

GRANGE VISITOR

Library Agri'l College

"THE FARMER IS OF MORE CONSEQUENCE THAN THE FARM, AND SHOULD BE FIRST IMPROVED."

VOL. XVIII, NO. 11.

LANSING, MICHIGAN, JUNE 1, 1893.

WHOLE NO. 419.

A BILL AND HOW IT BECOMES A LAW.

HON. A. E. EWING.

To the careless observer and general critic the making of a law is a very easy thing. But to the actual lawmaker who meets the usual difficulties and encounters the practical obstacles it is a very different matter, and it may be of interest to many to follow the course of a bill from beginning to end.

In the first place it may be said that the legislature is only the "machine" through which laws are "ground out." The great majority of bills are perhaps drawn by parties who are not members of the legislature and who introduce them through the senator or representative from their district. To be sure the members draft a great many of their own bills and amendments, but if the bill is of any great or special importance it is generally drawn by some experienced lawyer. So if any person wants a law made he may draft it himself or get some one to draft it for him and request his representative in the legislature to introduce it, or, as is often the case, the member of the legislature upon request may both draft and introduce the bill.

Briefly stated the course a bill must travel when introduced in the house is as follows:

1. Previous notice by member.
2. Introduction by member.
3. First and second reading by clerk.
4. Reference by speaker to standing committee.
5. Consideration by committee.
6. Report of committee to the house with recommendation.
7. Ordered printed, referred to the committee of the whole, and placed on the general order.
8. Consideration by committee of the whole.
9. Report of committee of the whole with recommendation.
10. Placed on the order of third reading.
11. Third reading.
12. Placed on passage.
13. Transmitted to the senate.
14. First and second reading by clerk of the senate.
15. Reference by president of senate to standing committee.
16. Consideration by committee.
17. Report of committee with recommendations.
18. Referred to committee of the whole, and placed on the general order.
19. Consideration in committee of the whole in senate.
20. Report of committee of the whole with recommendation.
21. Placed on order of third reading in Senate.
22. Third reading in senate.
23. Placed on passage in senate.
24. Returned to house.
25. Senate amendments, if any, concurred in by house.
26. Referred by speaker of house to committee on engrossment and enrollment.
27. Report to house of committee on engrossment and enrollment.
28. Sent to the governor for approval.
29. Report of governor to the house.

It may be seen from the foregoing that the road is a long one, and from the following that it is a rough one. Let us consider each step in its order.

1. NOTICE.

When a member wishes to introduce a bill, he must give at least one day's notice, in writing, and such notice must contain the title of the bill. This is required by rule in both houses. Such notice

is usually given in the following form and read by the chief clerk and entered in the Journal:

"Mr. Newkirk gives notice that at some future day he will ask leave to introduce A bill to secure to women citizens, not otherwise qualified, the right to vote in school, village, city and other municipal elections."

2. INTRODUCTION.

Bills may be introduced by members individually, or on report of a committee. In the house, members must give such notice as above referred to, but the committee need not do so. In the senate, notice must be given in either case. But these rules may be suspended at any time by two-thirds of those present, and it is often done in order that a bill may be introduced without previous notice having been given. Nearly all bills are introduced by individual members after notice has been given. Committees rarely introduce a bill unless it be a substitute for some bill which has been referred to it. For instance, Mr. A introduces a bill to provide for the reorganization of "agricultural corporations or societies." The committee on corporations, to which the bill was referred, report back to the House as a substitute a general bill to "provide for the reorganization of any corporation or society."

When a member wishes to introduce a bill, he addresses the speaker and on being recognized, says: "Previous notice having been given I wish to introduce a bill." If notice has not been given, he says: "I ask unanimous consent to introduce a bill previous Notice not having been given." If any one objects, it then takes a two-thirds vote to suspend the rules in order that he may introduce his bill, and if that is denied, he must then content himself by giving notice and introducing his bill some other day. The constitution prohibits the introduction of any new bill after the expiration of the first fifty days of the session. On the fiftieth day of the present session the house was in session till midnight for the introduction of bills.

When a bill is introduced by a member, a messenger boy runs with it to the chief clerk.

3. FIRST AND SECOND READING.

The constitution says every bill shall be read three times in each house before the final passage thereof. Each house has provided by rule, and the supreme court has upheld the practice, that the first and second reading shall be by title only. For instance, a member sends up a bill and the chief clerk reads as follows: "A bill to secure to women citizens not otherwise qualified the right to vote in school, village, city and other municipal elections." The speaker then says, "first reading of the bill." Then the clerk reads the title again just as before and the speaker says, "second reading of the bill."

4. REFERENCE TO COMMITTEE.

There are about fifty standing committees in each house appointed by the presiding officers thereof. There are from three to seven members on each committee, and the committees are named according to the class of subjects or bills they are to consider. For instance, bills mainly involving questions of law go to the judiciary committee, city charters go to the committee on municipal corporations; bills affecting railroads go to committee on railroads, etc. When the speaker announced "second reading of the bill" relating to female suffrage, he immediately said; "referred to committee on judiciary." The clerk then gives

the bill a number in the order of its introduction and passes it over to one his assistants, who copies the title of the bill into a book, makes a memorandum of the date, introducer number and reference of the bill and delivers it over to the chairman or clerk of the committee to which it was referred, and takes a receipt for the same. This is to provide against confusion.

5. CONSIDERATION BY COMMITTEE.

It is no trouble for any bill however bad it may be to get as far along as this point on the rough way to the statute books. Many a bill meets its first resistance here, and, alas, how many a one never survives the severe inspection to which it is here subjected. Here are the scenes of all the great preliminary battles. Here is the place where the "lobby" storms the fort, and many of the most spirited contests of the session are held in these small committee rooms. The committee sets some particular time for the consideration of a bill and all interested are invited to attend and put in their reasons for or against it. Sometimes there is no contest at all, but on such a bill as for instance the Detroit electric lighting bill, in the discussion of which the mayor of the city and many of the foremost lawyers in the State argued long and earnestly before the committee, it was found necessary to hold several different sittings before the committee got the bill in shape to be reported out. It is only before these committees that anyone not a member can speak in the legislature. Here the public is heard. The members of the committee listen, question, cross question, speak if they want to, scrutinize, draw conclusions and finally decide what to do with the bill. If the bill is so unfortunate as to meet with the disfavor of the committee it will probably be "pigeon holed" and never again heard of unless the house should order the committee to report on it, which is rarely done unless it is thought the committee has been unfair about it. The committee may recommend amendments to, or even a substitute for the bill.

6. REPORT OF COMMITTEE TO THE HOUSE.

If the committee are in favor of the original bill or agree to amendments to it, or to a substitute for it, they direct their chairman to report accordingly at some following session. The report is made as follows, being usually prepared by the clerk of the committee and offered during session by the chairman of the committee: "Your committee on judiciary to whom was referred house bill No. 246 relative to female suffrage in cities, villages, etc., beg leave to report that they have had the same under consideration and have directed me to report the same back to the house without amendment and recommend that it do pass and ask to be discharged from further consideration of the subject."

If the committee make amendments they ask that they be concurred in by the house. If the committee fail to agree, the minority may bring in a similar report with such recommendations as they see fit.

Frequently a committee will make a report without recommendation and ask that the bill be printed for the use of the committee. When the chairman of a committee makes a report he returns the bill with the report and the battle of such a bill is half won.

7. GENERAL ORDER.

The report of a committee is read by the clerk, and the speaker

then announces that "the bill will be printed, referred to the committee of the whole, and placed on the general order," and that is the last seen of the bill until it turns up on the printed files on each member's desk, and then it awaits its turn to be called up in committee of the whole. This may require several days time and frequently a member will move to "discharge the committee of the whole from further consideration of the subject and that the bill be placed upon its immediate passage." This is done to save time and hurry the bill through, but it is not regular and such bills sometimes are so poorly considered that the house knows but little of what they contain, and upon the whole it is better, even if it does take longer, to let the bill take its regular course. Many a bill passed under suspension of the rules is afterwards called back to be amended or corrected and much time is lost thereby.

8. COMMITTEE OF THE WHOLE.

Next after consideration by the standing committee the consideration in committee of the whole is the most important stage in law-making. Here the whole house resolves itself into a general committee, or "committee of the whole," as it is called. It is done in this way. Some member moves that the "house resolve itself into committee of the whole on the general order," that is, on such bills as are reported and awaiting such consideration. The speaker does not preside but calls some member to the chair while he himself goes down upon the floor with the other members. The regular rules of the house, except those applying to the committee of the whole, are suspended and formality is somewhat relaxed. A bill cannot be passed in committee of the whole. It can only be considered and its passage recommended. This is the way it is done.

The chairman of the committee of the whole reads the bill section by section. As he finishes the reading of a section he says: "Are there any amendments to this section?" Here, any member can offer amendments or substitutes and the freest debate is allowed. A member can speak as often as he wishes to and when the discussion is closed the chairman puts the amendment or substitute to vote and if a majority of the members agree to it, it is so recorded. Each section of the bill is taken up in this way and when all the sections are so disposed of the chairman asks if there are "any amendments to the body of the bill," and here another opportunity is offered to any member to offer any amendment or to change any part of the bill. If there are no further amendments the chairman declares it passed, and takes up a new bill. It is a fortunate bill that gets through the committee of the whole without being changed in some way. Sometimes a bill is so disfigured that even the introducer of it would scarcely recognize it as the same. Then again some bills slide through committee of the whole without a question. The action of the committee of the whole, however, is not final, nor by any means conclusive that it will pass upon third reading. For instance, the female suffrage bill went through the committee of the whole without the slightest opposition, but it was unmercifully slaughtered when it came up for final passage. The value of the committee of the whole lies in the free and easy discussion which it permits and the thorough scrutiny which such discussion incites.

9. REPORT OF COMMITTEE OF THE WHOLE.

When the business in the com-

mittee of the whole is exhausted, some member moves that the "committee of the whole do now rise." If carried, the speaker again takes the chair, and the chairman of the committee of the whole returns to his seat and reports to the speaker what bills the committee of the whole have had under consideration and what changes, if any, were recommended by the committee.

