft and before the farm work demands the services of the men and teams. As a general thing the spring time, immediately after sowing and planting, is the ideal time to repair farm buildings. Many farmers who have delayed this work until late in the fall, will agree with this advice. At this season the days are long and pleasant, the mechanics are not crowded with work and if one is handy with tools himself he can plan the work so that much of the inside work can be done at times when the weather is unfavorable for outside work. If the building is to have a stone or concrete foundation, as is the case with a house or dairy barn, there is no fear about the cold weather damaging the mortar. One of the most serious mistakes the writer ever made in building was that of beginning to remodel a dairy barn late in October. The weather turned cold unusually early and for almost two weeks it was necessary to work to great disadvantage with the cows in the barn and the men pinched up with the cold. On account of being rushed by the cold weather and the lack of time, a large part of the pipe fitting and plumbing had to be done over again the next year.

Another advantage of making plans for the year's business is the fact that it gives us an opportunity to figure the cost of labor, seeds, fertilizers, machinery and various other items and plan our year's business according to our finances. It is almost as important to know what the next year's expenses are likely to be as it is to know what the past year's income amounted to. By carefully going over our plans and estimating the cost of things needed for the coming season's activities it is possible to plan our business so that every dollar invested will add to the permanent value of the farm or help to increase the efficiency of the organization.

New York. W. MILTON KELLY.

CATALOG NOTICES.

The Hardie Sprayers, manufactured by the Hardie Mfg. Co., Hudson, Mich., are illustrated and described in a 50-page catalog sent upon request by this company. This is a profusely illustrated booklet showing many types of sprayers, spray pumps and engines for use in driving same, also mounted and portable hand pumps, sprayers, nozzles, fittings, etc. Mention Michigan Farmer when writing for same.

Isbell's Seed Annual for 1915 sent on request, by S. M. Isbell & Co., Jackson, Mich., is a liberally illustrated 120-page catalog listing a full line of farm, garden and flower seeds, including seed potatoes, etc.

Old Trusty incubators and brooders, manufactured by the M. M. Johnson Co., Clay Center, Nebr., are accurately described and illustrated in a handsome 110-page catalog published by this company. Aside from the descriptive matter, it contains a large amount of information on the operation of incubators and brooders, and poultry subjects in general.

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A FARMERS' SPORTSMEN ASSOCIATION.

I am quite proud of a local association in Shiawassee county, viz., that of the sportsmen. The name is, however, to the public view, a misnomer. A sportsman is usually associated with a "gent" in a khaki hunting jacket accompanied by a bird dog or a hound, and who, careless in closing gates, tries his high-priced gun on almost every living object.

This is the very opposite of the work and belief of the men who make up the Shiawassee County Sportsmen's Association, and it is against these "killers" of wild life that this body is urging a relentless warfare. The real sportsmen who associate are trying to restore and recreate in a limited way, national conditions and wild life. Nature was profligate of wild life, as was man, in its destruction. Few boys in southern Michigan have ever heard the drumming of the partridge in the springtime and the whippoorwill's call is but a memory, or a tale handed down. Then there was that Beau Brummel of the field the prairie chicken cock, who, with his grotesque antics at love making time was the real country cut-up, but now so rarely seen.

It is in order to restore in part the lost conditions that these sportsmen's associations are securing game preserves or refuges where hunting is absolutely prohibited, even to the owner of the land. In these protected areas of forest, field and swamp there is to be everlasting protection and, like the millenium, there is nothing to make them afraid. The time of peace be-



Prize-Winning Contestants in Huron County Bean Contest.

tween wild life and humanity has arrived and is proclaimed by notices on these preserves. Land owners who have advanced ideas are solicited to secure these refuges where wild life may live and propagate. To those having these ideas of conservation not only is the ideal being served, but also the extremely practical and financial to the farmer.

Among the birds and animals we have the most efficient rural crop police ever created or possible to create. On the night police force is that ill-odored animal, the skunk, who cleans up his beat of mice, moles and grubs. Grafters there are, but rarely, who seek the chicken coop, but these give the species a bad reputation and we forget the good they do. Among the birds the woodpecker family go up and around each tree, looking for insect enemies. The warblers and vireos carefully examine the leaves on both sides seeking for the banditti against vegetable life. The "Bob Whites" call should remind us that his services, if paid for, approximates \$2 per year in insects and weed seed destroyed. Bob White sends us no bills but we might join the Sportsmen's Association and provide for his care and a preserve where he may be protected. Pennsylvania, by mistake, called all hawks and owls grafting police and waged a war of destruction on these members of the farmer's protectorate, only to suffer enormous losses from insect attacks.

Attend some of these sportsmen's meetings and catch the spirit of the new view. There is need for the eradication of the spirit of the barbarian and associating ourselves with those who are conserving wild life. The readers of the Michigan Farmer who are annoyed by trespassers and "killers" should join or form an association of sportsmen. You will have their aid and protection from the disreputable class. In the meantime do not unnecessarily deprive the real sportsman of the pleasure of a rabbit hunt and let him clean up on the always surplus of rabbits who do not work on the police force.

Kansas farmers have added to their food supply by farm fish ponds. Natural depressions excavated by team and scraper are not at all rare and when fed by springs or flowing water are a valuable adjunct to the farm. The state's advices with the proper fish for stocking is at the disposal of all citizens of Michigan.

Shiawassee Co. J. N. McBRIDE.

ANOTHER DEVELOPMENT OF THE BOY CLUB CONTEST.

Michigan Farmer readers are somewhat familiar with the boy and girl club movement in Michigan and the growing of staple crops by boys and girls in competition for prize awards.

A new development of this same principle conducted by private enterprise is noted in the bean contest which was conducted in four townships of Huron county this year under the auspices of A. L. Chamberlain, president of a local produce company and chairman of the committee of the

Michigan Bean Jobbers' Association which last year conducted a propaganda of the planting of disease-free seed throughout the bean growing sections of Michigan.

This contest was conducted under rules formulated by Mr. Chamberlain and approved by Dr. Mumford and Prof. Muncie, of M. A. C., and President Welch of the Bean Jobbers' Association. Last month when the scores had been completed and the awards made, a public meeting was held in the city of Harbor Beach, at which time the prizes were awarded and an educational program was given, including an illustrated lecture by Prof. Muncie on bean diseases, and talks on cultural methods by other speakers.

The accompanying cut is from a photograph of the prize winners in the contest, all but one of whom are in the picture. The badge bearing the cross designates Emmanuel Stacie, the fourteen-year-old boy who won the grand prize of \$20 in gold.

The scores were based not alone on quantity but on the quality of the product as well, a very comprehensive score card having been provided for the occasion. Without question, contests of this kind are very beneficial, not only in interesting the young people in agriculture, but as well in promoting a general interest in the use of better methods of production in any agricultural community where they are held.

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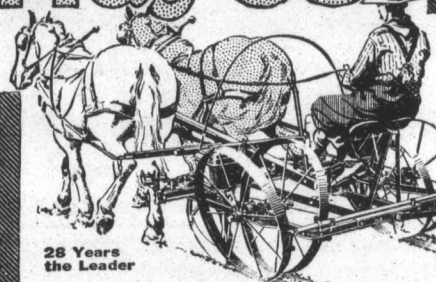
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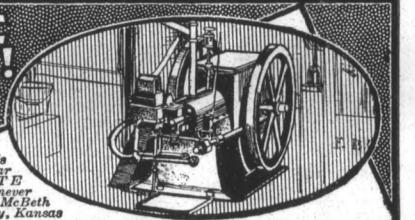
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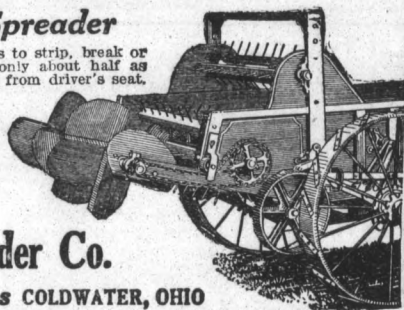
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The Best Apples for Michigan.

THE market men of the middle west are strong champions of the Northern Spy if their answers to the questions included in this survey may be taken as any criterion.

This variety led the list of their choices for the apples most in demand on their market, the apple which averaged the highest price on their market, and the variety which the greatest number would personally plant in an orchard of their own. In order to test their choice in this last matter, the question was then asked, "Do you think an orchard of Northern Spies is a good investment, despite the long time required for this variety to come into bearing?" Their answers only served to emphasize the overwhelming popularity of this variety, for 65 of the market men, or 90.3 per cent, answered in the affirmative, but seven men, or 9.7 per cent, claiming that it would not be a good investment. One man objected to it on the grounds that it was a "shy bearer" and another on the old charge that it was "too long to wait."

It may take from 10 to 15 years for an orchard of this variety to come into bearing, but viewed as a long time investment from the business standpoint, there is no doubt of the dividend paying ability of the Northern Spy, even on the accrued overhead expenses which have added up during the years of non-production.

Spy Favorite Michigan Variety.

When in addition it is considered that fillers may be planted of either peaches or early bearing varieties of apples, or that bush fruits or cultivated truck crops may be grown between the trees, and thus the years of non-production be made to at least pay for expenses, it is plain that this investment may be made even more profitable. There was a marked tendency in the answers to advise against this planting of Northern Spies alone in an orchard, and that some early bearing varieties should be interplanted, as the following extracts show: "Yes, plant Spies but mix them with other varieties," (three answers). "Use Duchess and Wealthies as fillers," and "Mix with Steele Red and Jonathan."

Spy Orchard a Good Investment.

There is no doubt but that the Northern Spy should be grown more widely in Michigan, because, as one man wrote, "so few states can grow them at all." One man who has had much experience in renting Michigan orchards, wrote of his experience as follows: "Have leased the largest Spy orchard in Michigan, which has proven a better investment than any of our other orchards there." Two men considered this variety worth "double the Baldwin or Greening," but several men expressed their opinions that it was exceeded by the Red Canada.

Of course, some growers who are prejudiced against this variety will claim that the market men are not acquainted with the problems of the grower and that consequently their judgment is biased. Consequently I shall devote the remainder of the article to a brief study of the points for and against each of the ten varieties chosen by the commission men as the best to plant in Michigan, looked at from all important commercial angles.

The Northern Spy in addition to the points already mentioned, is superior to either the Baldwin or Rhode Island Greening in flavor, when well grown. It is a most excellent winter apple, being suitable for either culinary or dessert use, as the flesh is very juicy, crisp and tender. Its size, beauty and fine flavor quality usually cause it to command high prices. It must be handled carefully because of its thin skin, and juicy, tender flesh, or much shrinkage in storage will follow. Its season is from November to the end of the cold storage period. The tree

is hardy and healthy but both the fruit and foliage is susceptible to scab injury.

Red Canada Popular Near Detroit.

The Red Canada belongs in the same group with the Baldwin and Esopus Spitzenburg and is of superior quality, though where it is grown on clay soils the quality is apt to suffer. The limit for commercial storage is January or February and in cold storage April. One objection is lodged against the tree in that it is not hardy and grows but moderately. This variety will find staunch supporters in the territory adjacent to the Detroit market.

The Oldenburg is one of the most valuable of the Russian apples thus far introduced into this country and possesses excellent culinary qualities. It stands shipment pretty well and sells for a satisfactory price for a variety of its season, but is rather perishable and apt to deteriorate rather rapidly. It is in season during late August and September but may be used for culinary purposes before it is fully ripe. One of the greatest points in favor of the Oldenburg is its great hardness.

Another variety which is especially valuable because of its ability to withstand severe winters is the Wealthy. Furthermore, being a red apple, it sells well and is good in quality for either dessert or culinary uses. Its season is from October to early winter or midwinter, and in ordinary storage its commercial limit is October, but in cold storage it may be kept until January or later.

A Good Early Variety.

One of the best of the early apples is the Yellow Transparent which is excellent for culinary purposes and acceptable for dessert. However, it must be handled with extra care as it bruises readily, due to its delicate color and tender skin. Several pickings of the crop are required as it begins to ripen in July and continues through a period of three to four weeks. The tree is a moderately vigorous grower, hardy, healthy and comes into bearing very young.

The Baldwin is a bright red winter apple above medium in size, of very good quality, and which stands handling well because of its firm texture and thick skin. For an export apple and for the cold storage trade it is one of the leading varieties. The tree is a strong grower, long lived and vigorous, somewhat slow in reaching bearing maturity, but when mature bears very abundantly. It is well adapted for general market, dessert and culinary uses. The season is from November to March or April in common storage, to May or later in cold storage.

Greening Good for Culinary Purposes.

The apple which is with the Spitzenburg in the front rank of the cooking apples is the Rhode Island Greening. This variety is a good apple to plant with the Baldwin, inasmuch as it ripens a little earlier in the season and can be picked and marketed before it is necessary to begin with the harvesting of the Baldwin. The tree is long lived, hardy, strong and vigorous and usually pretty healthy, although the foliage and fruit are often injured by scab and the limbs are somewhat susceptible to canker. In ordinary storage it is in season from October to March or April and its common commercial limit is January or early February. It may be held commercially in cold storage until March or April.

The Tompkins King is a beautiful red apple with enough yellow mixed in to give a contrasting effect, and is symmetrical, uniformly large, and excellent in quality either for dessert or culinary uses. It is well adapted for marketing in fancy packages and is in

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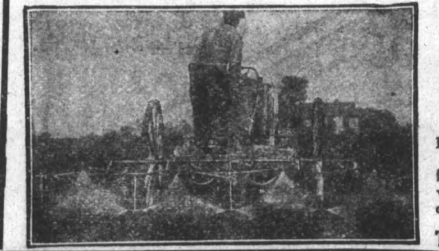
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good demand for both general and special trade, especially in the late autumn and early winter. It is in season from late September to early January, although with cold storage the fruit may be held until February and later. On account of the short life of the tree, lack of vigor and tendency to be a shy bearer, it is not extensively grown in commercial orchards. Other points against it are its susceptibility to sun scald, canker and collar root, and its tendency to winter kill. For these reasons this variety should be top worked on some hardier stock, such as the Tolman Sweet, Northern Spy or Rhode Island Greening.

Other Good Varieties.

The Maiden Blush is a beautiful apple of pale yellow color with a crimson cheek, and though not superior in flavor is values especially for culinary and market purposes. The season is from September to December. It is a good variety for commercial orchards because the tree is a fine grower, hardy, pretty long-lived, bears rather young and is a reliable cropper.

The Russets are especially valuable because of their long-keeping qualities, but since the use of cold storage has lengthened the season of red apples, they have not proven so profitable. It is an excellent storage variety, and is particularly in demand for shipment to northwestern and southern markets and for export. The tree is hardy. The season is from December to April or later.

Having now reviewed these apples from all angles we find that the choices of the market men have met all requirements from both market and orchard standards, with the possible exceptions of the Tompkins King and Russets. Therefore, with these eliminated, the final lineup of the best varieties to be planted in Michigan stands as follows: Northern Spy, Baldwin, Rhode Island Greening, Oldenburg, Red Canada, Wealthy, Maiden Blush, and Yellow Transparent.

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THE WAGENER APPLE.

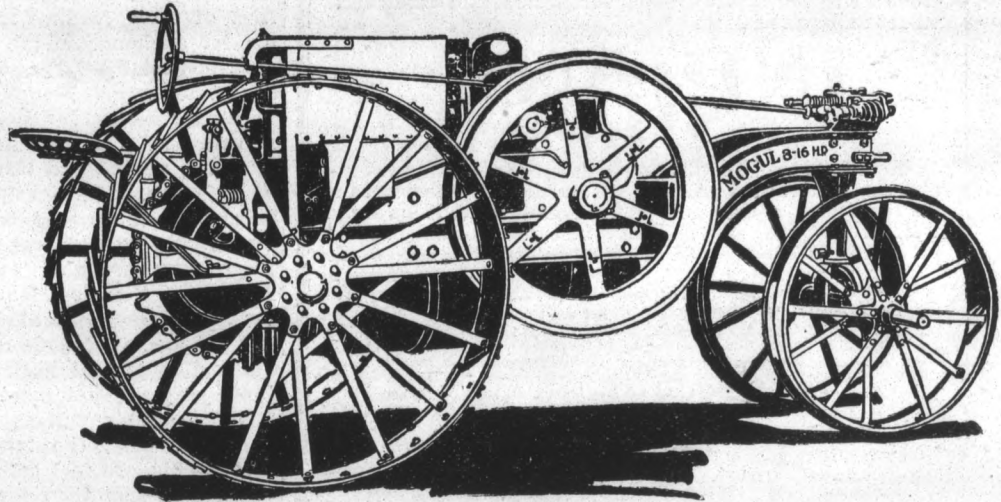
This variety is known for its early productiveness and lack of vigorous growth; the tree rarely attains any great size. For these reasons it is considered one of the best winter varieties to be used for filler purposes in the orchard. While it is a variety which belongs to the Spy type of apple it is the antithesis of that variety in respect to growth, longevity, and early productiveness, and needs just the opposite in the selection of soil conditions and treatment in pruning.

On light soils this variety often makes stunted growth and overbears. Therefore it should be put on the heavier apple soils to encourage the production of wood growth instead of forming fruit spurs. Also, the pruning should consist more of cutting out the spurs which contain the fruit spurs than the larger limbs.

Well grown this variety is very good for both dessert and culinary purposes. Its color and general appearance also make it appeal to the eye, which is an important factor in marketing fruit. Probably because it is so freely set on account of its early productiveness, it brings a price about that of the Baldwin and sometimes a shade lower. The fact that it often bears fruit small in size undoubtedly has something to do with the price received on the market. In storage it does not keep as well as many other varieties; February being about the limit in cold storage. It is very likely to scald and after scalding it goes down fast.

This variety does well in all parts of the lower peninsula and best on the heavier apple soils. It is somewhat susceptible to the black rot canker and on account of that and its poor growth it would be an advantage to grow it top-worked on more vigorous stock.

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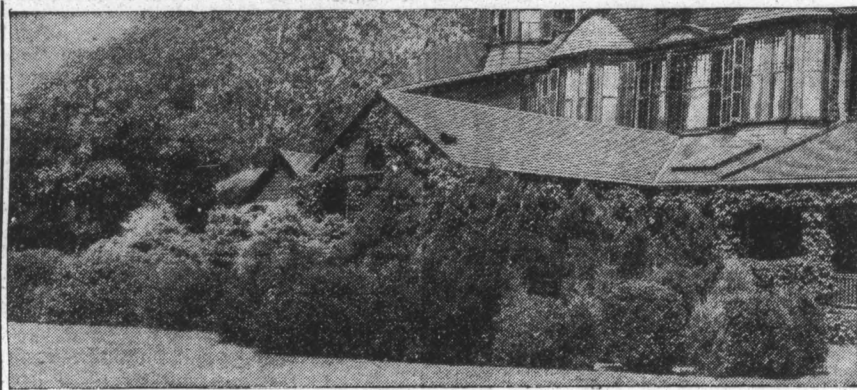
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THE OUTLOOK FOR MICHIGAN STOCK FEEDERS.

(Continued from first page.)

increase, feeder prices were elevated and profits correspondingly diminished. For the farmers in other states quickly came to realize the possibilities of lamb feeding and raised the bid for a chance in the game. Many quit, especially large operators and speculators.

Lamb feeders, for the fattening of mature sheep is practically inconsequential, are of two classes, the men who feed and fatten the lambs they raise, and those who buy their feeders, mostly western range lambs. The most men probably qualify in the first class, the most lambs in the latter. The conditions affecting the market prospects of both are very similar and a careful notice of some of them may prove interesting and possibly profitable. Most important is, unquestionably, the total number on feed. This, we feel safe in saying, is materially less than for many years. Northern Colorado is feeding its full quota, and likewise is western Nebraska. Southern Colorado is short, probably 25 per cent. Iowa, which has been one of the largest lamb fatteners is way short of last year, 25 to 40 per cent, judged by feeder shipments from market points, and there was practically no direct movement from ranges to these feedlots. Feedlots east of Chicago are not up to former years. From all obtainable information Michigan as a whole is way short.

The lambs were simply not to be obtained. Forced liquidation of range bands, due to encroachments of settlers and dry farmers, and timidity of bankers, have greatly reduced the total number of sheep now running on the range. Few men seem to as yet realize the amount of this reduction. The 1914 lamb crop was of generally good percentage, but the ewe end was nearly all held to replace the old ewes. The fat lamb sections, as Idaho, had few feeders in their marketings. These all combined to largely reduce the available supply of feeders. Figures of shipments from market centers substantiate this. Add to this the status of the native lamb supply. Many good farmers lost their senses and sacrificed their flocks in the last two years so the native supplies are far less. The firmness of the price levels, and at times even their loftiness when business generally was slow and money tight but add evidence of short supply. Had it not been for the impossibility of many feeders to secure money this last fall it is hard to tell to what heights feeder prices would have soared.

To be sure, there are many lambs being fattened but there is a place for every one, and at a good price. In fact, it would not be at all surprising if new price records were established for prime lambs before the season closes. The demand for mutton has been gradually increasing for several years, and in spite of this we are confronted with the anomaly of a decreasing supply. An important factor of the demand is that it has developed among people who can afford to buy and pay good prices, while industrial depression hardly affects this demand so perceptibly as it does that of beef and pork.

While many ridicule the idea, yet it is a fact that wool prices have a potent influence on fat lamb values. An active market for wool at a fair price always induces the packer to buy lambs. That pelt means a no small profit to him. Present indications are that wool values, especially for those grades which prevail on fat lambs will be fairly good and the demand strong. This is a factor which helps the feeder.

The general conditions of supply and demand are thus seen to be unusually favorable to the live stock feeder. That they may not operate on

the market every day is patent. Neither will they make good fat animals out of poor, illy-fed ones. Judgment is required in marketing, and the most profitable lots are not always those which get the highest price. Time of marketing should be determined more by the condition of the animals than by the desire and the guessing ability of the feeder to hit the high spot. Most important is good care and plenty of feed. It takes grain to make fat meat and that is the kind that brings the money.

In these times when men in many lines of business are affected by greater or less depression, it seems to us as if the outlook for the farmer feeder is extremely bright in comparison. The day of cheap meat in this country has passed. Free range has gone. Cheap feed is no more. With their passing went the big speculator. The production of good meat is an established business. Its factory is the farm and the ranch. It requires capital, brains, and labor. The more of these involved, and especially the two latter, the greater the profits. It is up to the live progressive farmer to get into this game and get his share. There is no section in this great country that supplies greater natural advantages which operate for the benefit of the producer of meat, whether it be beef, pork, or mutton, than does the good old state of Michigan. The man who makes a settled policy of feeding every year the capacity of his factory, and markets his product in accordance with his individual conditions and ordinary business judgment has as substantial profitable business as the average man can reasonably desire.

The eleventh of 52 special articles to be published in consecutive issues. This article was just written by Mr. Wood after a personal investigation of live stock conditions in the west, and the corn belt, including Michigan, and on account of its peculiarly timely nature was substituted for the special article on "Canning Factory Crops for the General Farmer," announced for this issue. That article will appear in an early number.—Eds.

LIVE STOCK NEWS.

The Chicago sheep and lamb market has been greatly injured by the quarantine system, as it has been impossible for shippers to buy there, and the local packers naturally took advantage of the situation, having no competition. In short there have been two Chicago markets, consisting of the quarantined and the unquarantined. In the quarantined division it has been impossible to get stock yarded early in the day, and sometimes it has been eight or nine o'clock at night before car lots were weighed. This means a great shrinkage, and in every way owners have suffered. Unfortunately, a large proportion of the receipts have been on the feeder order, and owners should know better than to send in such stock, particularly at a time when no feeders can be sent from Chicago. One of the leading sheep sellers in the Chicago stock yards said the other day that about 40 per cent of the lambs offered have been of the feeder type and should be kept at home and finished.

A great many hogs arriving on the Chicago market have been placed in the quarantined division of the stock yards, and such consignments are sold at a serious disadvantage to owners, especially if the swine offered happen to be of rather ordinary quality. There is frequently a difference of 20 cents per 100 lbs. or more in the prices paid between hogs in quarantine and those placed in the unquarantined division, and these abnormal conditions are expected to last until the quarantine restrictions are wholly removed. Progress in stamping out the foot-and-mouth disease is being made right along, but the work is necessarily rather slow.

H. L. Barnes, the well-known banker and stockman of McLean county, Illinois, says no cattle are going on feed in that region, and few are being fed by farmers thereabouts, although there is a great abundance of rough feed. Similar statements are made by other stockmen of the middle west.

J. S. Minch, a large land owner and stockman of White county, Indiana, arrived in the Chicago stock yards on a recent day, bringing in 16 cars of fat cattle, hogs and sheep, one of the largest individual stock shipments ever made from Indiana.

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Organization Benefits Holstein Breeders.

IN his annual address before the Central Michigan Holstein Breeders' Association, President John Hull spoke as follows regarding the work of the association:

Our rosters have been well scattered over the country and have been received with universal favor. We are beginning to see the results of such advertising and have every right to expect continued results along this line. Our association by its location, having the capitol and the college as its center, has a large advantage over the other associations of the state and it seems to me that by continued effort we can soon not only be the largest but the most helpful to our individual members of any of the sister organizations.

Increase in Registered Stock.

A few years ago the matter of consignment sale was taken up by this association but it was found that our holdings were too small to make such a move advisable. However, the great increase in membership and in our individual holdings brought about a change. At least four times the number of registered animals are now owned in the territory represented by our association as were six years ago, and I believe that the time is now at hand when this association should take steps toward holding such a sale. Perhaps not as an individual money maker, for at least for a time these sales would be of no benefit to us, but as an advertising medium it will fully compensate us for such loss as might be sustained. Having the college centrally situated, with all its natural advantages for carrying on a sale, we should no longer delay improving the opportunity. I would, therefore recommend that this matter be taken up at this meeting, arrangements made, suitable committees appointed, so that we can hold the first of our annual consignment sales as early as the coming fall.

Picnic Meetings Valuable.

A year ago, at our annual meeting, when I invited the association and its friends to meet with us at Silver Creek Farm, I little thought of the benefit that would be derived not only to ourselves but to our community, from such a meeting. Some of the criticisms as to our plans on the farm were well received and will cause improvements that will be a source of pleasure to us in the future. Although the day was cold and disagreeable a goodly number of our neighbors met with our membership and, in my judgment, in no other way could the benefits and pleasures of breeding good animals, especially Holsteins, be brought so emphatically before these people.

An equally well attended picnic was held at the home of Creyts Brothers in September. Too much cannot be said of the value to any cause of those interested in the cause meeting together and profiting by the interchange of thought and experience.

I am satisfied that one of the greatest benefits to be derived from our picnics comes from incentive and inspiration gained by personal contact, which inspiration sends us back to our individual business or calling determined to make a greater effort to succeed.

Michigan Foremost in Holstein Cows.

At our national meeting at Chicago, in June, it was demonstrated to the eastern breeders that we in the central and western states have as much enthusiasm and interest as the older breeders in the east. We have by our talks and advertising told the world that Michigan is the heart of the Holstein business, and now it behooves us to make these assertions good. I am proud to say that since that time we have succeeded in securing in Michigan one more of the world's record cows, and I still be-

lieve, as I said a year ago, that Michigan holds in reserve the first fifty-pound cow. The advantages we have of having the president of our National Association in our state should not be overlooked by a single breeder of our state.

The Holstein Not a Beef Animal.

Not long ago those who are members of the National Association received a circular from Secretary Houghton which extolled the virtues of the Holstein as a beef producer, said circular claiming that our breed would produce not only more gain in pounds of dressed carcass, but a larger per cent of the high-priced cuts of meat than the so-called beef breeds. It cited experiments to prove the above assertion. In my judgment such advertising is a step in the wrong direction. The Holstein cow is purely a dairy animal. I do not want it understood that I do not favor a good individual, but that individual should be a good dairy type. If we are to instruct the public we should show the specimens of the breed good, not only as individuals but as producers, with a preference towards the latter. Am sorry to say that many of the animals that are being shown, and not only shown but winning prizes, are not good producing animals. I speak of this in order that I may if possible so impress upon the minds of the members of this association the fact that the primary object in our breeding operations is to breed an animal that is pre-eminently an animal bred for the production of large quantities of the best of dairy products, and let us advertise and show how such an animal to the public and not an animal that will please the eye, regardless of producing ability.

PROPER AMOUNT OF SALT FOR COWS.

Is it harmful to milch cows to give too freely of salt? Will it dry up the milk flow? How much and how often should salt be given? W. H. R.

A cow should have about two ounces of salt daily per 1,000 pounds of live weight. A little more will not hurt them, but two ounces is sufficient. We give our cows salt twice each day and sprinkle it on the silage about one ounce morning and night. I am sure this is better than giving them a large amount once a week, for they are liable then to eat more than is good for them. If the cows are given free access to salt, they will not eat enough to injure them. If the manger is so constructed that you can keep salt before them all the time, that is a good way, but usually this cannot be done, so the best way is to give them salt regularly at least once a day.

IS COTTONSEED MEAL NEEDED?

Am I feeding my cows profitably with the feed I have? I am feeding cornstalks once a day and mixed hay, clover and timothy, mostly clover, twice a day. For grain I am feeding equal parts, in bulk, of corn and cob meal and ground oats twice a day at the rate of 3½ lbs. to every 10 lbs. of milk a cow gives. I also feed 4 qts. of potatoes once a day to each cow. Would cottonseed meal be of any value? I have no silo. A. L. D.

This is a case where cottonseed meal or some other food high in protein is necessary to balance the food-stuffs already in the ration. There is nothing better than cottonseed meal for this purpose. I would recommend feeding two pounds per day of cottonseed meal to each cow. Then cut down on the corn and cob meal and ground oats in proportion; you are feeding grain enough, but it does not contain sufficient protein for best results. You could cut down on the grain ration so the ration with cottonseed meal would not cost you any more than the present ration, and I believe, get better results.



DE LAVAL BUTTER Best as usual at the great 1914 National Dairy Show

BUTTER made from cream separated by De Laval Separators made the usual clean sweep of all highest awards at the great National Dairy Show held in Chicago in October 1914, as it has always done at every convention of the National Buttermakers Association or a Dairy Show since the beginning of these important annual contests in 1892. The Sweepstakes and Gold Medal awards in the various classes were as follows:

Whole Milk Creamery Butter

The highest award in the Whole Milk Creamery Butter Class was made to Thomas Sadler, of Oelwein, Iowa, upon butter made with a De Laval Power or Factory Separator—score, 96½.