10. PLACED ON THE ORDER OF THIRD READING.

When the chairman of the committee of the whole makes his report to the speaker, the speaker orders the bill placed upon the order of "Third reading of bills," and when that order of business is reached on the same or any following day, all bills which have progressed to this stage are taken up in their order and passed upon. This is called the order of

11. THIRD READING.

This is another critical period in the course of a bill. When the house arrives at this order, the speaker announces the same and the clerk produces all the bills on that order. He takes them up separately in their turn and proceeds to read the bill entire. The first two readings were by title only; but this third reading is a real reading, and the reader can here imagine the monotony in the reading of some long, dry statute. Sometimes a member moves that a bill "be considered as read" in order to save time. There are some charter bills that would take all day to read and the members are generally glad to let it be read by sections, or be "considered as read," and take the standing committee's word for its value, but as a general rule, it is not a wise thing to omit the actual third reading as required by the constitution. But when the reading of a bill takes an hour or two the members pay but little attention. When the reading of a bill is concluded by the clerk the speaker announces "third reading of the bill. All in favor of the bill will as your names are called answer aye, those opposed, no. The clerk will call the roll." At this point discussion is again in order and amendments and substitutes may be offered. But it takes a two-thirds vote instead of a mere majority to make any change in the bill since its consideration in committee of the whole. Debate at this time is more formal than in committee of the whole. No member is expected to speak more than once, and cannot do so if anyone objects unless he be the introducer of the bill. But these discussions on third reading often become very lively and many a bill receives its death blow from some pointed strong speech against it at this stage.

12. PASSAGE.

When debate ceases, the clerk proceeds to call the roll of the House in alphabetical order and records the vote of each member as "Aye" or "No" as the case may be. The clerk has for this purpose a large number of long strips of paper on which are printed in alphabetical order the names of all the members. He uses a separate strip for each roll call going over it the second time in order to give all a chance to vote, and then hands the marked slip over to one of his assistants who records the result upon the journal.

The constitution requires the "Aye" and "No" vote upon the final passage of all bills. It requires a majority of all the members elect to pass a bill and accordingly the least number in the house that can pass a bill is fifty-

Continued on page 5.

Field and Stock.

THE VALUE OF MILK TESTING IN THE FARM DAIRY.

(Concluded.)

A RATION.

At first her ration was about as follows: From 10 to 12 pounds clover and timothy hay; 4 pounds corn meal and 3 pounds crushed oats, in two feeds, night and morning. I have weighed each milking for nearly three months. Tests of her milk were made generally every week. This cow's ration was poorly balanced at first, but soon after the following combination was made: 10 to 14 pounds clover and timothy hay, 5 pounds corn and cob meal, 4 pounds crushed oats and 2 pounds wheat bran. The following formula shows its digestible nutrients in pounds:

	Albuminoids.	Carbo-hydrates.	Fat.
12 lbs. Clover & timothy	0.66	5.28	0.19
5 lbs. Cob meal	0.34	2.35	0.16
4 lbs. Oatmeal	0.30	1.84	0.05
2 lbs. Bran	0.23	0.92	0.05
	1.59	10.87	0.50

According to the analysis of this ration there should have been twice as much bran to make a well balanced nutritive ration. This experiment showed me that it would pay to lay in a good supply of coarse, flaky bran next summer when the price is low. Then I can feed more bran at a far less cost. Through November I gradually increased my first ration to the amount given above. The scales and tester showed a gradual gain until this cow gave from 20 to 22 pounds of milk testing 4.8 per cent butter fat. No change of ration seemed to increase her yield more than this, according to repeated tests, and I decided that she had reached her full limit for this season, both as to milk flow and fat yield.

The first of last December she gave 20 pounds of milk and tested 4.6 per cent fat. Today (Feb'y 10), she give almost exactly the same amount of milk, and has gained 0.2 in fat. This cow has not varied 2 pounds per day in her milk flow for nearly 2 1/2 months, except on two or three different days; then she was left out in the yard a portion of the day in a very cold wind, and on another day was out in a snow storm. By actual weight and use of the tester, I found a slight loss of butter fat, and from two to four pounds loss of milk each time she was exposed to the weather.

Some of the greatest losses in the dairy arise from imperfect creaming and churning. It is claimed by leading dairy experts that from one-fourth to one-third of the butter fat produced by our cows goes into the swill-pail. Some may say, "What of it? The pigs get it, don't they? It isn't lost."

But, my friends, is it lost, for the butter may be worth 25 cents per pound, and a grain ration may be purchased for one-tenth that amount, that will be far more valuable for a hog ration.

SHALLOW SETTING.

As a general thing it is found that creaming milk in the shallow, open pan is a wasteful method. It is very difficult to place these pans where the temperature may be just right during the whole 24 or 36 hours. To secure the larger proportion of the fat in this way, it would be better to have a special room that could be warmed and ventilated so as to keep the temperature at a uniform, normal condition.

The milk tester shows the slightest loss of fat in the skim milk. Out of many scores of tests made it is found that the loss from the shallow, open pan setting averages from 1 1/2 to 2 1/2 per cent butter fat. In the deep setting creamery it was from 0.1 per cent to about 1.2 per cent fat. The Centrifugal Separator is the only machine that will invariably extract nearly every particle of fat, leaving only from a trace to about 0.1 per cent fat in the skim milk. As the separator is too costly for use in a small dairy, it would seem the better way to use the cold water gravity system. Almost any method will do whereby the milk may be placed in narrow, deep cans, and partially or totally submerged in cold water.

Finally, the tester and dairy thermometer show how to avoid excessive loss of fat in butter milk. The cream should be properly ripened by the aid of the thermometer. Some dairy matrons and maidens test the cream by sticking their

fingers into it and wiping them off on the under side of their apron. As the temperature of their fingers is not always the same, they frequently hold the cream too long, and it develops too much lactic acid. When properly ripened and churned the butter globules will gather into little granules, about the size of small wheat kernels. A test of the buttermilk taken from a perfect churning, shows the loss of butter fat to be reduced to a minimum.

THE MILK TESTER.

"There is a mistaken notion in the minds of some farmers as to the value of the milk tester on the farm. It does not give any indication of the amount of milk, nor of the length of the milking period, nor of any of the other merits or defects of the cow. It is not intended for any of these purposes, nor is it intended to supplant the judgment of the dairyman as to what constitutes a good cow, but rather to aid him in selecting and breeding. It is useless without the scales, for in determining the value of the cow the amount of milk is as essential a factor as its richness. Its great use is, in connection with the scales, to determine the productive capacity of the cow; showing in other words whether she is kept at a profit, or at a loss, or whether she is merely paying board. It enables the farmer to determine which cows he should select as the dams of the future herd, and, in general, in connection with other means of information, to enable him to carry on breeding on correct and scientific principles. It has, therefore, a much wider, and often more important use on the farm than in the creamery. In the creamery it merely determines the value of the milk. On the farm it determines the value of the individual cow, and is an important aid in the still more complicated problem of breeding up a herd of dairy cows."

THE CARE OF THE JERSEY.

PRIZE ESSAY, BY EDWIN F. MOORE.

KIND TREATMENT.

The education and forming of character and development of the constitution of the cow begins, as does similar training in the whole animal family, in infancy. Treat the calf with kindness; feed properly; give access to plenty of pure water, and shelter from cold rains and winter's storms.

Treat the cow with gentleness always. The Jersey cow probably owes her docility to the fact that in the island whence she came to us, and where she presumably acquired many of her valuable characteristics, she has been under the care and training of the wives and daughters of the household, thus developing a quiet, trusting disposition. The stockman's average hired help are not so considerate of their charges as are the wives and daughters of the dairying peasantry.

Nervousness and viciousness are engendered in the ill-treated cow and transmitted to her offspring. The more docile the cow the more are her energies likely to be devoted to the interests of the dairyman, and the stockman can not be too watchful of unreliable help, who may beat or otherwise frighten the cows or hurry them to or from the pasture. Likewise, quarreling in the herd is to be avoided as much as possible.

CLEANLINESS.

One very bad feature of average dairying is carelessness in milking, more particularly in the winter time, or when the cows are stabled. More or less vileness and offensive dust collects upon the udder, and unless removed before milking, a portion of it finds its way into the pail. Part of it settles after passing the strainer, a portion is seen floating on the cream, and the whole product is contaminated. Frequently when stables are ill-kept and the milkers careless, there is a decided "off" flavor to the entire milking. Half the milk that is sent into our cities will deposit a vile sediment after standing.

Let Jersey dairymen, while giving a richer grade of milk, also supply a cleaner article, and those who care for health and decent living will give it the preference even at an increased price.

It is urged by many that it is too much trouble to clean the udder, and in many farm households this dirt in the milk is looked upon as

unavoidable. It is strange that even fastidious people will tolerate it, when they would be inexpressibly shocked and disgusted if they should see even a smaller portion of the same fertilizing element introduced openly into the milk they were expected to consume.

The picking over by the cow of foul bedding, as well as leeks and other plants found in bush pasture, also impart an odor to milk and butter and render it unwholesome.

PURE WATER.

Another matter of vital importance, and one very frequently neglected, is the necessity of having pure water for the cows. It is a very common impression that anything in liquid shape is good enough for stock of all kinds. Shallow basins are excavated, or natural depressions utilized, where the water stands exposed to the sun for weeks and months, propagating disease germs which being transmitted by the agency of the cow, find lodgment in the consumer's physical system. Thousands of children, yes and mature consumers also, in city and country, die annually from the effects of milk from cows obliged to drink water contaminated with the germs of disease. Sometimes the disease is traced to its source. More often no effort is made to find the cause, medicine is administered with varying results, and "the prevalence of typhoid" or some other kindred disease is commented upon as a mysterious visitation. The drinking water of the household and the milk supply share the responsibility as sources of this class of ailments; but as people are much more careful of their own drinking water than of that which they give their cows, the evil perhaps more frequently can be traced to the water supply of the milk producer. Any standing water exposed to the rays of the sun is dangerous. Give no water to your cows that you think is not fit to drink yourself.

Jersey dairymen, you have in its essential elements the best milk and butter on earth to offer your customers. See that it is scrupulously clean and wholesome, and secure a trade where the demand at good prices is greater than the supply—the custom of those who like what is palatable and clean, and who have regard for the health of their families.