Gathered Cream Creamery Butter

The highest award in the important Gathered Cream Creamery Butter Class was made to the United

Dairy Co., of Chicago, which uses both De Laval Separators and Milk Clarifiers, the prize winning butter being made from cream gathered mainly from farm users of De Laval Hand Separators—score, 96½.

Farm Dairy Butter

The highest award in the Farm Dairy or Home-Made Butter Class was made to Austin C. Higgins, of Andover, Mass., who happily is not only a De Laval user but a De Laval Local Agent—score, 96.

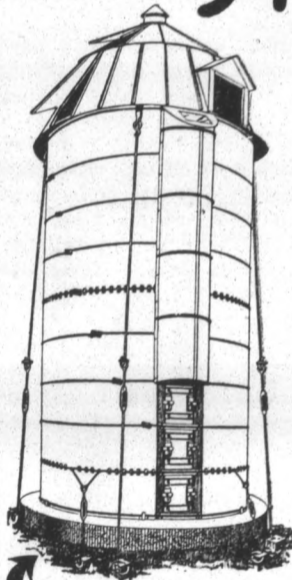
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DETROIT, JAN. 16, 1915.

CURRENT COMMENT.

State Laws in the Making.

The Legislature convened on Wednesday last week and at once proceeded to the routine work of organization. It is, of course, too early to even predict the probable trend of legislation which will be enacted by this body. If, however, the suggestion made by Governor Ferris in his message, that better and fewer laws be enacted is adopted, one of the first things which will be done will be the establishment of a joint committee or the making of some other provision whereby bills before the Legislature may be more carefully scanned for constitutional imperfections.

There has always been a considerable percentage of the laws passed which would not bear the scrutiny of the Supreme Court and which were declared unconstitutional by that body. This number has apparently increased in recent years and the suggestion of the adoption of some means to obviate this difficulty is one which will commend itself to every thoughtful citizen.

One important recommendation made by the Governor in his message was the granting to the Governor of power to appoint all state officers below Lieutenant-Governor. This is in line with the short ballot propaganda which has found many friends among all parties throughout the country, but is a change so radical in character that there is much doubt as to its favorable reception in Michigan, either within or without the Legislature.

Another important recommendation in the Governor's message was one advocating the establishment of a Department of Markets or a Market Commission. He called attention especially to the New York Department of Foods and Markets established early in 1914, as worthy of the careful study of the Legislature and pointed out the need of undertaking such an activity by the state.

Several recommendations were made with regard to changes in the tax laws, the most important of which was perhaps a recommendation for the repeal of the present mortgage tax law and substituting therefor a law providing for an annual fixed payment of taxes upon credits, whether secured or unsecured. Another recommendation was made for a law which would establish a maximum rate of taxation for state, county, municipal and school purposes beyond which limit taxing officers could not go without special authorization in each case.

The Governor would also change the personnel of the state board of equalization by making it consist of the tax commissioners, the attorney general and the governor of the state. He also advocated a law providing for the assessment of interurban railroad, light and power companies and other corporations whose property extends through more than one assessing district by the state board of assessors, and the equitable apportionment of such assessment among assessing districts through which the properties run.

Various recommendations were made for changes in election laws. Recommendations which have a direct effect upon business as now conducted favor the creation of a public utilities commission, the joining with other states in the enactment of a uniform "blue sky" law to be prepared by a committee of attorney generals of the various states, establishment of an arbitration board to settle industrial disputes, the placing of private banks under state supervision, etc. Among the public questions touched upon in the Governor's message was the establishment of a reformatory for women.

The work of the Legislature will be carefully followed in these columns as the session develops to the point where actual business is being accomplished.

The Automobile Show.

The Detroit Automobile Show, which opens January 16th and continues until the twenty-third, is an event of interest to the farmers of the state as well as people living in the metropolis. Here all lines of automobiles, commercial as well as pleasure vehicles and accessories and equipment for same, are exhibited in one building, permitting visitors to gain a wider knowledge of the season's construction than could be acquired in a much longer time outside of this show. The show this year is to be held in a new building erected by a local lumber company on West Jefferson avenue between Junction and Campbell avenues. This is a little farther from the downtown section of Detroit than was the location of last year's show, and the available floor space is much greater than has yet been available for any show. It is expected that the show will exceed in interest any other which has been held, for the reason that while it had been thought that automobile development had previously reached a high plane, and that future construction would be along established lines, yet there have been more and greater developments during the past year which will be presented in the automobiles shown at this event than ever before since the history of the industry. Every automobile owner or prospective owner who can do so should attend this show in order to keep up with the development of the modern automobile, both as a pleasure and a utility vehicle.

HAPPENINGS OF THE WEEK.

Foreign. The European War.—Reports do not indicate any large movement of troops the past week. Heavy snows have made it difficult to handle forces in the east and only minor engagements have characterized the fighting between the German-Austrian forces and the Russians. The latter have made slight advances south of the Mlawa River. They appear also to be successful in forcing the Austrians from southern Galicia. Their operations, however, in Hungary, which they have reached through the Carpathian passes would appear to be of only minor importance. The Russians have completely defeated the Turkish troops operating in the Caucasus Mountains. The latest information is, however, that the Turks are endeavoring to re-organize the routed troops. Some of the forts defending the Dardanelles are said to have been captured by the Allied fleets. The indications are that Roumania has already declared war against Austria and her allies and it is presumed that Italy has done likewise. A report early this week stated that a fleet had already been dispatched by the naval

department to participate in active fighting. In the west the French have made some progress in Alsace-Lorraine, while the general line to the west has changed little except at Lille, France, which is now claimed to be in the hands of Allied troops. If this report is confirmed it shows that a considerable advance has been made at this point by the English and French soldiers. A raid was made on Dunkirk and along the English channel by German aeroplanes Sunday.

Troops under General Villa defeated the constitutionalist forces at Saltillo, Mexico, last week. Arrangements are about completed for the establishment of a neutral zone between Mexico and the United States to avoid complications arising between the two countries through fighting along the border.

Great Britain has answered the protest of the United States government on delays to American cargoes through their being held up for examination by British warships. In general the note was friendly yet frank. It asks for proofs of damage being done to American commerce with neutral nations. The note explains that England will hold up vessels only when necessary for her national safety.

National. It is alleged that a bread trust exists in St. Louis, Mo., and a suit has been started by the state to oust the concern from doing business in that state.

Marshall P. Wilder, the noted American humorist and author, died in St. Paul, Minn., Sunday at the age of fifty-five. A report by the United States district engineer shows that Duluth, Minn., ranks second to New York city in the amount of ship tonnage of freight handled.

Many factories have opened up since the first of the year. In Detroit the large stove works have either started manufacturing again or are about to do so. Among the several steel plants that have begun operations or increased their capacity is the Bethlehem Works of Pennsylvania where 11,000 men are now on the pay roll. Orders of this last concern for foreign delivery aggregate in value \$135,000,000.

There is hope of a settlement of the coal miners' strike at Fort Smith, Ark., through the purchase of the mining properties by the labor unions. The workmen's organizations have made a bid for the property and it is expected that all matters between the present company and the miners will be settled providing the offer is accepted.

MICHIGAN FARMERS' INSTITUTES.

- In addition to the list previously published, the following Institutes will be held during the last two weeks of January: County Institutes.—Charlevoix Co., East Jordan, Jan. 26-27. Tuscola Co., Caro, Jan. 29-30. One-Day Institutes.—St. Joseph Co., Constantine, Jan. 14; Parkville, Jan. 15-16; Mendon, Jan. 18; Centerville, Jan. 19; Leonidas, Jan. 20; Burr Oak, Jan. 21. Livingston Co., Gregory, Jan. 16; Hamburg, Jan. 18; Brighton, Jan. 20; Oak Grove, Jan. 21; Fowlerville, Jan. 22; Pinckney, Jan. 23. Jackson Co., Hanover, Jan. 18; Liberty, Jan. 19; Napoleon, Jan. 20; Norvell, Jan. 21; Michigan Center, Jan. 22; Jackson, Jan. 23. Van Buren Co., Almena, Jan. 18; Lawrence, Jan. 19; Hartford, Jan. 20; Keeler, Jan. 21; Covert, Jan. 22; Lacota, Jan. 23; Bangor, Jan. 25; Bloomington, Jan. 26; Kendalls, Jan. 27; Paw Paw, Jan. 28. Emmet Co., Bear Creek, Jan. 20; Epsilon, Jan. 21; Alanson, Jan. 22; Brutus, Jan. 23; Island View, Jan. 25; Stutsmanville, Jan. 26. Tuscola Co., Unionville, Jan. 20; Akron, Jan. 21; Reese, Jan. 22; Vasar, Jan. 23; Millington, Jan. 25; Fostoria, Jan. 26; Mayville, Jan. 27; Cass City, Jan. 28. Macomb Co., Warren, Jan. 22; Utica, Jan. 23; Fraser, Jan. 25; Meade, Jan. 26. Bay Co., County Line Grange, Jan. 23; Pinconning, Jan. 25. Allegan Co., Trowbridge, Jan. 25; Chicora, Jan. 26; Leisure, Jan. 27; Glenn, Jan. 28; Ganges, Jan. 29; Douglas, Jan. 30. Genesee Co., Davison, Jan. 25; Gd. Blanc, Jan. 26; Swartz Creek, Jan. 27; Linden, Jan. 28; Gaines, Jan. 29-30. Arenac Co., Moores Junction, Jan. 26; Sterling, Jan. 27; Pine River, Jan. 28. Clinton Co., Duplain, Jan. 26; Greenbush Twp., Jan. 27; Fowler, Jan. 28. Ogemaw Co., Prescott, Jan. 29-30; Rose City, Feb. 1-2. Lenawee Co., Blissfield, Jan. 30; Madison, Feb. 1; Morenci, Feb. 2; Ogdan, Feb. 3; Tecumseh, Feb. 4; Macon, Feb. 5; Holloway, Feb. 6. Farmers' Week, Agricultural College, East Lansing, March 1-6.

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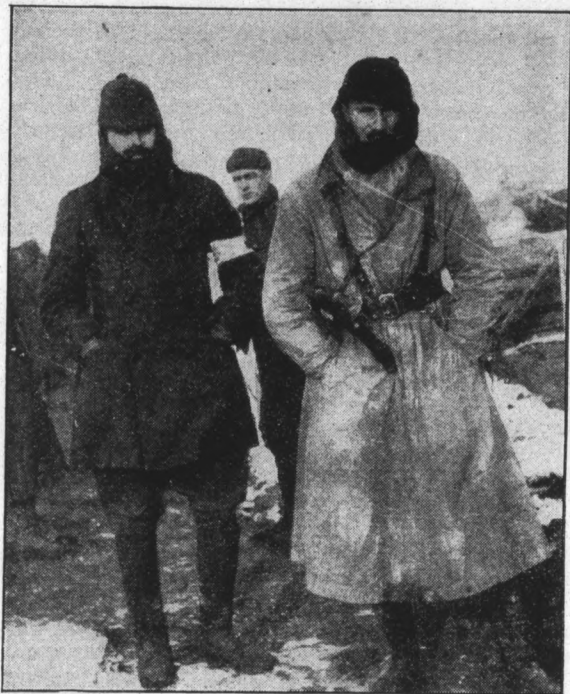
LITERATURE
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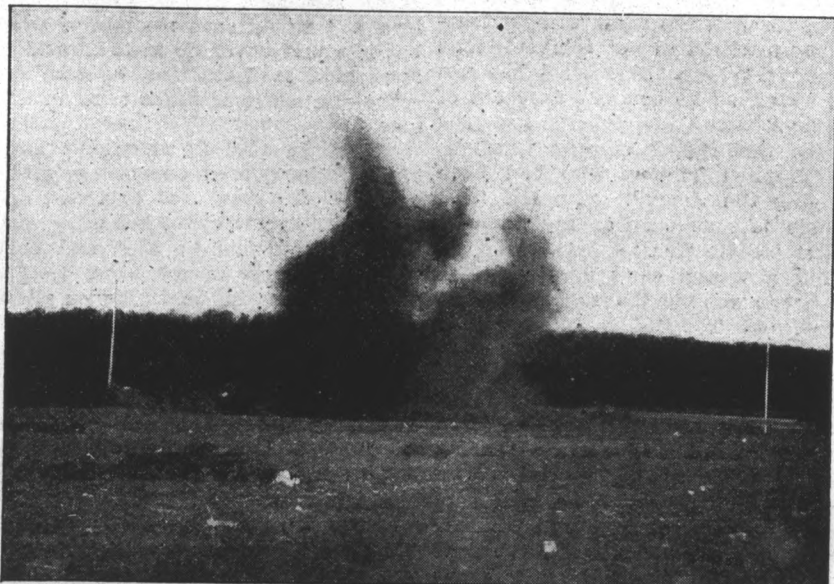
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Opening the Skating Season at Van Cortlandt Park, New York.

Mr. Bigger Solves the Domestic Problem. —By W. C. KOHLER.

MARTHA, I'm clean beat out running over the country to find somebody to help you," said Mr. Bigger, mopping his heated brow. "Emmy Pearson said she wouldn't turn her hand over for nobody till her berries were out of the way, and Grandma Brown is visiting her son, and Aunt Mandy Phelps is on the sick list—well, there isn't an able-bodied female in this whole county—that is, one that goes out to help. I'll tell you what I'll do. I'll let you have Bob till this extra work is over. Bob don't like the hot sun any too well and he'll be glad to lend you a hand. Sonny, you just buckle to and help your Ma through this extra ditching and I'll get you that bicycle you've been wanting."

"Sonny" was a lank, lazy lad—the baby of the big family—and he did not take kindly to work of any sort. Perhaps it is wrong to say he was lazy, for he was growing so rapidly, like most boys of fourteen, that he had no energy left for anything like work. Mr. and Mrs. Bigger were kind and considerate parents, never overworking any of their children, but in busy times they did insist that Bob should lend a hand somewhere else than at the table. Bob had an enormous appetite and was always ready for three big meals with lunches between, but he was apt to grumble when riding the cultivator, or hoeing the garden was proposed.

"That is an idea!" said Mrs. Bigger. "Bob is right handy about the kitchen and we'll get along first rate. Run along, Sonny, and pick a basket of string beans for dinner. And bring some potatoes while you're there!"

It was rather pleasant digging potatoes under the shade of the big Rome Beauty and picking beans with the currant bushes to shelter him from the sun's rays, but when Bob was set to work peeling potatoes he entered a vigorous protest.

"Ma, why don't you bake the potatoes or boil them in their jackets? I'm most dead peeling and there ain't half enough. Yes, I'm peeling as thin as I can. I can't scratch the skin off. It won't come for me. Honest, Ma, the men like the baked ones better. I heard Joe Smith say so myself. Gee! It would save me a lot of work if you'd only do that."

Mrs. Bigger looked at the drooping figure and ran a hand through the crock in which reposed a dozen "marbles" which testified to the fact that Bob was not scraping the new potatoes. "Well, I guess we'll have to cook them in the skins," was her verdict, "or you'll have to dig the whole patch to get enough."

"Hurrah! And now for these apples. Say, Ma! Why don't you have one of your dandy big rice puddings? I love pudding. These apples are so mean and little that I'll never get through. I'll beat up the custard, honest I will. I'm tired of apple pie anyway."