SPECIAL DEVELOPMENTS OF JERSEYS AS BUTTER PRODUCERS.

PRIZE ESSAY, BY H. C. BECKMAN, JR.

In this day of competition it has come to be an acknowledged fact that general purpose animals, either cows, horses, sheep or swine, are unprofitable. Owing to the principle known as the "law of correlation," it is theoretically (and practically as well) impossible to produce an animal superior in two dissimilar branches—e. g., milk and beef, or mutton and wool.

Every animal, either cow, horse, sheep or swine, has a certain amount of energy at its disposal, and this energy can be exerted in a single direction to make a superior animal, or it can be divided, a part exerted in one direction and a part in another, making a general purpose animal indifferent in both branches. If any organ or set of organs is developed for any length of time, through evolution, it becomes improved at the expense of other organs.

A careful breeder can, by judicious selection, mold the form, disposition, size, etc., of his animals, until a certain limit is reached. History tells us how Bakewell, the Collings, Booth and Bates developed the British beef breeds? Of course these men were exceptional breeders, but their work goes to illustrate how susceptible cattle are to morphological and physiological transformations.

For centuries the farmers of the island of Jersey have been breeding their cattle with a single object in view—not size, nor beauty of form, neither quantity of milk nor quantity of butter, but quantity of butter for given quantity of feed; and in this capacity their cows have come to be par excellence. The Jersey farmers are as a rule very careful and painstaking, and love their cows as an Arab loves his horse. The cattle are given the best of care, and as the whole island supports on an average one cow per acre, it will be seen that the farmers are obliged to make the most out of their feed. The cows are tethered

in order to avoid a waste of pasture. The climate of the island is of the mildest; thus nature supplies a feature which might otherwise have been neglected, and Jerseys will not work up to their full capacity when exposed to cold rains, snowstorms, etc. The more highly organized an animal is, the better able she is to apply her entire energy in a single direction, and the less able she is to withstand abuse; consequently, the better it pays to give her every advantage; a warm stable is far cheaper than feed.

The following facts go to prove that Jerseys are better adapted to make more butter out of a given quantity of feed than any other breed:

1. They are more highly developed in that capacity than any other breed.
2. Through evolution, they have obtained a scientifically correct form and disposition.
3. They waste no energy in making unnecessary skim milk.
4. They respond more rapidly to good feeding.
5. They mature as early or earlier than any other breed, frequently giving milk before the first calf is dropped. It is questionable whether this is desirable or undesirable, as the cow is almost sure to suffer for it afterward. It does, however, illustrate the remarkable milk giving tendency versus the tendency to lay on fat, so prominent in most dairy breeds.
6. As a most potent proof, the fact may be cited that a very large percentage of the dairy cattle of the east are Jerseys.

The dairy farmers of the eastern states, notably those in New York, Pennsylvania, Vermont, etc., owing to keen competition, are obliged to run their dairies as economically as possible, to practice intensive rather than extensive farming. They have awakened to the fact that it does not pay to keep dairy cows that lay on fat, or waste their food in making skim milk; and it is only a question of time when the same condition of affairs will exist in the west, and western dairymen be obliged to adopt similar measures.

THE EFFECTS OF TAINTED MILK UPON THE MANUFACTURE OF CHEESE

[Bulletin Geneva, N. Y. station.]

The term "tainted" is usually applied to any milk that gives off any odor other than that belonging to normal milk. In regard to cheese making, we should make a distinction between different kinds of tainted milk. Milk may be exposed to and absorb odors which do not in any way affect the cheese making, that is which do not cause floating curd and increased loss in manufacture, and which may produce cheese of good quality. For example, the absorption by milk of traces of such an odor as that of spirits of turpentine would in no way affect the loss of milk constituents in cheese making, and, under ordinary conditions, the volatile compound would be completely driven out at the temperature used in manufacture, so that the quality of the product would not necessarily be injured. On the other hand, if milk is exposed in the presence of putrefying animal matter, the absorption of odors will be accompanied by absorption of bacteria which will work such changes in the milk that, during the process of cheese making, there will result floating curd, large losses of milk constituents and an inferior cheese product. In connection with cheese making, we should, therefore, distinguish between tainted milk, caused by the absorption of a mere odor and that caused by absorption of odors which are necessarily accompanied by deleterious bacteria. Of course, any abnormal odors are undesirable in milk, but there is a wide difference in respect to their source and effects, and some general distinction like the above should be recognized.

Hon. E. P. and Hon. H. R. Dewey, of Grand Blanc, have sent their wool to a Philadelphia commission merchant to be sold. From his 35 head of Merinos, D. P. Dewey got an average clip of 15 pounds per head. The heaviest ewe's fleece weighed 19 pounds and 10 ounces, and was from a four-year-old. The heaviest ram's fleece weighed 24 1/2 pounds, and was from a five-year-old.

The modern giant comes high, but the circuses must have him.—Troy Press.

An important paper to bee keepers is furnished in the May number of *Insect Life*, issued by the Department of Agriculture by Mr. Frank Benton on "The Langdon Non-swarming Device" for bees, which is fully described and illustrated, and now for the first time presented to the public. Bee keepers have for many years endeavored to prevent or at least control natural swarming, but without success. The benefits to be derived by the suppression of swarming are manifold, and a system has at last been devised to meet this want. The apparatus is fully explained, and also the system, which owes its effectiveness to a non-swarming attachment for bee hives, by the use of which the desire to swarm is removed. It is even thought possible that by its constant use a non-swarming strain of bees will in time be evolved—a result that has long been desirable. Other important advantages are claimed for the system.

MICHIGAN STOCK BREEDERS.

All those who wish to purchase pure-bred stock of any description, will find it to their advantage to correspond with some of the following well-known breeders.

SHROPSHIRE SHEEP

We are prepared to furnish Choice Imported, or Home-bred Ewes and Rams at prices as reasonable as any Reliable Breeder can sell. If you wish to start a Flock it will pay you to write us for prices, or better come and see for yourself.

E. C. L. MUMFORD & SON
MOSCOW, MICHIGAN

EUGENE FIFIELD

BAY CITY, MICH

Successor to MERRILL & FIFIELD

Importer and Breeder of

HEREFORD CATTLE

and

SHROPSHIRE SHEEP

Choice stock of both kinds for sale. Prices reasonable. Correspondence solicited.

HIGH CLASS SHROPSHIRE.

We offer ten imported 2-year-old rams from the flock of Messrs. Bowen-Jones and Minton that will weigh 300 pounds, and shear from 18 to 15 pounds at maturity, that are tested sires and fit to head the best flocks, and 40 home-bred yearling rams. We shall make an early importation for our '93 trade. Annual auction sale September 31.

THE WILLOWS, PAW PAW, MICH.

SPRINGDALE FARM

LANSING, MICHIGAN

JAMES M. TURNER, Prop

Shorthorn and Hereford Cattle

Clydesdale and Standard-Bred

Trotting Horses, Shetland Ponies

and Shropshire Sheep

FOR SALE

A few good pigs from the Hillsdale County Herd of Poland China Hogs. Can furnish pairs or trios not akin. Inspection of our herd solicited, or write, describing closely what you want, and satisfaction will be guaranteed. Stock recorded in O. P. C. R.

JOHN BOWDITCH
Hillsdale, Michigan

H. H. HINDS

Stanton, Montcalm Co

Breeder of

Shorthorn Cattle

American Merino

and Shropshire Sheep

BLACK MEADOW FARM.

Standard-bred Trotters

Shorthorn Cattle

Write for

Shropshire Sheep

Catalog.

Berkshire Pigs

F. A. BAKER, Detroit.

69 Buhl Block.

Oakland Poultry Yards.

Eggs for hatching per 13, Barred Plymouth Rocks, Rose Comb White, and Single Comb Brown Leghorns, \$1.00 to \$1.50. White Wyandottes and Light Brahmas, \$1.50. Mammoth Bronze Turkeys, \$2.00 per six.

My yards are all headed by high-scoring males, hens and pullets score 90 to 95. My stock has won premiums at all the principal shows in Michigan.

JAMES MILLER, Jr., Beddow, Mich.

FOR SALE.

Three young Jersey Bulls, ranging in age from four months to one year old. All eligible to registry in A. J. C. C. registry. Also a registered Cheshire Boar.

IRA A. VAN ORSDAL,
QUINCY, MICH

COLBY STOCK FARM.

Rambouillet Sheep, Galloway Cattle, and Percheron Horses. All stock pure bred and registered. Two Percheron Stallions for sale at a bargain. Spring Rye for Seed.

Address, L. F. HOAG, COLBY, MICH.,
or L. B. TOWNSEND, IONIA, MICH.

M. H. WALWORTH

HILLSDALE, MICH

BREEDER OF

ESSEX, VICTORIA AND SUFFOLK SWINE

OF THE BEST

Also American Merino Sheep of choice quality

SHROPSHIRE HALL

STOCK FARM

Has now on sale 50 Registered yearling Rams, 25 Registered yearling Ewes, also imported Ewes and Rams. 1898 importation to arrive in July.

L. S. DUNHAM,
Concord, Mich.

SHROPSHIRE FOR '93

Imported, Registered and Unregistered

References: ex-Gov. Winans and C. S. Gregory,
Banker, Dexter, Mich.

Choice Yearling Ram and Ewe Lambs for sale

Terms reasonable. We pay half of freight or express.

VALENTINE BROS.,
P. O. DEXTER, MICH.

PATRONS' PAINT WORKS

PATRONS' PAINT WORKS have sold Ingersoll Paint to the Order P. of H. since its organization. House Paints and Cheap Paints for Barns and Out-buildings, 10,000 Farmers testify to their merits. Grange Halls, Churches, School Houses, Dwellings, all over the land, some of them painted 15 years ago, still looking well, prove them the most durable.

MICHIGAN PATRONS "Buy direct from Factory" at full Wholesale Prices and save all Middlemen's Profits.
O. W. INCERSOLL, Prop.
Oldest Paint House in America
241-243 Plymouth-st., Brooklyn

Ingersoll's Liquid Rubber Paints
Indestructible Cottage and Barn Paints
Sample Color Cards, "Confidential" Grange Discounts, Est. mates and full particulars MAILED FREE. Write at once.