"Bob Bigger! Your Pa says you're lazy and I believe it!" said Mrs. Bigger severely. "The men will go off and say I don't feed them enough if you keep on."

"No, they won't," said Bob. "I tell you if I was a woman I'd hunt up things that ain't so fussy for big meals. Do you think I'd stand over a hot stove and fry ham. No, siree! I'd plump it into a kettle and boil it. The men folks like it better that way. It don't take half the time and it tastes lots better."

"Well, I'll boil it if that suits you better," said the vexed lady. "Now, Bob, I want you to set right to work on those beans. I don't want to hear another complaint. I'm going to bake cookies and I want you to answer the telephone when I get my hands in the dough. Now right to work."

"Gingerbread is lots nicer!" re-

marked Bob, not a bit abashed by the command. "I'm tired of cookies."

"And easier to make," said the lady of the house to herself. "I suppose it's foolish to humor a boy but if he likes it better I'll do it. The time will soon come when Bob will be out in the world with nobody to humor him, so it won't make much difference now if I change from cookies to gingerbread. They say college meals are so poor and others hardly get enough to eat, so I don't know how Bob will fare. Seems to me I never saw such an appetite as Bob has."

Silence reigned for about five minutes and Mrs. Bigger felt hopeful, but presently her son had another suggestion. "Ma! Why don't we pull the oil stove out here on the screened porch and set the table out here. The

ditchers carry in a lot of mud every time they come in to meals and out here I could easily scrub it off."

"I've thought of that, Sonny, but there's never anybody to help me make the change. Do you think we could do it right now?"

"Of course! I'll put out the fire and we'll have the stove out in a jiffy. I tell you the men don't like to go into a stuffy house when they're warm and tired."

Mr. Bigger and the hired men were delighted with the change, and they all praised the dinner to the skies. "How is Bob getting along?" asked Mr. Bigger when the meal was over. "Is he more bother than he is worth to you?"

"Well, I've had help that could do me more good," said the lady of the

house evasively. "Bob always wants to do things different."

"Well, as long as he don't get lazy you keep him. I wish you could run to town this afternoon and bring us a piece for the mowing machine. I can't go nor spare a man."

"Send Bob."

"He doesn't want to go. He says he worked hard all morning and he doesn't want to put on a collar and tie. You'll be back in plenty of time for supper."

With many misgivings Mrs. Bigger departed and Bob lounged in the hammock until she rounded the corner. Then all his laziness vanished and a very lively lad sallied forth in the direction of the old corn crib that stood near the house.

"O, Bob! Have you started the supper?" was Mrs. Bigger's greeting as she drove into the yard at five-thirty that evening. "An automobile ran into me and damaged the buggy so I couldn't get home any sooner. I was so worried! You know I pride myself on having my meals always on the dot."

"Supper's ready and the men are eating it," said Bob proudly. "Come on and I'll put Nellie away after supper."

Mrs. Bigger felt disgraced forever when she saw that supper but she knew the men understood the situation. Bob had a big platter of boiled ham, a dish of beet pickles, a dish of potatoes cut in two and fried in hot fat, the gingerbread, boiled rice and milk to drink. Usually Mrs. Bigger served twice as much as that for supper with various spreads for the warm breads she delighted to set before her hired helpers.

"Bob, this is the best supper we ever had," said one of the men. "It isn't so heating and it hits the spot. I tell you, cool things after a hot day's work are awful good."

"Well, if that's the case I don't think I'll bother to make hot biscuit in this kind of weather," said the mistress of the house, who overheard what the man said. "If they want milk to drink and cold meat they can have it."

"Ma, I'm in a peck of trouble," said Bob when the dishes were washed and wiped—a proceeding that took about half the usual time that night. "I wanted to have a little surprise for you, but I guess I'll have to let it out."

He escorted his mother to the old corn crib which he had scrubbed and cleaned in her absence and there showed her a row of old beds rescued from the attic. "I can't find anything to put on the old springs," he said. "I've tacked mosquito bar over the windows and it will be a dandy place to sleep if I can get the beds made up."

"O, Sonny, the men would be insulted if you asked them to sleep out here," said Mrs. Bigger. "It's a good idea and would save me lots of work but it would never do in the world to ask them to leave the house. I'm sorry you spent so much time on this old—"

"We'd be glad to sleep out here, Ma'am," interposed one of the ditchers. "We've been used to a tent and the house seems awful hot after that. This place would be nice and cool, with everything open."

Very reluctantly Mrs. Bigger allowed Bob to carry out his scheme and the next day she was able to put the extra rooms in order and close them for the summer. The men were loud in their praises of their new sleeping quarters and even Bob begged to sleep there during the hot weather.

A week later Mr. Bigger woke his wife from a nap and said regretfully, "Martha, I hate to ask you, but could you spare Bob for the rest of the af-

(Continued on page 71).

Land O' Nod Stories.

By HOWARD T. KNAPP.

Too Whoo Loses A Meal.

AFTER all, I'm rather sorry for Slinker the Weasel," said Tinker Teedle Tee, the merry little elf. "To be sure he was a blood-thirsty villain, and if old Too Whoo the Owl hadn't swooped down and carried him off he would have made a meal of Mr. Rabbit. But just the same, I can't help feeling sorry for Slinker for, bad as he was, old Too Whoo is even a greater villain, and is more feared by the Little People of the White Forest."

"I should think Slinker could have dodged when he saw Too Whoo coming," said Billy Be By Bo Bum.

"That shows you don't know old Too Whoo," Tinker replied. "He should be called the Winged Death, for he is quicker than Hookbeak the Hawk, and flits through the woods as noiselessly as a shadow."

"Don't his wings rustle as he flies?" asked Billy.

"Nary a rustle," replied Tinker. "His feathers are covered with a fluffy down that deadens the noise. Then his eyes are so large and sensitive he can see better in the dark than most animals can in the daytime. In fact, the sunlight blinds him, so he does his hunting at night, going to bed at the break of dawn and sleeping until dusk in some hollow tree."

For several minutes Billy and Tinker trudged along in silence, their shadows dancing along in front of them on the snow like goblins. Somewhere off in the woods a bluejay was scolding a red squirrel, who chattered back in the most saucy manner imaginable.

"What under the sun is the matter?" asked Billy, as the racket grew louder than ever.

"Oh, you must not mind them," Tinker replied. "That's only Busybody the Bluejay and Frisky the Red Squirrel, quarreling again. Busybody is always squabbling with someone, but he does not mean any harm. He is the most inquisitive fellow alive, and is forever poking into other people's business and meddling in things that don't concern him, but for all that he is one of the best friends the Little People have. As he is always on the lookout to see everything that's going on, he is the first to catch sight of Slinker, or any other enemy, and never fails to give the alarm."

Tinker had hardly finished speaking when Busybody gave a shrill cry, entirely different from his noisy scolding. At the first note, Frisky the Red Squirrel stopped chattering, and Billy could hear him scampering off through the tree tops.

"That's the danger signal," shouted Tinker Teedle Tee. "The cry of warning all the Little People know and heed. Come on Billy Boy, let's go and see what enemy is stirring."

Of course Tinker, with his chubby little legs, could not run nearly as fast as Billy, but he spread his wings and darted on ahead, leaving Billy far behind. A minute later he came skimming back through the air, and circling around Billy's head, urged him to run faster. And all the while Busybody the Bluejay kept screaming at the top of his lungs, warning everyone in the White Forest that an enemy of the Little People was afoot.

"Look, Billy, look," shouted Tinker, as they reached the top of the hill, and looking in the direction Tinker pointed, saw Slinker the Weasel bounding over the snow, making straight for a big pile of rocks at the base of a tree. The next minute he dived into the rock pile and was gone.

"Why, I thought you said Old Too Whoo the Owl carried Slinker off in his claws," said Billy, puffing and blowing from running so fast.

"So I did," replied Tinker. "This certainly is a puzzler, and there's only one way to find out about it, and that is to follow Slinker's tracks back to where he started from. Old Too Whoo had him in his claws, all right, for see, as Slinker ran he left blood stains on the snow."

So they started on the back trail, following the bright red spots up hill and down dale for more than a mile. Then the tracks suddenly stopped.

"Now, how do you account for that?" asked Billy. "An animal can't travel through the snow without leaving footmarks, and yet Slinker's trail stops right here. A weasel has not any wings, so he couldn't drop out of the sky."

"Yet that's just exactly what he did," replied Tinker, who had been studying the ground. "He fell from the air just as sure as my name is Tinker Teedle Tee."

"But a weasel can't fly," protested Billy, who was not thoroughly puzzled.

"No, but Too Whoo can," Tinker replied, "and Too Whoo was carrying Slinker in his claws to make a meal of him when he reached his nest. Slinker must have managed to twist himself around and sink his teeth into Too Whoo's leg. The owl was so surprised he loosened his grip and let Slinker drop out of his claws. Slinker sure is a lucky weasel, and the next time he goes hunting, I'll bet he keeps his weather eye open for Too Whoo."

European Co-operative Agricultural

As Seen By American Commission.

By WM. B. HATCH, Michigan Member of the Commission.

I WENT with the section visiting the Poe River Valley because I was interested in dairying and this was reported as one of the best dairying sections. I was not disappointed. The snapshot which I took of a part of the co-operative dairy at Soresina, near Cremona, is here shown. This is said to be one of the best organized dairies in the world. Its main product is Roman cheese which it sells extensively in this country. Butter is a by-product produced from the fat taken out of the whey and then milk sugar is made by the bagfull here as another by-product. Pigs are also kept with which to consume what seems to be otherwise useless. Efficiency is spelled here in a total waste of but two per cent. There are 150 employes in this co-operative dairy. There are 160 members controlling 4,000 cows. The shares are \$10 each. The land owner members have pledged themselves to supply this dairy with their milk for thirty years, and the tenant members are pledged to supply this dairy with their milk during their leasehold. The milk is produced naturally on a soiling system as the land is worth \$500 an acre and much of it more. The dairy breed is Brown Swiss of high grade quality, produced by grading up with imported pure-bred sires purchased and owned by a co-operative breeding association. The annual production per cow is about 7,500 pounds, which is not a very high percentage. Cows are worth from \$140 to \$160 per head. The managers of this enterprising creamery were eager to get from members of the American Commission the names and addresses of prominent dealers in cheese anywhere in this country. And I have since my return received a courteous invitation from the president of this creamery to furnish similar information because he said he was about to make a business trip to this country. I cite this simply to illustrate the fact that American agri-

culture is already in competition with Italian agriculture in the American farmer's own home market, to say nothing of his foreign market. I asked a prominent state official here for the names and locations of the co-operative creameries of Michigan. He replied, "We have a few in name but I doubt if there is a single real co-operative creamery in Michigan." This Italian creamery is organized on a real co-operative basis, that is, one man, one vote, regardless of how

near Gargano in the foot-hills of the Alps in northern Italy. It manufactures a fine quality of Taurel and olive oil for export. It was organized on a purely co-operative basis in 1839 and has been in continuously successful operation as such ever since.

I came away from Italy feeling that the thrift and economy and enterprise of the Italian farmer is only equaled by his whole souled friendship for the American, and I came away with the conviction that the Italian farmer is



Co-operative Creamery in Northern Italy. Note the Substantial Construction of Building.

many or how few shares this man may hold in the creamery. Capital is simply paid the prevailing rate of interest. The profit, less a certain reserve fund, is divided amongst the patrons in proportion to their contributions of raw material. So that it is impossible in this kind of an organization for a city man with no cows but many shares of stock to take a majority of the profits made out of the raw material supplied by the farmers. This creamery at the end of eight years' business has a reserve fund exceeding its original capital or cost.

We visited a co-operative factory

better organized than the American farmer, and that he not only is now a competitor but that he is going to be more largely so later on. And, I believe, my convictions are supported in the fact that the American Italian is acquiring large areas of American lands and successfully operating them where American farmers have failed. If American agriculture is to successfully compete at home and abroad can it do so unless it is as efficiently and economically organized on a co-operative basis analagous to that which has proven successful in other countries after long trial?

Winston of the Prairie

BY HAROLD BINDLOSS.

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CHAPTER XVII.

Miss Barrington recalled the formal court-martial that had once been held in the hall of the Grange, when every man in the settlement had been summoned to attend, for there were offenses in regard to which her brother was inflexible. When it was over and the disgraced man went forth an outcast, a full account of the proceedings had been forwarded to those at home who had hoped for much from him.

"No," she said. "For the sake of the woman who sent him here we must stop short of that."

Then Maud Barrington looked at them both. "There is one person you do not seem to consider at all, and that is the man who lies here in peril through Ferris's fault," she said. "Is there nothing due to him?"

Dane noticed the sternness in her eyes, and glanced as if for support towards Miss Barrington. "I fancy he would be the last to claim it if he knew what we do. Still, in the meanwhile, I leave the affair to your aunt and you. We would like to have your views before doing anything further."

He rose as he spoke, and when he had gone out, Maud Barrington sat down at a writing-table. "Aunt," she said quietly, "I will ask Ferris to come here at once."

It was next day when Ferris came, evidently ill at ease, though he greeted Miss Barrington with elaborate

courtesy, and would have done the same with her niece but the girl turned from him with visible disdain.

"Sit down," she said coldly. "Colonel Barrington is away, but his sister will take his place, and after him I have the largest stake in the welfare of Silverdale. Now, a story has come to our ears which, if it had not been substantiated would have appeared incredible. Shall Miss Barrington tell it to you?"

Ferris, who was a very young man, flushed, but the color faded and left his cheeks a trifle gray. He was not a very prepossessing lad, for it requires a better physique than he was endowed with to bear the stamp of viciousness that is usually most noticeable on the feeble, but he was distinguished by a trace of arrogance that not infrequently served him as well as resolution.

"If it would not inconvenience Miss Barrington, it would help me to understand a good deal I can find no meaning for now," he said.

The elder lady's face grew sterner, and very quietly but remorselessly she set forth his offense, until no one who heard the tale could have doubted the origin of the fire.

"I should have been better pleased had you, if only when you saw we know everything, appeared willing to confess your fault and make amends," she said.

Ferris laughed as ironically as he dared under the eyes which had lost their gentleness. "You will pardon me for telling you that I have no intention of admitting it now. That you should be so readily prejudiced against me is not gratifying, but, you see, nobody could take any steps without positive proof of the story, and my word is at least as credible as that of the interloper who told it to you."

Maud Barrington raised her head suddenly, and looked at him with a curious light in her eyes, but the elder lady made a little gesture of deprecation.

"Mr. Courthorne has told us nothing," she said. "Still, three gentlemen whose worth is known at Silverdale are willing to certify every point of it. If we lay the affair before Colonel Barrington, you will have an opportunity of standing face to face with them."

The lad's assurance, which, so far and no further did duty for courage, deserted him. He was evidently not prepared to be made the subject of another court-martial, and the hand he laid on the table in front of him trembled a little.

"Madam," he said hoarsely, "if I admit everything what will you do?"

"Nothing," said Maud Barrington, coldly. "On condition that within a month you leave Silverdale."

Ferris stared at her. "You can't mean that. You see, I'm fond of farming, and nobody would give me what the place cost me. I couldn't live among the outside settler fellows."

The girl smiled coldly. "I mean exactly what you heard, and, if you do not enlighten them, the settlers would probably not object to you. Your farm

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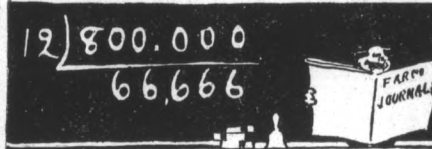
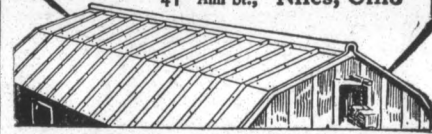
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will be taken over at what you gave for it."

Ferris stood up. "I am going to make a last appeal. Silverdale's the only place fit for a gentleman to live in Canada, and I want to stay here. You don't know what it would cost me to go away, and I'd do anything for reparation—send a big check to a Winnipeg hospital and starve myself to make up for it, if that would content you. Only, don't send me away."

His tone grew almost abject as he proceeded, and while Miss Barrington's eyes softened, her niece's heart grew harder because of it, as she remembered that he had brought a strong man down.

"No," she said dryly. "That would punish your mother and sisters, from whom you would cajole the money. You can decide between leaving Silverdale, and having the story, and the proof of it, put into the hands of Colonel Barrington."

She sat near an open window regarding him with quiet scorn, and the light that shone upon her struck a sparkle from her hair and set the rounded cheek and neck gleaming like ivory. The severity of her pose became her, and the lad's callow desire that had driven him to his ruin stirred him to impotent rage in his desperation. There were gray patches in his cheeks, and his voice was strained and hoarse.

"You have no mercy on me because I struck at him," he said. "The one thing I shall always be sorry for is that I failed, and I would go away with pleasure if the horse had trampled the life out of him. Well, there was a time when you could have made what you wished of me, and now, at least, I shall not see the blackleg you have showered your favors on drag you down to the mire he came from."

Maud Barrington's face had grown very colorless, but she said nothing, and her aunt rose and raised the hammer of a gong.

"Ferris," she said, "do you wish to be led out by the hired men?"

The lad laughed, and the hideous merriment set the white-haired lady's nerves on edge. "Oh, I am going now, but, for once, let us be honest. It was for her I did it, and if it had been any other man I had injured, she would have forgiven me."

Then with an ironical farewell he swung out of the room, and the two women exchanged glances when the door closed noisily behind him. Miss Barrington was flushed with anger, but her niece's face was paler than usual.

"Are there men like him?" she said.

Miss Barrington shook off her anger and rising laid a gentle hand on her niece's shoulder. "Very few, I hope," she said. "Still, it would be better if we sent word to Dane. You would not care for that tale to spread?"

For a moment the girl's cheeks flamed, then she rose quietly and crossed the room.

"No," she said, and her aunt stood still, apparently lost in contemplation, after the door swung softly to. Then she sat down at the writing table. There was very little in the note, but an hour after Dane received it that night, a wagon drew up outside Ferris's farm. Two men went quietly in and found the owner of the homestead sitting with a sheaf of papers scattered about the table in front of him.

"Come back tomorrow. I can't be worried now," he said. "Well, why the devil don't you go?"

Dane laid a hand on his shoulder. "We are waiting for you. You are coming with us!"

Ferris turned, and stared at them. "Where to?"

"To the railroad," Dane said dryly. "After that you can go just where it pleases you. Now, there's no use, whatever, making a fuss, and every care will be taken of your property until you can arrange to dispose of it. Hadn't you better get ready?"

The grim quietness of the voice was sufficient, and Ferris, who saw that force would be used if it was necessary, decided that it was scarcely likely his hired men would support him. "I might have expected it!" he said. "Of course, it was imprudent to speak the truth to our leader's niece. You know what I have done?"

"I know what you did the night Courthorne nearly lost his life," said Dane. "One would have fancied that would have contented you."

"Well," said Ferris, "if you would like to hear of a more serious offense I'll oblige you."

Dane's fingers closed on his arm. "If you attempt to tell me, I'll break your head for you."

Next moment Ferris was lifted from his chair, and in less than ten minutes Dane thrust him into the wagon, where another man, who passed a hand through his arm, sat beside him. It was a very long drive to the railroad, but few words were exchanged during it, and when they reached the settlement one of Ferris's companions mounted guard outside the hotel he found accommodation in, until the Montreal express crawled up above the rim of the prairie. Then both went with him to the station, and as the long cars rolled in Dane turned quietly to the lad.

"Now, I am quite aware that we are incurring some responsibility, so you need not waste your breath," he said. "There are, however, lawyers in Winnipeg, if you fancy it is advisable to make use of them, and you know where I and Macdonald are, if you want us. In the meanwhile, your farm will be run better than ever it was in your hands, until you dispose of it. That is all I have to tell you, except that if any undesirable version of the affair gets about, Courthorne or I will assuredly find you."

Then there was a scream of the whistle, and the train rolled away with Ferris standing, white with fury, on the platform of the car.

In the meanwhile Maud Barrington spent a sleepless night. Ferris's taunt had reached its mark, and she realized with confusion that it was the truth he spoke. The fact that brought the blood to her cheeks would no longer be hidden, and she knew it was a longing to punish the lad who had struck down the man she loved that had led to her insistence on the former leaving Silverdale. It was a difficult admission, but she made it that night. The outcast who had stepped out of the obscurity, and into her peaceful life, had shown himself a man that any woman might be proud to mate with, and though he had said very little, and now and then his words were bitter, she knew that he loved her. Whatever he had done, and she felt against all teachings of her reason that it had not been evil, he had shown himself the equal of the best at Silverdale, and she laughed as she wondered which of the men there she could set in the balance against him. Then she shivered a little, remembering that there was a barrier whose extent he alone realized, between them, and wondered vaguely what the future would bring.

It was a week or two before Winston was on his feet again, and Maud Barrington was one of the first to greet him when he walked feebly into the hall. She had, however, decided on the line of conduct that would be most fitting, and there was no hint of more than neighborly kindness in her tone. They had spoken about various trifles when Winston turned to her.

"You and Miss Barrington have taken such good care of me that if I consulted my inclinations I would linger in convalescence a long while," he said. "Still, I must make an effort to get away tomorrow." "We cannot take the responsibility of letting you go under a week yet," said Maud Barrington. "Have you

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anything especially important to do?" "Yes," said Winston, and the girl understood the grimness of his face. "I have."

"It concerns the fire?" Winston looked at her curiously. "I would sooner you did not ask me that question, Miss Barrington."

"I scarcely fancy it is necessary," said the girl, with a little smile. "Still, I have something to tell you, and a favor to ask. Ferris has left Silverdale, and you must never make any attempt to discover what caused the fire."

"You know?" "Yes," said Maud Barrington. "Dane, MacDonald and Hassal know, too, but you will not ask them, and if you did they would not tell you."

"I can refuse you nothing," said Winston with a laugh, though his voice betrayed him. "Still, I want a quid pro quo. Wait until Ferris's farm is in the list and then take it with the growing crop."

"I could not. There are reasons," said the girl.

"Winston gazed at her steadily, and a little color crept to his forehead, but he answered unconcernedly, "They can be over-riden. It may be the last favor I shall ever ask of you."

"No," said Maud Barrington. "Anything else you wish, but not that. You must believe, without wondering why, that it is out of the question!"

Winston yielded with a curious smile. "Well," he said, "we will let it drop. I ask no questions. You have accepted so much already without understanding it."

CHAPTER XVIII. With the Stream.

It was Winston's last afternoon at the Grange, and almost unpleasantly hot, while the man whose vigor had not as yet returned to him was content to lounge in the big window-seat listlessly watching his companion. He had borne the strain of effort long, and the time of his convalescence amid the tranquility of Silverdale Grange had with the gracious kindness of Miss Barrington and her niece been a revelation to him. There were moments when it brought him bitterness and self-reproach, but these were usually brief, and he made the most of what he knew might never be his again, telling himself that it would at least be something to look back upon.

Maud Barrington sat close by, glancing through the letters a mounted man had brought in, and the fact that his presence put no restraint on her curiously pleased the man. At last, however, she opened a paper and passed it across to him.

"You have been very patient, but no doubt you will find something that will atone for my silence there," she said.

Winston turned over the journal, and then smiled at her. "Is there anything of moment in your letters?"

"No," she said, with a little laugh. "I scarcely think there is—a garden party, a big reception, the visit of a high official, and a description of the latest hat. Still, you know, that is supposed to be enough for us."

"Then I wonder whether you will find this more interesting: "The bears made a determined rally yesterday, and wheat moved back again. There was later in the day a rush to sell, and prices now stand at almost two cents below their lowest level."

"Yes," said Maud Barrington, noticing the sudden intentness of his pallid face. "I do. It is serious news for you?"

"And for you! You see where I have led you. Ill or well, I must start for Winnipeg tomorrow."

Maud Barrington smiled curiously. "You and I and a handful of others stand alone, but I told you I would not blame you whether we won or lost. Do you know that I am grateful for the glimpses of the realities of life that you have given me?"

(Continued next week).

FULL POWER

How the correct oil holds compression

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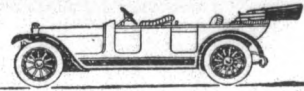
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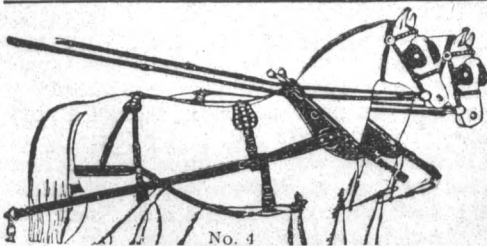
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Happiness Found Through Service.

IS there a more abused word in the language than happiness? Certainly there isn't another one which is made to do duty for so many other words which are directly opposed in meaning. How often we say we are happy when we are only excited. We are happy when we are only temporarily amused. When we are elated over the downfall of someone we dislike we claim to be happy. When we are pleased over a promotion or puffed-up over a little worldly fame, we think we are a-tremble with happiness, and even when a man gets drunk we often say he is "happy."

Yet, when we sit down and think the matter out carefully, we see that none of these sensations can be properly labeled happiness. For happiness consists not in possessions, nor comes through the realization of ambitions. It is not synonymous with pleasure or excitement. In short, it has but one other name, and that name is service.

George Eliot is, to me, the most satisfactory of English novelists. She is the one who can most skilfully analyze human nature in all its moods and tenses, the one who can go most truthfully to the bottom of the human soul. She has written many great things, but the greatest words she ever penned were those she put in *Romola's* mouth.

"Sometimes we can tell happiness from pain only by knowing that it is the thing we would have chosen above all else."

Ever since the serpent started things in the Garden of Eden, men and women have gone about seeking happiness. That so few have found it is because they have gone about it in the very hardest way. The great majority have had not the slightest idea of what it was or where it might be found. They, both men and women, have sought it through conquest, through fame, through wealth, through idleness, through pleasure, through ambition, through hard work, through selfishness. And they have missed it. They may have found some substitute in the satisfaction of realized ambitions, but in time they have realized that their substitute was not worth much. It might do for public exhibition, but for private use after the "tumult and the shouting died," it was rather useless. The gold was really tinsel on close inspection.

A few only in every age find the real thing. And they are never the ones we suspect of having it. In fact, we always look upon their lives as mean and empty. They are never the world's successes. Usually they are the ones upon whose backs the tinsel heroes have climbed to success. We would never call them happy. Perhaps they do not call themselves so. As a matter of fact, if we could look into their hearts we would probably see they had never given happiness a thought, at least by that name. They have known it only as service, and know it as their closest companion.

Always service has been at their elbow when they would have gone out on their quest for self. When they sought education, a mother, sister or aunt needed their help. When they would have spent hard-wrung savings for books or music, there was coal to buy or a doctor's bill to pay. When they wanted money for investments which promised sure returns, father

broke his leg or mother had pneumonia or the house needed shingling and the money went back home. There was always someone dependent, someone who needed help, just at hand to keep one from starting out to seek happiness.

But, like all the good things in life, happiness comes unsought. Comes

Michigan's Happy Babies—No. 9.

By DEBORAH.

THE diet of the nursing mother is of prime importance if she is to have a healthy, happy baby. No mother who is not well nourished or who habitually eats foods which she can not digest can expect to have a healthy child. Good nourishing food is a prime requisite, but what that food shall be must be decided by the digestive powers of the mother. While a strong, vigorous woman who does not know the meaning of indigestion can eat freely of a large variety of foods, the nervous, anaemic woman who is a poor digester must eat carefully. It is a case of each woman being a law unto herself.

Speaking generally, the mother should have plenty of good milk, eggs, meat, bread, butter, cereals, and the easily digested vegetables. Cabbage, onions, pickles and relishes must be dispensed with, entirely in most cases, though occasionally one finds a woman who can partake of these things sparingly. Everything must be eaten moderately, as an excess of any one food may upset the baby's stomach. One mother carefully refrained from sour foods, and then ate a great deal of maple syrup. The excess of sweet upset the baby for two days. Temperance in eating and drinking must be the rule.

Stimulants of all sorts must be avoided. Strong tea and coffee and alcohol in any form are not good. Though weak tea and coffee may be taken in moderation. Nursing mothers are often advised to drink beer and malt as these make milk. While it is true that they increase the quantity of milk, it is of an inferior quality. Mothers who are inclined to be bilious are often made worse by malt, and the infant cries with colic and stomach disturbances as a result.

Instead of beer and malt the mother should drink gruels made with milk. Corn meal gruel or oatmeal gruel are easily prepared and palatable. If these can not be digested, any of the cereals used as breakfast food can be used as a foundation for gruel, and from the number any normal woman can find one which she can easily digest. A bowl of gruel in mid-morning and mid-afternoon and at retiring will help increase the flow of milk and keep up the mother's strength.

If the mother's milk is low in fat she should eat freely of beef, mutton, eggs and milk as these foods increase the proportion of fat in the milk. If there is too much fat, she should decrease the quantity of these foods and eat more vegetables and grains.

Above all things the nursing mother should never be worried, frightened or overworked. The nervous condition affects the quantity and quality of the milk more than the food she eats. Worry, anxiety or nervous ap-

prehension of any sort so changes the quality of the milk as to make it impossible for the child to thrive upon it. It can not be too strongly impressed upon the entire family that the mother is to be freed from every care during this period of the baby's life. Nothing the father or mother can give the child is so important as good health, and there is no better way to insure it than by feeding him naturally the first few months of his life. The mother's duty is to refrain from useless worry, anger or other passion, and the father must see that neither he nor anyone else gives her real cause for grief or care.

Happiness, service, they are synonyms. He who would possess the first has only to make friends with the second.

DEBORAH.

To the inexperienced this statement, that the mind affects the milk more than any bodily disturbance, may sound like foolishness. Every nursing mother who has allowed herself to be completely upset temperamentally knows by her own experience that her supply of milk was injured more in this way than by any mistake in diet. Not only is the quantity of milk affected, but the composition is changed. If the nervous upheaval is only temporary the child may get off with an attack of colic. If the temper, or worry, is long continued the milk is so affected that the child begins to run down and a change has to be made. In cases of extreme agitation the milk often acts as a poison.

Knowing these things careful mothers will practice self-control, and intelligent fathers will realize that they have a place to fill this early in their child's life.

RUG-MAKING AS A PAYING ART.

BY JANET THOMAS VAN OSDEL.