Postal Jottings.

Enclosed find postal order for subscriptions to GRANGE VISITOR that were gained through a contest. A great deal of latent talent was brought out, the very best was a representation of spring, by a number of ladies dressed in white, presenting a bouquet of flowers to the May queen, and the presentation of old relics, some of 200 years old; one surveyor's book owned by the Hoig family that was used in Scotland, the oldest date being 1735; a pewter plate and cup that came over in the Mayflower; a spread that was 60 years old, and many articles ranging from 50 to 200 years old. Grangers go and do likewise, and you will see that it helps your Lecturer out wonderfully. I know by experience.

Mrs. B. G. HOIG,
Lecturer Morenci Grange.

WORTHY BROTHER—Penfield Grange No. 85, met April 18. By some it was understood that they would meet again in the A. M., and work again repairing the sheds, but through some misunderstanding but few were there. They had their dinner and did what they could. When the hour approached for opening of the Grange as the brothers arrived they would fall to work. They were so interested in it they did not want to leave. The Worthy Master finding a quorum present of sisters, called to order, and held a good session of the Grange while the brothers were pounding away outside the gates. Still there is more work to do.

The cold rains make everything backward, yet there is a good outlook ahead, and we take heart and move onward.
"AUNT JANE."

KALKASKA POMONA

met May 16 and 17, with Clearwater Grange No. 674, and were right royally entertained with the following program: "Does our Road Law need Change; if so, What?" L. L. Taylor.

Road question discussed by A. E. Palmer, Wm. Campbell, Charles Van Buren and C. W. Barnard.

"Our fast Disappearing Forests, and what Shall take the Place of Them," George Carlisle. This question will be discussed by Messrs. Carroll, Wilcox, Rosenberg and Robert Campbell.

"Does the Present Political Position of Woman Exalt or Humiliate her?" Discussed by James Greacen, A. E. Palmer and Sisters Amelia Taylor and Luemna Campbell.

"Would Woman's voting be a National Benefit?" J. D. Gibson, C. W. Barnard and Sisters Wm. Campbell, A. E. Palmer and Van Buren.

"Believing in Woman's Rights, Does the Franchise Privilege belong to Woman as a Right?" Wm. Eckler, Wm. Campbell, Sisters Jane Sherwood, Eckler Wilcox and Gilson.

"Why is so large a per cent of the Female inmates of the Asylums for the Insane Farmer's Wives?" Sisters Wm. and Robert Campbell.

"Which is most to be feared—Intemperance, Anarchists or Cholera?" Sisters Amelia Taylor, Jane Sherwood, Luemna Campbell and A. E. Palmer.

"Our Gardens and What Have we done with them?" For general discussion.

The discussions will be interspersed with songs.

Open Grange in the evening; initiation Wednesday morning.

H. A. BARNARD,
Lecturer.

A CLOSING ARGUMENT.

Goodrich, May 10, 1893.

MR. L. UNDERHILL, OLD MISSION, DEAR SIR—I had hoped that the "Single Tax" humbug was sleeping the sleep of death, until your personal address to me in the VISITOR of May 1 dispelled the delusion. I have very little patience to deal with this insane theory, and feel guilty when I waste valuable space in the columns of the VISITOR on the subject. A theory that for purposes of taxation would exempt all the accumulated wealth of the country, the hundreds of millions of wealth in the form of buildings, railroads, ships and cargoes, merchandise, bank stocks and bonds, and the thousand countless paraphernalia that enable the nabobs of the land to roll in luxury, and impose all taxes upon naked land, is certainly not worth any sane man's consideration.

Do you not know, Mr. Underhill, that our state has lost hundreds of thousands, yea millions of dollars in attempting to raise a revenue out of naked lands? Taxes would be assessed and returned, and reassessed, and charged up with costs, and finally to get rid of them would be sold to the highest bidder; when a tax of fifty dollars would often bring but fifty cents, and even at that the buyer got the worst of the bargain. I have a number of such titles myself, represented by very good looking state deeds, which I

will sell you Mr. Underhill, for just what I paid for recording the deeds.

The fact is, this thing called "Unearned increment" is a myth—it has no existence in fact. The earth will never respond to the demands of the tax gatherer until the hand of toil is first applied. What better evidence do we want on this subject than to look at the aborigines of our country. If there had been any reality in this "unearned increment" through all these countless ages in which they have been "monarch of all they surveyed" they certainly must, ere this, have become a very rich people. The only reason why they have not possessed boundless wealth is simply because they did not earn it. For countless thousands, and perhaps for millions of years they have been in the full possession of all the "increment" which this continent produced. Now, please contrast their accumulations with what the white race have built up in four hundred years. Now, Mr. Underhill, wherein consists the difference? Does not any one see at a glance, it consists in the fact that the white man has toiled and saved, while the Indian has been shiftless and worthless. You tell us, Mr. Underhill, that you know of a great many "Henry George" men, and that you have "four of them within two miles of you." If this be so I am sorry for them, and I have reason to fear that the insane asylum at Traverse City, so near you, has not been doing its duty. But let us put these four men, and yourself with the rest, on the witness stand. You tell us they "have all the lands they want." Now please kindly tell us, are they and you growing very rich out of the "unearned increment" of these lands? You may all be very prosperous, and I sincerely hope you are, but if so you are men that toil.

My experience in the improvement of these new countries, "All that I saw, and part of which I was," has enabled me to see how the wealth of a country is created. The first 22 years of my life were spent in the wilds of western New York, then I came to Genesee county Michigan, where I spent 25 years of the hardest of toil, both of body and mind, and finally, moving to the wilds of Tuscola county, where over 30 years have been passed. I have learned how farms and homes are created. In all this I have learned that whatever income the farmer may enjoy, it is the fruit of labor. Take from this fair land of Genesee, where I am now writing, the toil that has been bestowed upon it, and it will be left the same howling waste that we found it 50 years ago. A few gray-headed pioneers still linger among us, and as a rule they are in independent circumstances, but their furrowed cheeks and stooping forms bear ample testimony that it is no "unearned increment." The fact is that the curse of Cain has rested upon these sons of toil from the beginning, and by the sweat of their faces they have learned to eat their daily bread.

But the single tax men will tell you it is different in our great cities; but that too is a delusion. Take the great city of New York, for instance. Go back to the days of old Hendrick Hudson. Charge up the planting of the first settlements—the toils, the privations and the dangers; follow it down through the days of old Peter Stuyvesant and Wouter VanTwiller, to the period of its cityhood. Charge up all the thousand and one items of taxes and incidental expenses; the street building, harbor building, dredging, lighthouse building; with all its railways, schools and other public edifices, and add to these the accumulated interest of all these past years, and you will find that the man who pays a thousand dollars a foot for land pays no more than it has cost. It all represents value paid. There is no more "unearned increment" here than on the country farm. Some curious archæologist has demonstrated that if the sum of something near seven thousand

dollars, with which queen Isabella aided Columbus in fitting out his voyage of discovery had been placed at interest, simple and compound, down to this time, all the wealth of this American continent would not pay it. "Unearned increment" is the foundation and bed rock of Mr. George's theory of single tax, and investigation proves that it has no existence in fact.

Let us suppose for the sake of argument that this country was burned over, and buildings, fences, implements, and every thing in the shape of personal property swept from the face of the earth, and then send out your tax gatherers. What kind of a time would they have picking up your "single tax?" How long would it take them to gather the amount required to support this government for a single year? You ask me, Mr. Underhill, why, if there is plenty of land in the country, that people rush and tumble over each other to get to an Oklahoma land sale? I will answer; in the language of the traditional old lady, it is because "the fools aint all dead yet." It is a well known fact that fully half of the lands of Oklahoma are no better than our worthless Jack Pine lands, which starved out their settlers years ago. Right there, friend Underhill, is the place to test your single tax theory and to gather in your "unearned increment." But then, the wild lands of Michigan are not all thus worthless, for we still have many thousands of acres of desirable lands which remain unoccupied.

I would like to have you and General Francis A. Walker read the last and ablest of all our labor reports, wherein the Commissioner, the Hon. Henry A. Robinson, tells the people that Michigan is not yet half cultivated. He says there are yet very large areas of unoccupied land within our state, and that whereas we now have but a little over two million inhabitants, the state is amply capable of supporting five millions.

One thing more. You tell us that "all labor organizations have their single taxers." Of course they have; and that is one of the very best reasons why the farmers should oppose single tax. They, like some others, would like to crowd all the taxes onto the farmers, but the masses of the farmers have too much sense to embrace that doctrine.

It is urged by the single taxers that a good deal of personal property always escapes taxation; and the inference is drawn that because we cannot reach all personal property we farmers should imitate the camels of the desert by kneeling down to have the whole burden of taxation placed upon our backs. I will offer no arguments against so shallow a theory, it carries its own refutation with it. An honest and determined effort on the part of those who levy taxes would reach the greater part of it, but the fear of losing votes lets a good deal slip through.

And now, if the editor will condescend to publish this article in full I am willing to promise to him and his readers that this shall be the last time I shall trouble them by combating so foolish a theory as this "Single Tax."
ENOS GOODRICH.

If you are going to the World's fair look up our advertiser for accommodations. Mrs. Blount is a Michigan Patron and will be glad to entertain Michigan Patrons. Write her for terms.

Harness.

You will notice on page 5 the advertisement of the Hand Made Harness Co., Stanton, Mich. They are reliable people, and refer to Hon. H. H. Hinds, of Stanton, member of executive committee of State Grange. Write to them.

Weak lambs can often be saved by feeding them regularly for a few hours. Keep a supply of fresh milk on hand. Ventilate the barn but be very careful not to have drafts of air strike the sheep, especially the young ones. Keep the pens clean and well bedded. Give the older lambs as much room to run and play as practicable and let them have plenty of sunshine, but avoid having them lie on cold damp ground too much.—Orange Judd Farmer.

Our New Offer

THIS WILL INTEREST YOU

IF YOU ARE THINKING OF BUYING

A Sewing Machine

Although we have sold a good many of the machines we have been offering and though they have given satisfaction, we believe that we are making a still better offer.

FOR

\$21.00

WE WILL SEND A MACHINE WELL NAMED

THE COLUMBIAN

The Columbian is a strictly high grade sewing machine with all modern improvements. Superb mechanism, graceful design, handsome finish, light running and noiseless. In fact, all the desirable features contained in other well-known modern style machines are found in the "Columbian." Improved and simplified by the best mechanical talent until it stands the peer of all other sewing machines on the market.

FULLY WARRANTED FOR TEN YEARS.

As additional evidence of the general superiority and wearing qualities of the "Columbian," it is warranted for ten years. The "Columbian" will out-last any two of the highest priced sewing machines in the world.



All wearing parts are case-hardened steel possessing great durability, and by the turning of a screw all lost motion can be taken up. All parts are fitted so accurately that these machines are absolutely noiseless and as easy running as fine adjustment and best mechanical skill can produce. No expense or time is spared to make them perfect in every respect, as every machine passes a rigid inspection by competent men before leaving the factory.

Extra attachments in a velvet lined case, sent free with each machine: 1 Tucker, 1 Ruffler with shirring plate, 1 Hemmer Set (4 widths) and Binder, 1 Braider (Foot and Slide), 1 Thread Cutter. Each machine is supplied with the following additional accessories: 1 Hemmer and Feller (one piece) 10 Needles, 6 Bobbins, 1 Screw-Driver, Oil Can filled with oil, Cloth Gauge and Thumb Screw, and a Book of Instructions. The Book of Instructions is profusely illustrated, and answers the purpose of a competent teacher.

The Balance-Wheel and many of the fine parts are nickel-plated, with other parts finely enameled and ornamented, giving it a rich appearance. The improved automatic bobbin winder is so simple that a child can easily operate it—winding the thread automatically on the bobbin as evenly and regularly as the thread on a spool. This valuable attachment renders possible a perfect control of the shuttle tension, and all annoyance resulting from shuttle thread breaking while the machine is in motion, which is common to many machines, is entirely obviated.

A self-setting needle and self-threading cylinder shuttle are used in the "Columbian" high arm sewing machines. They are so simple that any one can easily operate them in a few minutes' time, as our Instruction Book is fully illustrated, showing how to do all kinds of fancy work with attachments. The self-threading shuttle is so simple that with two motions of the hand backward the shuttle is threaded.

The driving-wheel on this machine is admitted to be the simplest, easiest running and most convenient of any. The machine is self-threading, has the very best tension, and is made of the best material, with the wearing parts hardened, and is finished in a superior style. It has veneered cover, drop-leaf table, 4 end drawers and center swing drawer and finished in oak or walnut woodwork.

Price including one year's subscription, \$21. Sent by freight, charges prepaid. Give name of freight station if different from postoffice address.

We prepay the freight.

The Machine is shipped subject to your approval, and if not entirely satisfactory will be returned.

AT OUR EXPENSE

Could Anything be Fairer?

IT IS WARRANTED FOR TEN YEARS.

Address, with the money,

GRANGE VISITOR, LANSING, MICH.

Farms in Isabella County

AVERAGE ABOUT SEVENTY ACRES EACH. Beautiful homes, large barns, fruitful orchards, neat country school houses and churches, thriving villages and a handsome city, prove the prosperity of the people. The schools and colleges of Mt. Pleasant are excellent. Oats, clover, sheep, potatoes and fruits for general farming; corn, hay, and rich pastures for dairying and stock raising, have made many farmers well off; others are prospering, and so can you. Unimproved lands, valuable timber lands, partly improved farms, and farms highly improved, and choice city property for sale for really low prices. For samples of descriptions of such property as you may desire and feel able to buy, please address COOK'S REAL ESTATE AGENCY, Mt. Pleasant, Mich.

Illustrated Catalogue FREE. **BEST FARM SCALE**
3 Ton \$35. Other sizes proportionately low
ON TRIAL—FREIGHT PAID—WARRANTED
OSGOOD & THOMPSON, Binghamton, N. Y.
J. C. GOULD, Agt., Paw Paw, Mich.

DO YOU READ

any of the following papers and magazines? If so you can make money by sending to us, thus getting the VISITOR for nothing in some cases, and in some instances you can get a first-class magazine and the VISITOR for less than the price of the magazine. Send cash with order.

AGRICULTURAL PAPERS.		Regu- lar	Price with price, Visitor.
American Agriculturist	1.00	1.50	1.50
Ohio Farmer	1.00	1.35	
Western Rural, with Market Review	2.25	2.25	
Prairie Farmer	1.00	1.20	
Breeders' Gazette	2.00	2.00	
Country Gentleman (state if new)	2.50	2.50	
Orange Judd Farmer	1.00	1.20	
Green's Fruit Grower	50	75	
The Farm Journal	50	70	
MAGAZINES.			
Atlantic Monthly	4.00	3.70	
Cosmopolitan	3.00	3.00	
Harper's Monthly	4.00	3.50	
" Bazar	4.00	3.70	
" Weekly	4.00	3.70	
" Young People	2.00	2.00	
North American Review	5.00	4.50	
Scribner's	3.00	3.00	
Century	4.00	4.00	
Review of Reviews	2.50	2.75	
The Forum	5.00	4.50	
Popular Science Monthly	5.00	5.00	
Scientific American	3.00	3.00	
MISCELLANEOUS.			
Detroit Free Press, weekly	1.00	1.20	
Detroit Tribune	1.00	1.00	
Grand Rapids Democrat weekly	1.00	1.10	
Youth's Companion (new names)	1.75	1.75	
The Independent	3.00	3.00	
The Christian Union	3.00	3.00	
The Congregationalist (Lansing)	1.50	1.50	
The Moderator	1.50	1.50	
New York Tribune	1.00	1.00	

ALL THE COMFORTS OF HOME
includes the great temperance drink
Hires' Root Beer
It gives New Life to the Old Folks, Pleasure to the Parents, Health to the Children.
Good for All—Good All the Time.
A 25 cent package makes Five gallons. Re-use and get Hires'.

THE GRANGE VISITOR

Published on the 1st and 15th of every month.

Kenyon L. Butterfield, Editor and Manager, LANSING, MICH.

To whom all exchanges, communications, advertising business and subscriptions should be sent.

Office, Room 19, Old State Building. TERMS 50 Cents a Year, 25 Cents for Six Months. In Clubs of 20 or more 40 cents per year each. Subscriptions payable in advance, and discontinued at expiration, unless renewed.

Remittances should be by Registered Letter, Money Order or Draft. Do not send stamps.

Entered at the Postoffice at Lansing, Mich., as Second Class Matter.

Read what the master says.

Do you always mention the VISITOR when you write to advertisers?

Parents of girls who may be going to Chicago this summer should read "Advice to girls."

Of course you are busy, but don't neglect any good opportunity for gaining a new subscriber to the VISITOR.

Mortimer Whitehead, the eloquent lecturer of the National Grange, will speak at Bay View August 14.

If you contemplate going to the World's Fair, read a letter from Brother Farnum in this issue and also notice Sister Blount's advertisement on page eight.

Lovers of Jerseys will be pleased with the prize essays which will be found on page two. The article concerning the care of the Jersey should be read by everyone who keeps a cow.

Farmer's day at Bay View has been set for August 14. Make your plans to go if you possibly can do so. A nice trip, and not a very expensive one, is to go to Bay View for this day, and take a boat to Chicago.

The Woman's Work page was in charge of Mrs. E. D. Nokes of Hillsdale county and the articles are from ladies belonging to Granges in that county. The article last issue by a brother, entitled "A man's ideas," has evoked considerable comment evidently for we have already four replies. They will appear in next issue.

THE STORY OF A BILL.

We are fortunate in being able to publish an article written by Hon. A. E. Ewing on the methods of work in the legislature. It is a thorough explanation of the history of a bill which is to become a law, and should be read by every boy and girl in the family as well as by the older ones. Representative Ewing is one of the strong men of the present house.

FIGHTING THE TRUSTS.

The Whipple Harrow Co., of St. Johns, Michigan, proposes to fight the national harrow trust. Under the "Sherman law" any such trust or combination is declared to be illegal. The Whipple people have a big job on hand but they have the sympathies of all our farmers. It is said that the Farmers' Alliance proposes to aid them in some states. Can the Grange be of any service in fighting trusts?

ATTEMPTED LIQUOR LEGISLATION.

The liquor bill which finally failed of passage in the House, provided that saloon keepers could obtain bondsmen in the county instead of in the township or city in which the saloon is located, as now. It was fought by the temperance men of the House and was defeated by being re-referred to the committee. But there came very near being a piece of retrograde liquor legislation perpetrated upon our State.

SUMMER WORK FOR THE GRANGE

Lecturers have a much harder task in summer than in winter, in many respects. Members are so busy they have less time for preparation and to attend meetings. They are harder worked, and any additional task is a heavy burden. So it would seem as if the Lecturer, while not allowing enthusiasm or interest to lag, should arrange programs that will have a "summer air" to them; programs that will refresh instead of burden, that will relieve toil rather than add to it, that will awaken, revive, please, rather than have the color of tasks.

DO YOU MISS YOUR PAPER?

Occasionally we get a card that reads something like this: I have not had my VISITOR for three or four issues. Or there comes a complaint that the subscriber has not had any papers since he subscribed. Most subscribers do not realize how much work it is to keep the mailing list correctly and how many chances of error there are. We can not guarantee absolute accuracy, but we will promise immediate and careful attention to complaints. But don't wait three or four months. Please pin these italics in your memory: *If you don't get your paper within ten days after date of issue, drop us a card stating the fact.*

GOING TO THE FAIR.

Some, perhaps many, are saying, "I don't believe it will pay to go the fair." Of course there are some who either by reason of poor health, or absolute want of funds, can not go. But no one who possibly can get away for a week even, should think of missing it. One should not go merely to see, merely to allay curiosity, or to ramble about aimlessly, but to study and learn. It will be an education that can never elsewhere be obtained at so little expense. Especially the young should go. It will broaden them wonderfully. They will be better men and women for going. If they are healthy and not morbid, they will love home more, and love the country more, because they have seen the city.