It is not many years since the woman living on a farm aimed to have an ingrain carpet in the parlor at least, and if she was unusually ambitious, in the sitting-room, as well. The rag rugs were then relegated to the bedrooms and the kitchen. Today the rag rug is no longer a rather despised floor covering, it has come into its own. An excursion through the rug department store reveals counter after counter given up wholly to the display of rag rugs. Slightly different it is true, from the rugs of, say ten years ago, but rag rugs, nevertheless, such as any woman who has ever made a rug can produce. Even though a novice in the art, with just a little practice she can do quite as effective work as is shown in the beautiful floor coverings that are in such demand just now.

These rugs are produced wholly from rags and warp. They are the same braided, crocheted, woven and tufted rugs as were made generations ago. The difference between these rugs and those of long ago lies chiefly

in the colorings and the combination of colorings. One reason for this difference is that the grandmothers and the great-grandmothers had not the facilities for coloring that today's woman has. These older women made their own colorings while today any shade of dye can be purchased, and so perfected are these dyes that their use is a simple matter as compared with the dyeing process of long ago.

In a display of hundreds of these rugs, one that attracted the attention of all observers was of woven rags in a solid soft gray body with a six-inch border of deep rose color about two inches from the edge. It was a thing of beauty, a work of art and would cause any ingrain carpet placed beside it to look tawdry. The rags were cut a bit narrower than most women cut their carpet rags and this gave a finer appearance to the rug. It was, nevertheless, just an old-fashioned rag rug, yet it would scarcely be recognized as even a distant cousin to the many-colored, hit-and-miss rug.

Another rug that attracted attention was a bedroom rug made of an apple shade of green, with here and there a shot of pink through it. The pink was exactly the right shade to harmonize with the green by contrast. The shot effect was, of course, obtained by occasionally sewing in amongst the green rags several of the pink. Nor must the pink be used too frequently or the restful effect obtained in the green rug will be changed to a garish effect. The warp used in this rug was of pink, the same shade as the pink rags. Another bedroom rug was made on the same plan as this with the body color a new blue, instead of the green, and shot with a lighter shade of blue. In this the warp was also of light blue.

A living-room rug that bespoke service, warmth and cheer all at once, was made of golden brown rags with a five-inch border of burnt orange, eight inches from the edge. A hit-and-miss rug that did not seem at all hit-and-miss, was made of dull brown and dull green woolen rags, cut very narrow.

The braided, the crocheted and the tufted rugs showed all the same harmonizing shade combinations. A braided rug, oval in shape, six feet long, sold for six dollars. The makers of these rugs have been careful to cut the rags of uniform width and from materials of uniform thickness, thus insuring a smooth, symmetrical rug. The warp used in sewing the braided rugs was in all cases of an inconspicuous color, as nearly like the predominating color of the rug as it was possible to obtain.

The tufted rug was made with gunny-sacking or burlap as a base. The rags were drawn through the burlap by means of a bodkin and each stitch of rag is pulled up a couple of inches above surface of burlap or sacking. This is later cut in the middle and thus the tufted effect is secured. Old stockings are particularly effective in this kind of rug as they give it a fluffy appearance. Perhaps it may be a helpful hint to some to suggest that instead of cutting the stockings up and down and then sewing the strips together, the feet be cut off the stockings and then the stocking started round and round. In this way the whole stocking will be in one strip, necessitating no joining. The latest and best method of joining rags for

carpets and rugs is to sew together on the machine by means of a flat French seam the pieces of goods before they are cut into strings. This makes the work quicker and surer and as the joinings are more even the result is a smoother rug.

There is a big demand for these rugs. Because they are beautiful is one reason, because it is a day when handicraft is the rage is another, and because they are the most sanitary floor coverings known, is another. This opens a new field to the woman on the farm who has leisure during the winter months which she would gladly turn into dollars. The above descriptions of colorings are only suggestive. That they may be used effectively has been proved, by any woman who takes up the work in earnest will soon learn to strive for originality of coloring and of design. The best teacher in the use of effective coloring is nature. By studying her rich, harmonious blendings of colorings, new effects, striking, but never startling, may be obtained. Designs as well can be taken from nature. Some of the most famous woven blankets and hangings in the world have in them designs adapted from nature by the Indians.

MR. BIGGER SOLVES THE DOMESTIC PROBLEM.

(Continued from page 69).

ternoon? I want him to drive a team in the hay field. John is not feeling well and is lying down in the sleeping room. I don't think we'll need Bob longer than a day or two."

"I can spare him easily," said the lady. "Since I have adopted Bob's camp ideas of cooking and sleeping I am not overworked. Every afternoon I have a nap, and this morning I picked up a new crochet pattern out of the farm paper."

"Come along, Bob!" said his father. "As soon as haying is over you can pick out that new wheel and when August comes you can go camping up at the lake with your crowd. I'm proud of you, Son. For years I've tried to get your mother to draw in a little and take life easier, but she wouldn't listen to me. I'm glad you've done it. A boy who can do that is smart enough to be President."

"I don't know as I want to be a President," said Bob, lazily uncoiling himself from the hammock. "I'd have to be awful fashionable and like as not wouldn't get enough to eat for style. I'll take the bicycle and the camping for mine. Say, Ma! I guess I'll have to have some gingerbread and a glass of milk before I go. You sit still and I'll wait on myself. I'm kind of glad to be released from housework and get back to the field, but when you need me again just tell me. Well, I guess this will stay my stomach till supper is ready," he added, taking a huge section of gingerbread and ambling down the steps.

"Who would have thought a boy knew so much?" said Mrs. Bigger proudly, as she watched her husband and son drive off. "Dear boy! His father said the domestic problem would never be solved for the farm until the daughters came back from the factories and stores, but I guess he's mistaken. Anyway, my problem is solved and I'm happy."

HOME QUERIES.

Household Editor:—Having seen Mrs. M. C.'s request in The Farmer of December 5, thought I would answer it. The catsup is as follows:

Ripe Tomato Catsup.

Half bushel of ripe tomatoes, cooked and strained, boiled down to eight pints; three tablespoons of salt; not quite half a teaspoonful of red pepper; half teaspoonful of whole cloves; half teaspoonful stick cinnamon; one pint of vinegar; one cup of light brown sugar. Put cloves and cinnamon in cheesecloth sack and remove

when catsup is strong enough to suit taste.

Here is the way I make apple butter, either with sweet cider, not boiled, or no cider at all. One peck of apples, peeled and cored; one quart of water or sweet cider. Cook until apples are tender, mash, or strain, and to each quart of fruit add two cups of dark brown sugar, one teaspoonful of ground nutmeg, one-quarter teaspoonful of ground cloves, one tablespoonful of ground cinnamon. Return to fire and cook slowly until thick enough to keep.

I have no mustard pickle recipe that calls for green tomatoes, but here are two ways that I use my green tomatoes that we like.

Green Tomato Chowder.

Four gallons of green tomatoes chopped fine. Sprinkle with salt and let stand over night, drain in the morning and add one dozen onions, one head of cabbage, chopped fine; six green peppers; half a teaspoonful of ground cloves; one tablespoonful of cinnamon, half a tablespoonful black pepper; two teaspoonfuls tumeric powder; half cup mustard seed; two pounds of dark brown sugar, vinegar enough to cover. Cook until tender.

Green Tomato Mince Meat.

Eight pounds of green tomatoes, chopped fine and drained well; four pounds brown sugar; two quarts of water. Boil one and a half hours, then add two cups strong vinegar; four tablespoonsful cinnamon; one tablespoonful cloves; half tablespoonful pepper; two pounds good suet, ground fine; two pounds raisins, salt to taste.

Hoping Mrs. M. C. and Mrs. J. W. B. will like these recipes as well as we do, and thanking you again for the help I get through the Household Department, of our paper, and that it will prosper long years more, I am your weekly reader, Mrs. F. H.

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Farm Commerce.

Necessity is the Basis of Co-operation.

A CO-OPERATIVE organization of farmers must be founded on economic necessity if it is to be permanently successful. The reason for its existence must lie in some vital service which it is expected to perform if it is to have strength enough to live in the face of the competition to which it will be instantly subjected. It must compete with existing organizations and this competition will be directed towards eliminating it; it will be viciously attacked; every conceivable form of misrepresentation will be levelled against it; the officers will be attacked by insidious rumors concerning their ability or integrity; the banks, especially in the newer sections, may be controlled by competitors, and may refuse to furnish the necessary credit; and every weapon known to competition, either legitimate or disreputable, will be used to put it out of business.

The average producer is not a business man, nor is he skilled in the arts of competitive business. He is naturally a strong individualist. He is slow to delegate authority over his affairs to any one and when he is face to face with the skilful arguments of those who aim to break the organization and keep him working as an individual, he is likely to weaken and finally leave the organization unless he had felt the effect of hard times, a helplessness arising from a combination of those who buy or sell his products, excessive freight, or commission charges, or other forms of oppression.

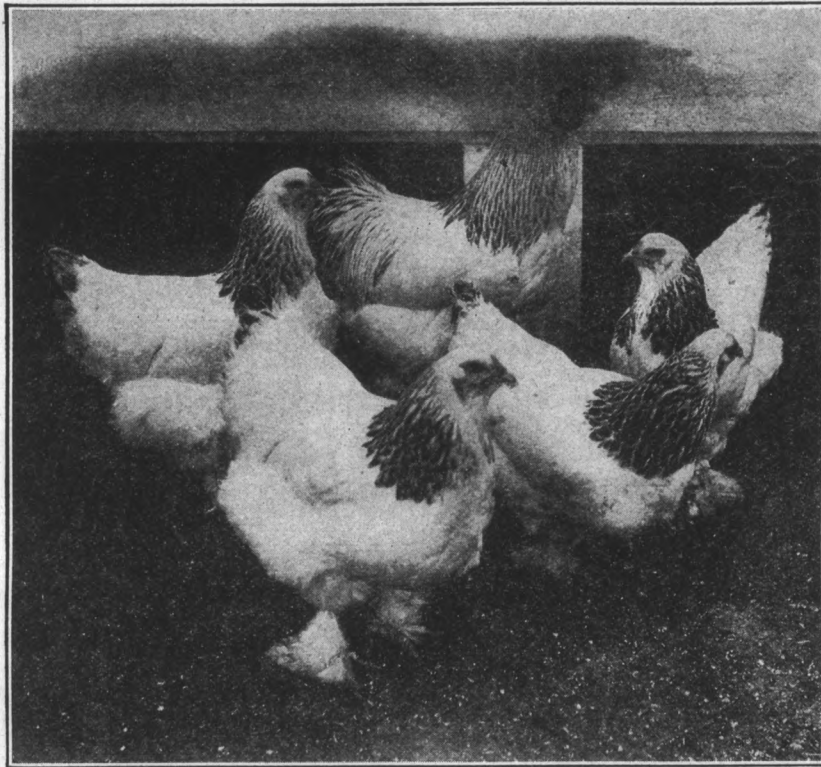
It is an historical fact that the investment of the farmer must have been threatened by existing conditions before he has been able, in the past, to overcome his individualism sufficiently to work with his neighbors in co-operative work. The country is strewn with the wrecks of co-operative organizations that were born prematurely and which died by the wayside, because the farmer himself deserted in the first real conflict with the established agencies that have handled his business. Co-operation,

Difficulties In Path of Mutual Selling.

THE subject of co-operation in marketing farm products is a very common topic of late. We hear it advocated and urged on all sides. The matter is tersely stated by the Secretary of Agriculture in the Yearbook of the Department of Agriculture for 1913. He says: "It is clear that before the problems of marketing, the individual farmer, acting alone, is helpless. Nothing less than concerted action will suffice. Co-operation is essential. The same business sense and the same organized genius which have placed this nation in the front rank in industry must be invoked for agriculture. Reflection suggests this; experience demonstrates it. All the successful attempts in the marketing of any produce anywhere in the world have come through organized effort. The individual farmer has neither adequate information nor the facilities."

In the way of successful co-operation two chief difficulties are met. The first is that the individual farmer fails to realize this difficulty mentioned by the Secretary of Agriculture. Selling goods is an art. Traveling all up and down our land are tens of thousands of men whose sole business is selling goods. All successful lines of business, whether manufacturing or mercantile, have such representatives,

to be successful, must be founded not only on economic necessity, but it must grow through gradual evolution. It must have a small beginning and grow in strength through experience step by step, rather than by leaps and bounds. The fundamental mistake that is being made in many localities



If Catering to a Select Egg Market have Hens of Uniform Type.

is to form a farmers' organization all at once on the plan of an organization that has taken years to develop. The plan may be sound but a co-operative organization can only succeed when given the unflinching support of the members who through years of experience have acquired an appreciation of the fundamentals that underlie a successful association of this kind. The success of any organization depends on its members, not on its form. H. G. POWELL.

men who are experts in their lines. They are one factor in the organized effort spoken of by the Secretary of Agriculture—simply one wheel in the complicated machinery and without them the whole machine must stop. The foreman in the manufacturing plant does not go on the road selling goods. The engineer or mechanic or other artisan does not venture an attempt at selling; much less the common workmen or roustabouts. The trouble with the present methods of the ordinary farmer is that the person untrained in salesmanship has to do the selling. This is not intended in a derogatory sense; but the fact is the common farmer knows absolutely no more as to the actual value of his products than the roustabout does of the worth of the goods he trundles in and out of the factory. Nor has he more experience or skill in the art of selling. He can only accept whatever price the buyer offers him, and he knows so little about the actual value of his goods or of general market conditions that he is not prepared to make any sort of argument regarding the equity of a higher figure. When the common farmer comes to understand his limitation in this respect and is ready to confine his efforts to the one specialty of production, and is willing to commit the work of sell-

ing to a specialist in his line, a long step will have been taken.

The other large difficulty is to find the specialist to do the selling. There are enough of them, but the trouble is they can make more working for themselves than the farmers are willing to pay them for their services. Wherever an organized effort at marketing has been undertaken and failed, the trouble will more often be found in the inefficiency of the man employed to do the selling than in any other cause.

When the common farmer comes to appreciate his limitations in the way of selling and is willing to commit that end of his business to a compe-

tent salesman; and when enough such farmers can unite to employ a thoroughly competent man to do the selling, an effective organization can be formed. EDW. HUTCHINS.

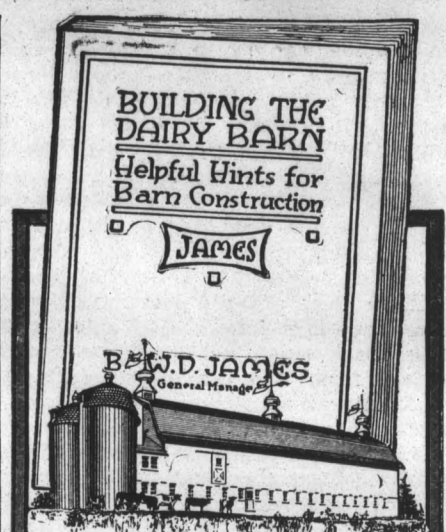
CO-OPERATIVE CREAMERIES UNITE.

Seven of the eleven co-operative creameries of Jackson county, Wisconsin, have formed a general organization to gain mutual advantages. There had developed more or less of competition between the separate associations and the relations with the buying world were somewhat hampered where the different associations operated independently. By reason of the new organization it is anticipated that there will be much closer relations between the operators and patrons of these creameries.