THE CORUNNA LYNCHING.

Everyone by this time has read the details of the lynching of the murderer Sullivan, and most newspapers and their readers have expressed their opinions.

All think alike as to the fiendishness of the man Sullivan. All agree that no punishment which man can mete would expiate the crime he committed. He murdered a fellow being, brutally, without cause or shadow of excuse. Under our government there are laws that cover such a crime, laws which the people themselves have made and under which they have prescribed certain punishment. Our own national constitution, itself the product of blood, guarantees to every person that he "shall not be deprived of life, liberty or property, without due process of law."

But in the instance here discussed men of good repute presumably, deliberately, without trial or legal procedure, murdered a fellow being. Their excuse is that he himself was a murderer. But does the law justify that? Does the constitution permit that? These men, sober, loyal citizens usually, have broken the law of their state and have made themselves traitors to the national constitution. And they have no excuse to offer in palliation of their crime.

This phase is the most serious perhaps, because there is a lamentable tendency on the part of many to lightly regard law. But the saddest aspect is the treatment that

the dead body received. It was cuffed and kicked about, dragged in the mire, hooted and jeered. Men sank their civilization, their education, their manhood, and acted the brute.

The men who are guilty of this murder no doubt regard themselves as heroes. They should rather slink from the sight of men and bury the memory of their deed, praying that it may never rise, ghost-like, to haunt them at the banquet board nor at their dying bed-side.

REPORT OF INVESTIGATING COMMITTEE ON AGRICULTURAL COLLEGE.

The report made by this committee would carry more weight if it represented more thorough investigation. It is, however, written in a spirit of fairness and many of the suggestions made touch vital points and if followed would aid in popularizing the college.

The conclusions of the report are, briefly: 1. The college has in the main been true to the legal basis on which it was founded. The course is laid down by law, and has been followed carefully. The agricultural course might be made a little more practical in some ways. The mechanical course should not be dropped; it is legal and useful.

2. The expenditures of money have been wise. The salaries are not extravagant and in most cases there is work enough for each professor and employé.

3. The college has been of very great service to farmers in value of experiments made on account of the saving of many thousands of dollars to the farmers of Michigan.

4. The college lands should be put under control of the board of agriculture. This was done by a bill passed at this session.

5. The report concludes with several recommendations, among which are: Closer relations between board and faculty; abolition of compulsory manual labor, except when it is educational; more elective courses; a two years' course in connection with the four years' course; gradual relinquishment of dormitory system; more practical experimental work.

The VISITOR agrees with some of these suggestions and hopes to discuss these and other phases of the college work in the future.

Enemies of the college will say that the report is whitewashed, but they have no reason for saying so at all.

MORE CONCERNING THE COLLEGE.

The following editorial in the Grand Traverse Herald contains so much that is in harmony with our own views, and appears to be written in such a broad and intelligent spirit, that we quote it entire.

The president of the agricultural college of Michigan having resigned, the selection of his successor becomes an important and responsible duty. It is a peculiar and trying position. Unlike most colleges it has a special mission. It is a mistake to attempt to make of it a university. It was organized for a special purpose and the object of its projectors should not be lost sight of. It was intended to aid in the higher development of the most important branch of business in which the American people are engaged. Farming is as much a trade or business as carpentering or selling dry goods or groceries. It is of greatest importance that the farmer be educated to the best and most economical methods of getting the most money possible out of an acre of land. This is the primary object of the agricultural college. If a farmer's boy wants especially to learn to be a doctor, or a lawyer, or a minister, or if he wants to know more of the stars or

of the deep earth, or if he wants the highest degree of literary culture and learning, the agricultural college is not, or should not be, the place for him. Michigan has its normal school to educate would-be teachers, its university to educate would-be lawyers, doctors and gentlemen of leisure, and it has its agricultural college to educate would-be farmers, fruit-growers and florists. If a young man does not expect to follow some calling akin to farming this college is not the place for him to secure his education. If the college cannot be conducted successfully on the lines laid out for it, then it fails of its mission and is a needless burden to the tax-payers of the state, and should be abolished.

We believe, however, the agricultural college of Michigan has an important and distinctive work to do and can be made a success. The president should be a leader in the work, not a theorist. He should be a broad-minded, liberal-spirited, educated, practical farmer. He should be a gentleman in the highest sense of the word. His hands need not be fitted to kid gloves every day, but he should be a man who can meet men and hold his own with any of them. There are such farmers in Michigan. The Herald is not writing in the interest of any individual. It has no one to name or suggest. It has always taken a deep interest in the agricultural college, and has an abiding faith in its ability to do what it was intended it should do.

We sincerely hope the appointment of president will be made solely in the interests of the college and the great industry it represents.

AND THOU TOO, JUSTICE!

The legislature on its closing day, passed a bill raising the salaries of the Justices of our Supreme Court from \$5,000 a year to \$7,000, and requiring them to live in Lansing.

The wisdom of the increase is debatable. We are not of those who believe that public servants should labor for nothing. Neither do we believe in making a financial sinecure of official station. Public officers should receive enough so that the very best talent can, irrespective of its own accidental riches or poverty, occupy the positions. The question at issue always is, have we reached that point? Are we getting the kind of men we ought to have for the position, and if not, is the low salary the cause? If it is the cause, increase the salary.

But this vital question was not raised concerning this measure. There was no complaint that the present justices are not competent; nor was there any assertion that they were patriotically serving the State in rags while their families were begging bread. There seems to have been no trouble to secure good men at the old salary. True, there has been complaint on the part of the justices that they have more work than they can do; and in the present session various schemes were brought forward for their relief. One proposed to increase the number of judges; that was frowned on by the present justices as unnecessary. "What can we do then to help you out?" asked the legislature. "Why, give us \$7,000 a year; we will then come to Lansing and can easily keep up with our work." Now we should like to ask what in the name of common sense they were elected for if it was not to do their work faithfully. Their action is a confession that they have not done their duty. And what guarantee of better performance does a Lansing residence imply? And by way of parenthesis, we should like, very humbly, to ask if it is constitutional for the legislature to compel a public official to change his residence.

This attitude of the justices was bad enough. It meant nothing

more or less than a salary grab. But worse than this, the justices themselves personally lobbied for the bill that was to give the increase of salary. With their public business, already behind, awaiting their pleasure, they sat in their room at the capitol and called before them members of the legislature who were opposing the bill, and endeavored to convince them of the error of their ways. At their own instance, directly or indirectly, letters and telegrams were sent to attorneys in all parts of the State. As a result members opposed to the bill began to get telegrams signed by attorneys chiefly, asking them to vote for the bill; and on the day the bill was brought up for passage in the House a strong lobby of attorneys was on the floor. It is humiliating to write these words, but we have them directly from an honorable and influential member of the legislature and they are true.

It is discouraging to urge a higher and better political life when the ermine itself stoops thus. It is common political stock in trade to hold up to public view the shortcomings and misdoings of legislators; it is no uncommon thing to disclose nepotism and dishonesty in departmental officers of state, but it is fortunately rare that a state is made ashamed of its highest bench. When that does occur well may the patriotic citizen despairingly paraphrase the dying Caesar's cry and exclaim, "And thou too, Justice!"

FROM THE MASTER.

Of all the various plans and methods adopted for calling out the membership and sustaining the attendance at Grange meetings, there is none so wholly within the easy grasp of the workers as the fixed purpose of observing, in appropriate Grange form the various holidays and extra occasions that present themselves during each year. A half dozen special occasions observed with extra and thorough preparation will keep every worker enthusiastic and every half dormant and careless member will be held in line. In this way the Grange will also attract closer attention from those who are looking on.

AUGUST PICNICS.

Bro. Mortimer Whitehead, National Grange Lecturer, will come into the State about August 14. He is billed to speak on the occasion of "Farmers' Day," at Bay View Assembly, August 14. I again urge all county and district Granges that contemplate or can arrange for large audiences, to write me at once. Brother Whitehead can stay ten days in Michigan if enough localities desire to hear him. You should not fail to bring the matter before your county Granges, and take immediate action.

GEO. B. HORTON.

THE PRESIDENCY OF THE AGRICULTURAL COLLEGE.

A Pointer.

At a meeting of Washtenaw Pomona Grange held with Superior Grange May 25, the present status of the Agricultural College and its relation to the farming interests of the state, was discussed at some length, and the following resolution was unanimously adopted:

We, members of Washtenaw Pomona Grange in council assembled, while declaring our belief in the practical utility of an agricultural college maintained for the "benefit of agriculture and the mechanic arts," believe that at the present critical juncture in the history of the Agricultural College, that it is an imperative duty incumbent upon the State Board of Agriculture in choosing a new president to exercise the utmost precaution in making their selection. That a man not only of broad, general culture, but above all one who is known to be thoroughly identified and in hearty sympathy with the agricultural class. And we further believe and reiterate that no one, be he teacher, lawyer or congressman, political wire puller or any other person, should be called to be president of the college, unless beyond question he is known to be, by past record and present standing, a man who is in full accord and genuine sympathy with all farming interests, and in vital touch with farm life.

JUNE 1, 1893.

The Lecture Field.

Lecturers of Pomona and Subordinate Granges will confer a favor, by sending their P. O. addresses to me, that I may be able to send to them direct when desired.
Epitaph, Mich. A. J. CROSBY, JR.

CAPITOL GRANGE NO. 540.

Program—First Quarter, 1893.

- January 14, "Good of the Order."
- January 21, "The World's Fair." Papers and discussion of Sunday Opening. Confering first degree.
- January 28, "Woman's Work." Confering second degree.
- February 3-4, "Farmers' Institute."
- February 11, "Legislative Night." Confering third degree.
- February 18, "Confering Fourth Degree." Feast, Toasts.
- February 25, "College Night."
- March 4, "Inaugural Evening."
- March 11, "Immigration." Debate.
- March 18, "Sowing the Seed."
- March 25, "The Little Red School-house."

Capitol Grange has two Lecturers, a brother and a sister. The Lecturers affirm that it works first rate, and no one else complains. The programs for each evening are read the two preceding meetings and the participants are also notified by postal card two weeks in advance. Those notified must pay a fine of ten cents if they do not respond to the exercise, unless they have good excuse and give notice to the Lecturer.