The managers of each of the creameries represented have already mapped out a common program. The ends they hope to gain are:

1. To increase the richness of the cream that leaves the patrons' farms;
2. To divide the territory covered by the cream haulers of the different associations so as to do away with the necessity of having more than one hauler pass a farm;
3. To so plan the routes that all cream can reach the factories before noon, and
4. To carry on an educational program looking toward the general improvement of factory and farm conditions.

The new organization adopted as its motto, "Better butter and better markets." By carrying out the plans indicated above it is the hope of the managers to secure a higher quality of cream at the factories. With this a superior grade of butter can be manufactured, and by reason of being able to offer a high-grade of butter in large quantities, there is every excuse for their hope of securing premium prices for their output.



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Forcing Hens to Lay.

WHEN a hen begins to lay the first thing that many poultrymen think of is how to force it to lay without ceasing. Frequently the poultryman concludes that the more food he gives the hen the more she will lay, but that is just the rock upon which so many are wrecked. The forcing process does not limit its operations in any one direction. In forcing the hen for eggs she is forced into many other things which we do not want her to do. She may be forced to become too fat or even diseased and thus made to become utterly worthless for any purpose whatever. Her capacity is limited and when she is forced to go beyond that capacity she breaks down entirely.

stimulant effect is really imaginary. If the hen is healthy and has a good appetite any such method intended to force egg production cannot improve her condition. Egg laying is not improved by the use of powders and pills, but by the use of good, wholesome food and proper care. A healthy hen is no subject for medicines or tonics. If she is sick or drooping it is not out of the way to endeavor to assist her to recover her health with a tonic, but as long as her comb is red and bright, and she scratches and works vigorously, enjoying her food and laying eggs as fast as nature permits, the use of stimulants and tonics will not benefit her or enable her to lay more.

Forcing Not Effective.

No hen can really be forced to lay eggs. Nature has given her a certain period of time during which the eggs are to be developed and it is only by care and judicious feeding and management that this period can be made to extend its full time and the hen be made to produce her maximum number of eggs. It is not so difficult to supply her with the needed elements for this purpose, but any surplus bestowed will only be a waste, or if she cannot divert the materials to the production of eggs she will either void them or lay them up in the storehouses of her body as fat, and thus impair the functions of the egg producing organs.

Proper Feeding and Exercise Give Best Results.

Forcing, as a rule, is useless as it usually makes the hens too fat, in which condition they cannot lay at all. The hens may lay for a short time after an attempt has been made to force them, but they will soon cease because too much pushing is not natural and always throws them out of condition. There is but one really good method of forcing a hen to lay and that is by keeping her in perfect health. To do this compel her to scratch and work for her food. She should have all of the food that she requires but she should be made to earn it by hard work. This exercise brought about by scratching uses up the fat materials in the hen's body, and thus keeps her warm as well as healthy. She will be able to digest and assimilate the food and thus convert it into eggs. Keep the hens busy from early morning until night. By this method you will force the hen to have a good appetite, force her to throw off disease, force her to rest well and in that manner, as by no other way, force her to lay.

Indiana. C. H. WHEATLEY.

There are several ways by which some poultrymen attempt to force hens into the production of eggs when nature decrees otherwise. One method that is frequently employed for this purpose is to put red pepper in with the chicken feed to stimulate the fowls. These men are not aware that red pepper has no more influence on the generative organs of the hen than so much sugar or salt, and that the

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STATE BEEKEEPERS' MEETING.

(Continued from last week.)

After several bee men had described their cellars it was found that a great variation of construction was possible and yet winter bees successfully. The main points brought out were that very dry cellars were not as successful as those containing more humidity, providing the temperature did not go too high. Some form of ventilation, while not absolutely necessary, helped to winter the bees better. A damp cellar with good ventilation often wintered bees well. Very cold cellars were not conducive to good wintering. An even temperature of 45 degrees F. was about the right one to keep the cellar.

Mr. L. A. Aspinwall, Jackson, Mich., one of Michigan's veteran beekeepers and inventors, gave a very interesting account of some of our older beekeepers and their work. Mr. Aspinwall is himself the inventor of the Aspinwall non-swarming hive and is now engaged in writing a book on beekeeping.

The evening session of the convention opened with an illustrated lecture by Prof. R. H. Pettit, of M. A. C. A number of views of Austrian, German, Turkish, Russian, Dutch, Belgian and French apiaries were shown and their methods of management outlined.

Immediately following Prof. Pettit's address, F. E. Millen, State Inspector of Apiaries, gave an illustrated talk on "Features of Interest about the Honey Bee." Slides of the external and internal parts of the honey bee were shown, and the interesting features explained.

On Thursday morning the meeting commenced at 9 a. m., and the "Foul Brood Situation in Michigan" was taken up by F. E. Millen, Inspector of Apiaries. During the past season, evi-

dence of much foul brood was found and as far as possible remedial measures were taken. One or two minor changes in the law were advocated and the need for more help indicated.

The next item on the program was an address with illustrations by Prof. Morley Pettit, Ontario Provincial Apiarist, Guelph, Canada. He showed a great many views of Ontario apiaries and other interesting bee slides. Conditions in Ontario are very similar to the conditions found in Michigan and from the apiaries seen one would have trouble to say whether they were from Ontario or Michigan.

"The Age and Durability of a Queen Bee for Profit in the Production of Comb Honey and my Method of Requeening," was the subject which Mr. A. H. Guernsey, of Ionia, Mich., entertained the meeting with. The speaker stated that he was not in favor of requeening any or all colonies at stated times, as every year or every two years. Mr. Guernsey watches the work of the individual queen and directly he notices a failure on her part, to lay prolifically, then that queen is taken out and the colony requeened.

New Officers.

After the report of Mr. E. D. Townsend on the work of the National Convention held at St. Louis, last February, the meeting adjourned until the afternoon, when the business session was held. The members decided to make the dues of the Michigan affiliated branch \$1.00 in nineteen sixteen instead of 50 cents as at present.

The election of officers resulted in the following members being elected: President, Mr. David Running, Fillon; vice-president, Mr. Frank Pease, Marshall; secretary-treasurer, F. Eric Millen, East Lansing.

The city selected for the next convention was Grand Rapids. Ingham Co. F. E. MILLEN.

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Practical Science.

FRUIT JELLIES.

BY FLOYD W. ROBISON.

Color in Fruit.

In the manufacture of different products from fruits, such as wines, ciders and the like, the depth of the color of the finished product is an item of considerable importance. This may be brought about by cooking the fruit products with the skin on.

The Jellying of Fruit.

The effect of the skins of fruits on the color of the product is very clearly shown in the manufacture of fruit jelly. If the pulp, or body of the fruit including the skins, is cooked for some time with the juice, a product which will give a much deeper colored jelly is obtained.

Meat Gelatine.

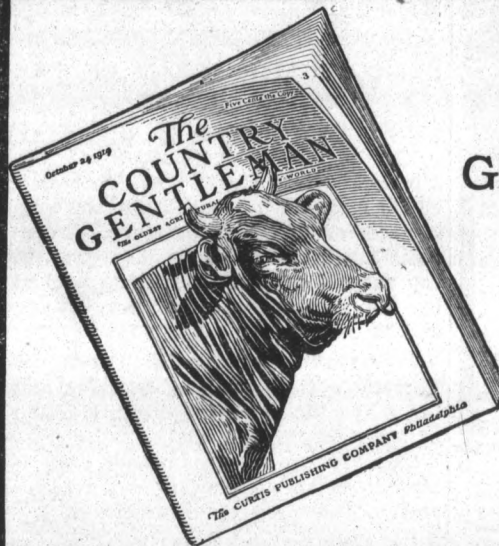
The gelatine of meat and bones, however, is an entirely different product than the jelly-making material of fruits. In animal products the gelatine is essentially a nitrogenous product. While not a typical proteid it still contains approximately the same percentage of nitrogen that is found in typical proteid bodies.

(Continued next week).

Great is the power of a life which knows that its highest experiences are its truest experiences, and that it is most itself when it is at its best.—Phillips Brooks.

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Table listing contents: General Farming . . . 95 Articles, Livestock . . . 75, Marketing, Management and Finance . . . 60, Buildings, Equipment and Labor . . . 45, Poultry . . . 55, Vegetables, Flowers . . . 60, Dairying . . . 25, Orchards and Trees . . . 45, Rural Social Life . . . 25, Home Making . . . 55

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You Can't Beat Galloway Prices and Quality!

My New Low Down No. 8 Spreader with cut under front wheels and trussed channel steel frame is positively the best spreader in the world. Light draft, endless apron, positive force feed, double chain drive. Just ask for my book, "A Streak of Gold," FREE, and I will tell you the truth about manure spreaders and how to get the greatest profit out of your manure products.



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6 Positively supreme in power, simplicity and design. All our years of engine building are built into it. A mechanical masterpiece. Long life and satisfaction to engine users are built into every one of these Galloway Masterpiece Big Six Engines. Great volume, perfected design and simplicity are what make this price possible. A heavy weight, heavy duty, large bore and long stroke engine not overrated. Get right on engines before you buy. Get my free engine book before you buy an engine at any price.



Wm. Galloway, President, The Wm. Galloway Co., 177 Galloway Station, Waterloo, Iowa

Harvest a winter crop of wood
There's a lot of good money in it; if you have a real good wood-saw.

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are built to withstand the greatest strain and wear that a wood-saw gets. Strong, rigid frames of heavy steel, or of hardwood; bolted, braced and mortised. Non-rigid boxes—dustproof, non-heating and self-adjusting. Shafts of lathe-turned steel. Ten styles: with tilting or sliding tables. Get Wood Saw Booklet now—also circular about the Appleton All-Purpose Grinder. Appleton Mfg. Co. 620 Fargo St., Batavia, Ill.

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Saves 15% to 20% of Feed
Keep Stock Healthier **Crush** ear corn (with or without chucks) and **Grind** all kinds of small grain. 10 sizes 2 to 25 H. P. Conical shaped grinders—different from all others.
Lightest Running Feed Mills
Handy to operate. Ask why; and state size of your engine. We also make Sweep Grinders. **FREE** a folder on Values of Feeds and Manures.
D. N. P. BOWSHER CO. South Bend, Ind.

Save on STEEL Shingles

Edwards STEEL Shingles now cover 135,000 roofs. Cheaper than wood shingles. Last 5 times longer. Edwards patented "Tightcote" process prevents rot, rust, fire. Patent interlocking device makes roof absolutely watertight. Go on easily with hammer and nails. Dipped in molten zinc after they are cut—no raw edges to rot. You also have free lightning insurance under our \$10,000 bond—another advantage. Special offer now at lowest factory prices. Direct to you. We pay shipping charges. Save money by acting now. Write for big free bargain book 167 Give size of roof if possible.
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PUMP GRIND SAW Made for Hard Use
Wood Mills are Best. Engines are Simple
Feed Grinders, Saw Frames, Steel Tanks
CATALOGUES FREE
AGENTS WANTED
Perkins Wind Mill & Engine Co. Est. 1860
125 W. Main St. Mishawaka, Ind.

Grange.

LEGISLATIVE PROGRAM OF THE STATE GRANGE.

The legislative committee of the Michigan State Grange has formulated its legislative program for the coming session of the Legislature. It contains much that is of great interest to the general public. It will be backed by the full influence of the Grange and is as follows:

"We reaffirm our position upon the Torrens system of land transfer and for a specific tax upon the production of iron, copper and coal.

"The fixing of a maximum rate of state taxation to prevent extravagant and unnecessary appropriations.

"A revision and adjustment of the mill tax appropriations to the Agricultural College and the University upon such basis as will represent the relative importance of each institution to the state.

"An elimination of duplicate courses of study as between the Agricultural College and the University and the establishment of such functional lines of difference between them as will more completely distinguish the agricultural college for the industrial and the University for the professional educational demands upon the state.

"While we believe it is possible to revise the present primary law so as to more fully guarantee the greatest possible individual freedom in the exercise of citizen franchise rights, we are opposed to such amendments as will provide for a compulsory pre-convention or the absolute election of candidates at the primary as being in direct opposition to the spirit and intent of said primary law.

"Reiterating the declaration of both national and state Granges, we are in favor of federal, state and county aid to country road improvement. We believe the old adage, "business before pleasure," is especially true in regard to the location and construction of public highways. We are opposed to the many bonding schemes advanced by those seeking touring roads, believing that the pay as you go policy is far more business-like in road building, whatever may be the unit of administration. We believe that roads are local affairs and their control should remain with the people in whose midst they are located; that the national and state governments may provide general standards of construction and maintenance of roads and may protect themselves by withholding appropriations when requirements are not met; that we call the attention of all our people to the grave dangers in top-heavy bureaucratic control of road administration and to the fact that much of the support for the good roads comes from those who are more anxious to build roads for bonds than to sell bonds for roads; that the legislative committee of the Grange, both national and state, is urged to use every honorable endeavor to secure first, business roads that will serve the best interests of both producer and consumer; that we are opposed to conflicting administrative authority, and that while there should be state and may be county supervision of distribution of funds, all construction should be done by township or such other recognized unit of administration as will best serve the needs in all parts of the state.

"We favor prohibition of the manufacture and sale of cigarettes and the prohibition of the sale of liquor within a radius of five miles of any state educational institution. We are opposed to a smaller territory than the county for a local option unit.

"We favor appropriations by the state to match the federal appropriations for agricultural extension work

under the provisions of the Smith-Lever bill.

"We ask for the enactment of a market commission bill by the incoming Legislature.

"We are in favor of the guarantee of bank deposits against loss by bank failures.

"We are in favor of the enactment of laws, both state and interstate, for the faster movement of live stock shipments.

"We favor state censorship of moving picture films."

THE GRANGE SPEAKER AND THE POMONA.

(Continued from last week.)

Localities differ and methods should always be subject to local conditions, but surely we ought to do much better than we have done in the past in getting the ear of the public at our open Grange meetings.

The regular meetings of a Pomona Grange should be among the most popular events of the year, and they will be if we set about it and see that the public is invited in a way that gets results.

Lastly, the state speaker must not be depended upon to furnish all the entertainment at the Pomona meeting. I fear that in many counties the securing of outside speakers has resulted in the retiring of home talent. The great mission of our Order is to develop strong men and women in the country. We need few things more in the country, than strong and wise rural leadership. It is the business of the Grange to discover and train rural leaders, and if the outside speaker has tended to lessen the development of local talent I fear he has done less good than harm in the Grange where he has been in evidence.

Let every Pomona lecturer put the emphasis upon the local program. Let it be full of the best things that can be discovered in the county. Lecturers, do not prepare it in too much of a hurry. Take time. Advertise it well after you have secured it. If a state speaker will add to your meeting the attraction necessary to get out the public in largest numbers, get one, but let us ever remember that the great mission of our Order is to uncover talents that have been hidden in the earth, to find in every rural neighborhood great men and women capable of doing splendid things, and then to unite these people in a common effort for "Rural Betterment."

W. F. TAYLOR.

Farmers' Clubs

OFFICERS OF THE STATE ASSOCIATION OF FARMERS' CLUBS.

President—R. J. Robb, Mason. Vice-president—C. J. Reed, Spring Arbor.

Secretary and Treasurer—Mrs. J. S. Brown, Howell.

Directors—Alfred Allen, Mason; Joseph Harmon, Battle Creek; C. B. Scully, Almont; C. T. Hamline, Alma; W. K. Crafts, Grass Lake; Edward Burke, St. Johns.