A BILL AND HOW IT BECOMES A LAW.

Continued from page 1.

one, that being a majority of one of the one hundred members in the house. In the senate it takes at least seventeen as there are thirty-two members there. When the woman suffrage vote was taken in the House it stood 38 for, and 39 against. A great many thought it only lacked one vote of passing, while as a matter of fact it would have required at least 13 more to reach the necessary 51.

Members are not required to vote either way unless they wish to, and frequently refrain from voting. When a vote is taken the clerk makes a count and announces so many for, and so many against. If the bill receives the requisite 51 votes or more the speaker announces it this way: "A majority of all the members elect having voted for the bill, the bill is passed." But it has only passed the house and its course may be less than half run; but the bill that can survive to this stage may hope yet to become a law.

13. TRANSMITTED TO SENATE.

The next thing is for the clerk to send a messenger boy with the bill to the senate, where it is delivered to the secretary of the senate. It is first brought to the attention of the senators by coming up under the order of "messages from the house." With the bill comes a statement from the clerk of the house that the bill has passed the house and that the "concurrence of the senate is respectfully asked."

14. FIRST AND SECOND READING OF BILLS IN SENATE.

The bill is then read by the secretary of the senate a first and second time by its title, only just as it was in the house.

15. REFERENCE TO COMMITTEE.

The president of the senate then refers the bill to its appropriate standing committee, just as was done in the house.

16. CONSIDERATION BY SENATE COMMITTEE.

At some convenient time, the Senate committee takes the bill into consideration and again the bill is brought face to face with its enemies if it has any. The same battle of words and argument may ensue that were employed in the house committee. Amendments or other changes are attempted and often adopted by the senate committee. This is another important step in the history of our bill.

17. REPORT OF SENATE COMMITTEE.

When the senate committee have agreed to the form of the bill the chairman at some following session of the senate makes his report to that effect the same as was done in the house.

18. REFERENCE TO COMMITTEE OF THE WHOLE IN SENATE.

The president of the senate then announces that the bill is referred to the committee of the whole and placed on the general order and there it goes unless someone moves to suspend all rules conflicting therewith and place the bill on its

immediate passage. But they usually take their regular course which is better.

19. CONSIDERATION BY COMMITTEE OF THE WHOLE IN SENATE.

When the senate arrives at the order of "general order of the day," they go into committee of the whole. The president of the senate calls some senator to the chair just as was done in the house and the consideration proceeds. Debate follows and the bill may receive such further mutilation that the house will not recognize it when it is returned, and may be it will pass the senate without any change whatever.

20. REPORT OF COMMITTEE OF THE WHOLE.

The committee rises and reports back to the senate in a similar manner as was done in the house. The president of the senate again takes the chair while the chairman of the committee of the whole returns to his seat and reports to the president the proceedings of the committee.

21. PLACED ON ORDER OF THIRD READING.

The president of the senate next announces that the bill will be placed on the order of "third reading" just as the speaker did in the house, and the secretary places the bill with other bills on that order.

22. THIRD READING IN SENATE.

The next appearance of the bill is when it comes up under the order of "third reading of bills." Here it is read by the secretary of the senate in full, just as was done in the house. Then discussion is again in order and amendments may be made by a two-thirds vote. This is the sixth time our bill has been subject to amendments and if there be a weak place in the bill, it will have been discovered by this time.

23. PLACED ON PASSAGE IN SENATE.

The secretary of the senate then calls the roll of members and if the bill receives the necessary 17 votes, it has passed another very critical period of its course. But it is by no means a law yet.

24. RETURN TO THE HOUSE.

The bill must here be returned again to the house with a statement from the secretary of the senate that the bill has passed the senate, also what, if any, amendments were made by the senate.

25. CONCURRENCE BY HOUSE.

If any amendments were made in the senate, the bill with such amendments is returned to the house and the clerk brings it up under the order of "messages from the senate." When the roll is called, the members vote on concurring in the amendment just as they would on a new bill.

26. ENROLLMENT.

The speaker then announces that "the bill will be referred to the committee on engrossment and enrollment. This committee take the bill in charge and supervise its enrollment. They employ several clerks who carefully rewrite on heavy paper the entire bill word for word. The work must be done with the utmost care and skill and it may require a clerk several days to engross one bill if it is a very long one.

27. REPORT OF COMMITTEE ON ENROLLMENT.

The chairman of the committee on engrossment and enrollment reports to the house that such an act has been correctly enrolled, signed and presented to the governor.

28. SENT TO GOVERNOR.

It would seem that our bill has seen grief enough to be permitted to be now called a law, but the governor has power to kill it even at this stage of its career. But he is not disposed to exercise such authority except in very extreme cases, and the great majority of the bills that get through both houses are sure of being approved by the governor.

29. REPORT OF GOVERNOR.

The governor signifies his approval by message to the House about as follows:

"I have this day approved, signed and deposited in the office of the Secretary of State, house bill No. 368, being an act to protect the fish in Saginaw river."

At last our bill has become a law. The road has been long and rough and there are many difficulties not mentioned in this article to which it is constantly subjected. Let no one think that any legislature can do justice to the State in hurrying

legislation. Good laws require deliberation and deliberation requires time, and I am inclined to think that the common public clamor for short sessions works directly against the best interests of the State by inciting hasty legislation. In law making "make haste slowly."

Lansing.

FROM THE WHITE CITY.

My pencil lingers long over my World's Fair letter today, at a loss to decide what will most interest Visitor readers. Will they rather hear of their own lines or ramble in fancy among foreign sights and products? Will they wish the inside or the outside of the buildings?

Let me be true to the most honorable calling and say that nowhere has more ingenuity been displayed than in the exhibits of agriculture, with striking results and usually in excellent taste. The most kaleidoscopic effects are produced in agricultural hall and some of the state buildings by the use of our common grains. Iowa is notably elaborate in this respect.

Agricultural hall, or the "Palace of Agriculture," has a fascinating beauty of exterior as is proper for a building that contains the products that feed the world. The architectural features are particularly happy in associating the ideals that stand back of every accomplishment, with the practical exhibits here shown. Rows of Corinthian columns 50 feet high and five feet in diameter line its front, facing the "Court of Honor," as the south lagoon is called. It is adorned with noble sculptured groups of cattle and horses and figures representing the "Signs of the Zodiac," "Abundance," "Ceres," "The Four Seasons" and "The Nations." On the central dome lightly poises a graceful statue of Diana swung by every breath of air and looking fairly like enough to be borne away by an extra puff. It was brought from Madison Square Garden, New York, and when its delicate finishing to this beautiful hall has grown dear to one it is difficult to realize it measures eighteen feet in height.

Of the exhibits inside I do not feel competent to express an opinion, so incomplete were many of them and so much more able judges will soon be here from among our own members. Brother J. J. Woodman is bringing Michigan pavilion to the front in practical demonstration of cereal capabilities, and Brother David Woodman's "grain family" even here win their customary homage of approval. Michigan's location is central and patrons will inquire the way from here through the annex over to stock pavilion to visit the National Grange headquarters where familiar faces and names are sure soon to be found.

We wished for the companionship of a specialist when visiting the various exhibits, for a miner in mining building, an artist in art gallery, a machinist in machinery, and a round the world traveler in manufacturers' building; are glad for the presence of Brother Woodman in agricultural hall and that Brother and Sister Hinds are at the dairy school, but covet, in addition, one trip through horticultural hall with a Professor Beal.

It was my fortune, however, to visit machinery hall, the government building and the full sized model man of war with a boy, and a better guide perhaps I might have hunted for long and found none. He saw more and could tell more of the great Allis engine, the war cannon, battle guns, model ships, army equipments and Indian exhibits than I should have learned alone in months. The lad who has poured in wrapt silence over his "Injun stories," his naval fights and histories of our country's progress will find in government building endless instructive sights. The contents of this building are rarely interesting and educational. The north half is devoted to the exhibits of the Smithsonian Institute and interior department; the south half to the postoffice, treasury, war and agricultural departments.

The fisheries building set itself apart in my mind as the choicest in design and arrangement. I notice my guide book says it "has been pronounced an architectural poem," and truly I think you will

say the praise is fitting. The "fishy" decorations of the whole building make a unique and charming study.

Among the growing and huge pavilions of foreign nations in manufacturers' building I oftenest stopped before the Swiss wood carving, jewelry and photography; Austria's fairland of glassware, into which my steps turned repeatedly as if drawn by magnets; and England's china and woven goods, resplendent with color and suggested royalty. France promised gorgeous and splendid things when last seen, and at Italy's snowy marble, supposed to all but palpitate with breath, I peeped wistfully through barriers at the entrance not yet open to the public.

It seems needless to again mention unwarranted charges at the fair but, returning home the question by word and by letter awaits an answer: "Are Chicagoans bound to rob us?" So far as I could learn, no; not unless one invites robbery and hangs out his jewels, unfurls his roll of bills in public, demands the princely fare for a pauper price, asks himself no sacrifice of comfort or luxuries and ignores the world panorama because at the door of a sideshow he is charged a quarter or a half dollar.

It is well to remember, here as elsewhere, that *one is quite likely to find what he takes with him.*

JENNIE BUELL.

BAY VIEW.

The detailed Assembly programs and all information about the University courses and work for 1893, together with full particulars about Bay View passenger rates, etc is ready. Persons desiring the circulars and any information about Bay View, will receive prompt reply by addressing John M. Hall, Superintendent, Flint, Mich. The April Bay View periodical contains many glimpses of rich feasts in store for all who can visit Michigan's famous resort this summer.

Chaplain McCabe, Anthony Comstock, Mr. H. H. Ragan, Leon H. Vincent, are among familiar names of lecturers, while many new ones are highly endorsed. The illustrated lectures and musical features promise finely and every child lover must rejoice that the author of "The Story of Patsy" and "Christmas Carol," Mrs. Kate Duglass Wiggin, is to be present.

Our own people will be most interested in the Aug. 14 program when the Lecturer of the National Grange, Hon. Mortimer Whitehead of Washington, will speak. It should make "Farmers' Day" an occasion to be coveted. Later and more complete announcements will be made, but meantime it will be well to bear Bay View in our plans.