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

Associational Motto:

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

Associational Sentiment:

"The Farmer: He garners from the soil the primal wealth of nations."

CLUB DISCUSSIONS.

Hold "Holiday" Meeting.—Seventy members and visitors of the Club gathered at "Willowbrook," the pleasant home of Mr. and Mrs. Wm. Russell on Saturday, December 17. The house was beautifully decorated in the holiday colors, and the Christmas idea was carried out in many ways. President Covert called the meeting to order and after singing by the Club, prayer was offered by the Chap-

lain, Rev. D. H. Campbell. After all had done ample justice to a bountiful dinner the president called to order, and the program was taken up. The response to the roll call was very general, nearly everyone present giving a Christmas quotation. President Covert, in a few well chosen words reviewed the work of the past year and outlined plans for the coming year. "Can the farmers control the lawless hunters?" was the subject of a paper by E. A. Harrington, who said in answer to the question, "They certainly can." The paper gave the law regarding this, and states that if a farmer would post his notices, take pains to get the evidence, and make the complaint himself, the lawless hunters would certainly be brought to justice. Secretary W. B. Burris, of the Jackson County Fair Association, was introduced and gave an interesting talk, outlining the proposed plans of the association, and answering many questions in regard to said plans. The next on the program was a paper written by Mrs. E. A. Harrington, the subject being "The relation of the patron to the school," and "The teacher to the community." Miss Mae Crego, a visitor from the Columbia Club, was called upon and gave an interesting story. The subject of establishing a cheese factory at Napoleon was brought up and quite freely discussed.

Will Encourage Junior Agricultural Club Work.—The Somerset Farmers' Club met with Mr. and Mrs. Randal Wescott, Saturday, December 26, and although the weather was very cold and the roads drifted badly, 34 were in attendance. After all were served a good dinner the meeting was called to order by Vice-president Chandler. Following the opening exercises the Club voted to raise money to carry on the work begun last year, of the Junior Agricultural Society. A committee of five was appointed to solicit funds for this work and Mr. Vanbuskirk was made superintendent of the same. Treasurer made report of the year's finances. In an address on "The Twentieth Century Farmer," the Rev. Guy Vanbuskirk began by saying he was raised on the farm and knows from experience and observation since leaving the farm. In the first place, the conditions as compared with 30 years ago are vastly different. One great advantage is the rural free delivery of mail. To be most successful the farmer must specialize, follow along the lines that which is best adapted to our various farms, the locality, etc. He is not in favor of the cheese factory, but favors the cow as an important factor if her products are used to produce beef, butter, hogs, etc. He also says the farmers who are the most successful are the most religious, because the man is brought nearest to nature, hence nearer to nature's God. This address was greatly appreciated and loudly applauded. A good program was rendered.—Z. E. White, Cor. Sec.

Hold Annual Meeting.—The December meeting of the Summit Farmers' Club, of Jackson county, was held at the home of Mr. and Mrs. E. Sharp. Following the roll call and usual opening exercises the session was adjourned for Christmas dinner. This part of the program was much enjoyed. Meeting was again called to order by President William Blake and officers elected for the ensuing year as follows: President, J. A. Wright; vice-president, Chas. Lyon; secretary, Mrs. E. Sharp; treasurer, Mrs. Vandenburg; organist, Mrs. Ora McGraw; chaplain, Geo. E. Mount; press reporter, Mrs. John Gray; financial secretary, F. M. Ellison. Reports from Mr. and Mrs. J. A. Wright, our delegates to the State Farmers' Club Association at Lansing, were very much enjoyed by our organization. Mr. and Mrs. Wright were given a rising vote of thanks. A vote of thanks was extended to Mr. Blake, our out-going president, for his faithfulness and efficiency during his term of office. Our Club has had a prosperous year, many good things having been said and we recognize its power for good in our community. Meeting adjourned to meet with Mr. and Mrs. W. Purdy in January.—Cor. Sec.

Have Lecture Course.—Peach Grove Farmers' Club is in a very prosperous condition. The Club holds meetings every month and have a lecture course now coming midway between the regular monthly meetings. In November Rev. Freeman, of Grand Rapids, talked of Tolstoi—soldier, and as a man of peace and of war. In December we had a man talk on the subject of single tax. For the next we expect a lady matron of the Orphan's Home to speak to us. Our membership is not so large as last year, but yet we have such crowds that it is sometimes a task to find room for them and the attendance seems to be very regular. In speaking of our meetings, we have debates, travel talks, literary and musical programs and try to work the young in as much as we can.—F.

I Saved Allen Geer \$174.00



Theo Hine.

In October, 1914, I shipped Allen Geer of Plymouth, Michigan, the material for a house. This lumber cost him \$699, freight paid to Plymouth.

Unsolicited, Mr. Geer writes me as follows: "I am well satisfied with the material. I figure that I saved \$174 anyway on this bill of material. Everything came all right. You may use my name any time as a testimonial."

I have hundreds of other letters from satisfied customers of mine telling of savings just as great.

I mention these facts because I have a proposition to make the farmers of the State of Michigan that will interest every one of them.

This is my thirty-fifth year in the lumber business and I am going to celebrate the anniversary by selling

1000 Barns in Michigan in 1915

I believe it can be done. I believe it ought to be done.

My reasons are: First, lumber prices are lower than they have been in many years; Second, I believe they will advance; Third, never has the farmer received such tremendously high prices for his crops as he is getting now and he, therefore, is in a better position than ever to buy.

The opportunity for buying building material at the present prices may not come again in many years—it probably will not for, already, business is starting with a boom. That means more building and then the price of lumber will go up.



General Offices Detroit, Mich.

Yellow Pine Is King

**I can save you from 10% to 25%
On all of your lumber bills.**

I can make you this saving because I sell and ship direct from the mills through any one of my big yards: Yard No. 1 at Detroit, Michigan; Yard No. 2 at Bay City, Michigan, and Yard No. 3 at Cairo, Ill. Shipment in each case is made from the yard nearest you, thereby getting you your lumber without the slightest delay.

Furthermore, I can do this because I have been in the lumber business for 35 years. I know all the channels through which lumber usually goes from the forest to the man who wants to build and how the cost mounts up at each turn. I know, therefore, how great the saving is by selling direct from the mill.

If you are planning upon building a barn or a house, send me your specifications and I will send an estimate right back to you. When you get my figures, compare them with what you would have to pay elsewhere. That comparison will tell the story.

Should your plans not be complete let me help you with them. I have an architectural department which is entirely at your service.

This department is in charge of men experienced in planning farm buildings. Get away from the old style timbered barn and build your new barn right. Use the plank frame barn which is better and cheaper.



Detroit Yards, Hine Lumber Company.

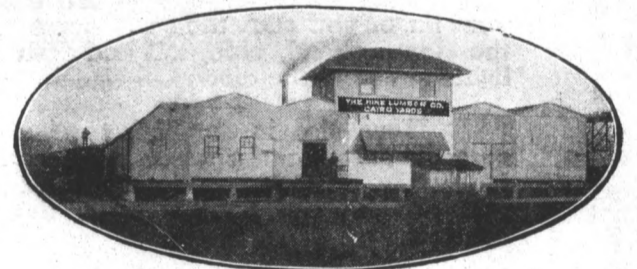
YOU TAKE NO CHANCES

I furnish a Guarantee Bond with each purchase pledging myself and my company to make all shipments just exactly as represented and against loss.

Write to me personally at 965 Woodward Ave., Detroit, Michigan.

I Prepay All Freight Charges

unless specified to the contrary—so you will know just what your material is going to cost you. You don't have to worry about the amount you will have to add to the bill for freight. My prices are f. o. b. not at the mill but right to your home station.



Cairo, Ill., Yards, Hine Lumber Company.

I am recommending YELLOW PINE as a building material.

The following table which compares the breaking strain of yellow pine and other woods used for building purposes, shows conclusively that Yellow Pine is King.

Average ultimate Breaking Unit Stresses, in pounds per square inch. Compiled by Association of Railway Superintendents of Bridges and Buildings	Kind of Timber.	Tension.	
		With Grain.	Against Grain.
	Yellow Pine.....	9000	600
	Hemlock	6000	450
	White Pine.....	7000	500
	Spruce and Eastern Fir.....	8500	500

With my facilities for lumbering, milling and shipping I am able to offer you Yellow Pine at a price that will surprise you.

Yellow Pine is stronger than other woods, it has a grain and it is far superior to these other woods for building purposes.

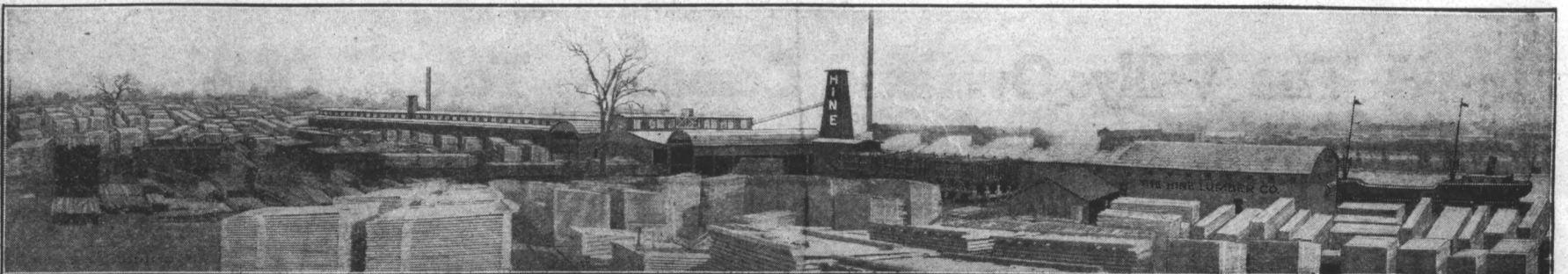
Ask any banker his opinion of my Company. I invite investigation of my business methods and dealings.

Then send your specifications to me.

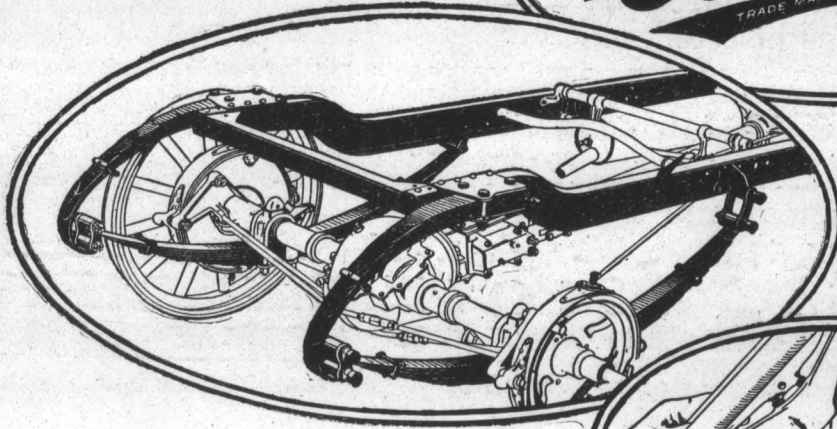
Theo Hine Pres.

HINE LUMBER COMPANY,

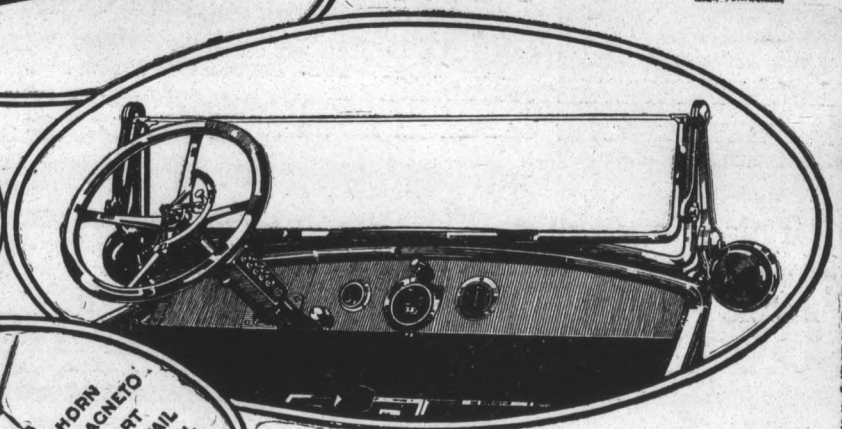
(Bay City Mills, Hine Lumber Company.)



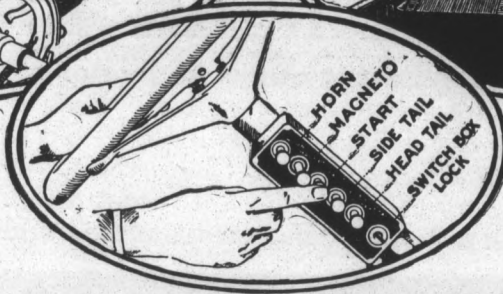
Overland
TRADE MARK REG.



New underslung shock-absorbing rear springs



All instruments in plain sight



All electric buttons on steering column

The New Year's Greatest Car Has all the Latest Improvements

A great many people have the mistaken idea that in order to get the very best and latest automobile it is necessary to spend a whole lot of money.

Nothing could be further from the truth.

The 1915 Overland has all of the very latest improvements, comforts and conveniences.

Yet it costs but \$1075!

The illustrations above are typical of the up-to-date features of the entire car.

In one is shown the simplicity, compactness and completeness of all Overland controls and instruments.

The complete set, of electrical control buttons, is located on the steering column.

With just a slight pressure of your finger you start the car, operate the electric head, side, tail and dash lights or sound the electrical signal.

Here also is the high tension magneto button and a patented device for locking all switches, in or out, so that no one can tamper with the controls.

Could any other method be better or more satisfactory?

Now take the cowl dash. Here are four instruments—a high grade electrically lighted magnetic speedometer, an ammeter, a carburetor priming button and the oil sight feed.

Some higher priced cars have neither speedometer nor ammeter!

The Overland type of rear springs is still another important and high priced feature.

See how the springs are placed *under* the axle; that they are *long*, have a very wide opening, and are of *generous dimensions*. Notice that the frame is *dropped* which makes possible a much lower hung and more graceful body. The road clearance is not affected.

The wide opening of the springs permits **great** up-and-down play—the maximum of flexibility.

These springs are unusually long; in fact are longer, in proportion to the wheel base, *than the springs used on almost all of the highest priced cars.*

The Overland swivel seat gives absolutely free movement of the springs, prevents binding and reduces possibility of breakage.

There is not a car on the market, regardless of price, that rides smoother or easier.

And these are but several examples of Overland superiority!

So don't you, Mr. Buyer, feel obliged to buy an excessively high priced car. An Overland gives you every practical improvement at an exceedingly moderate price.

Place your order today.

\$1075

Model 80
5 Passenger Touring Car

Other Model 80 Prices:

2 Passenger Roadster . . . \$1050
4 Passenger Coupe . . . \$1600

Model 81 Prices:

5 Passenger Touring car . . . \$850
2 Passenger Roadster . . . \$795
Delivery Wagon with closed body \$895
Delivery Wagon with open body \$850

Model 82:

Overland Six . . . \$1475

All prices f. o. b. Toledo, Ohio

Catalogue on request. Please address Dept. 86

The Willys-Overland Company, Toledo, Ohio