JENNIE BUELL.

ADVICE TO GIRLS.

OFFICE OF THE YOUNG WOMEN'S CHRISTIAN ASSOCIATION, ROOM 61, 243 WABASH AVENUE, KIMBALL HALL, Chicago, May 1, 1893.

The Young Women's Christian Association of Chicago, now sixteen years old, has always been an aggressive body in aiding young girls depending upon their own resources for support. It has continuously, since 1876, kept a home for young girls, strangers in the city, opening from time to time new ones. Now it has four homes located at the following numbers: No. 288 Michigan ave.; 5830 Rosalie Court, near Jackson Park; 367 Jackson boulevard (west side); and 3258 Wentworth avenue. These homes are given as landmarks of safety to young, respectable girls who need protection or information in coming alone to Chicago. These homes, with their limited capacity, if full, can direct to suitable lodging houses. The great feature of the work of The Young Women's Christian Association is the Travelers' Aid Department, about four years old. Paid agents, wearing a blue badge marked "Young Women's Christian Association," meet the trains, to aid women traveling alone in making changes, or direct them how is the cheapest and best way they may reach their destination. No charge is made for this service, as the agents are paid by the Association. Girls are warned not to speak to strangers, but go to the waiting room, and remain until the badge is seen. The agents may be

delayed a trifle, but will gratuitously direct as well as aid in finding the friends or shelter sought by women or girls traveling alone. Young girls proposing to visit Chicago should, three days prior to leaving home, address the head agent, Miss Anson, 5830 Rosalie Court, Jackson Park. State the exact date and time of starting, as well as the railroad they will come over.

The sole desire of The Young Women's Christian Association of Chicago is to aid young self-supporting girls and women, and to protect them from imposition.

Respectfully,
 MRS. LEANDER STONE, *President.*
 MRS. A. S. CHAMBERLAIN, *Secretary.*

WESTERN POMONA.

Western Pomona Grange No. 19, met with Trent Grange May 25th and 26th. After the usual openings for such meetings, the first subject on the program, "Does the responsibility of the child's education depend more on the mother than on the father," was introduced by the reading of a paper by Mrs. Stauffer. All fathers that are inclined to shirk this responsibility, should have been there. Mothers were edified on this point also. There was to have been a paper on "Corn Culture," by Bro. Tuttle. He was not present but ground was plowed, corn was planted, from the butt, middle and tip of the ear, cultivated with all kinds of cultivators, at all depths and all seasons of the year. Sod plowing in the fall, was generally conceded to be the best for corn and the cultivation to commence before it was fairly up, to continue through the whole season, until corn commenced to harden. Shallow cultivation was thought best and to plant the corn from the whole ear, one part being just as good as the other. We had expected an essay from Tom J. G. Bolt, both were absent. "The best way of keeping up the fertility of our farms," by Ephraim Woodard, came next. Bro. Woodard was not present, but this subject led to a lengthy discussion of the advisability of using fertilizers. There were those present who said that they would be the last resort, others that they would be not get along without them. Each side gave their different reasons and experiences. "Would a school to teach house keeping be practicable?" by Mrs. George Price. There was a great difference in opinions on this subject. We have members that say the time is not very distant when such schools will be established, and that they will prove a success. Music and recitations were given through the meeting, and if we could have had the making of the weather, we should have had a larger crowd. As it was the attendance was very small, so many farmers not having their planting done. We had a very pleasant session and all present felt well repaid.

MRS. H. J. AUSTIN, *Secretary.*

IF YOU GO TO THE FAIR.

EDITOR GRANGE VISITOR—With your permission I would like to call the attention of the readers of the VISITOR to a matter that I think will be of interest to them. I presume that most of the Patrons in the state expect to visit the great world's fair at Chicago this summer and it seems to me that it would be both pleasant and profitable for all of us to stop at the same house while visiting the fair. Nearly all of the different organizations of the country are adopting this plan. At the suggestion of myself and others Mr. R. O. Dunning has established a headquarters for the use of Michigan Patrons, our county grange contracted to make it our headquarters. Any Patron in the state with his or her friends can secure quarters there by making application. Mr. Dunning's prices are very low compared with those of other houses of the same kind being from 50 to 75 cts. for each person per day. The building is located on the corner of 33d street and Saginaw avenue, South Chicago. There are two electric lines and several railroads leading directly to the fair grounds, making the trip in 12 or 15 minutes with a five cent fare. This building being south of the fair grounds you will escape the immense crowd and consequently delay and inconveniences of those who go toward the heart of the city.

Mr. Dunning informs me that he sent a package of circulars to the secretary of each subordinate grange in the state for distribution. Those who have not received one or who wish any information can address R. O. Dunning, South Chicago, Ill. I have known Mr. Dunning for the past fifteen years and consider him thoroughly reliable. I will say further that Patrons can buy their tickets to Benton Harbor and take fare with us. Our rates are \$1.00 round trip, berth extra, giving a nice ride on the lake and making a cheap trip.

Fraternally yours,
 C. H. FARNUM,
Chairman executive committee, Pomona Grange No. 1, Berrien Co.

HOW'S THIS?

We offer One Hundred Dollars Reward for any case of Catarrh that cannot be cured by Hall's Catarrh Cure.
 F. J. CHENEY & CO., Props. Toledo, O.
 We the undersigned, have known F. J. Cheney for the last 15 years and believe him perfectly honorable in all business transactions and financially able to carry out any obligation made by their firm.
 West & Truax, Wholesale Druggists, Toledo, O., Wadding, Kinnan & Marvin, Wholesale Druggists, Toledo, O.
 Hall's Catarrh Cure is taken internally, acting directly upon the blood and mucous surfaces of the system. Price 75c. per bottle. Sold by all Druggists. Testimonials free.

Woman's Work.

THE DREAM.

Just listen awhile let me tell you my dream—
A dream that seemed more like a vision;
So life-like and real did everything seem,
Now pray do not laugh in derision.
This Visitor, a paper got up for the Grange,
That evening had kept me quite busy;
I thought I would go to sleep for a change,
I had read till my head became dizzy.

My arm for a pillow, I soon fell asleep,
My head bending low on the table;
The goat trotted out, I jumped on his back,
Now really, I'm telling no fable.
For so it all seemed in my wonderful dream,
The goat going faster and faster;
I said to myself, I never will scream,
Though fearing some dreadful disaster.

I clung to the halter with all of my might,
And truly that goat was a ringer;
I wondered how many hours I must ride,
Before they would call me a Granger.
I fell from his back and my troubles begun,
Such trials as happened soon after;
As round in a circle, O how I did run,
While the Grangers all shouted with laughter.

I seemed for my life to be running a race,
The goat I heard coming behind me;
I thought to myself I must give up the chase,
And hide where the goat cannot find me.
I then turned about and ran into the crowd,
With heart beating faster and faster;
I could hear myself breathing heavy and loud,
Till I came to the good "Worthy Master."

How strange, when we dream, we always awaken
Before it has come to conclusion;
Mixing everything up, in a wonderful way,
And filling our minds with confusion.
Just then I awoke, how strange it did seem,
The goat must have fled to his manger;
I said to myself, in spite of my dream,
I wish I were really a Granger.

—N. C. J.

SUGGESTIONS.

The lapse of time is swiftly bringing the season near when we all hope for fruit in plenty. Perseverance and science have advanced horticulture till we are fain to believe with the Quaker poet that

"Our homestead flowers and fruited trees,
May Eden's orchards shame."

Pomona's gifts are beautiful to the eye, delicious to the taste, healthful to the body. Modern culinary methods make it possible for the housewife to supply appetizing relishes, dainty desserts, exquisite sauces and flavors for the table all seasons of the year.

We remember our first experience in fruit canning began as an experiment, sometimes resulting in discouraging failure, and when successful the pleasure offset the work and former disappointment tenfold. To insure perfect success several things are necessary: First, ripe, not soft fruit, careful handling, porcelain or granite to cook in, the requisite amount of heat and no more, and completely air tight cans.

Strawberries, first of the first fruits; pick before they are soft, turn cold water over them and remove hulls while in water; this removes any sand that may adhere and does not soften as much as washing. Sprinkle granulated sugar over, a pint to two quarts, let remain till next morning, pour off the juice, heat to boiling, skim, turn on fruit. Second morning pour off juice, let boil ten minutes, put in berries and cook fifteen minutes slowly. Fill cans two thirds full of berries, cook the juice ten minutes longer, fill full and seal. Treated thus the berries keep their shape and delicate flavor.

Cherries we prefer to cook in the cans, dropping them in the cans as they are pitted, shaking them gently now and then, and adding sugar at the same time. When full turn in cold water within an inch of the top. Raspberries, currants, whortleberries, we prepare in the same way. Screw on covers lightly without rubbers, and heat by steam. Have found a double decked steam cooker the best for this work, can do a dozen quarts at a time. Place the cans in steamer, let the water be just warm to commence; put on cover of steamer; twenty minutes after the water boils remove cover, take out cans, see that they are full, wipe dry and seal. Pears cannot be done the same way as they require long cooking and no fruit is more improved by having a liberal quantity of sugar than pears.

With the advent of canning dried fruits are relegated to a second place or left out altogether by many.

Cherries, peaches or currants dried, after being sprinkled with sugar, we think vastly superior to dates, prunes and other fruits of commerce that come from cholera or plague smitten countries.

Fruit tablets or bon-bons are much sought after, why not have them? Sweet apples, pears, plums, and peaches, cooked in a syrup till clear, left in the syrup twenty-four hours, spread on plates and dried slowly by the fire are equal to the best imported. Neither are plain dried fruits to be dispised, even to apples, by which we do not mean "sulphured evaporated." But all dried fruit should be cooked long

and steadily, not quickly stewed. Fruit jams are much improved by expressing the juice of one-third of the fruit and the boiling should nearly all be done before adding the sugar and jellies the same.

A word to the brothers. Grow fruit in plenty and save doctor's bills and anxiety. Sisters, can fruit juices to flavor pudding sauces, leave out wine and brandy and thus help the temperance work.

HETTIE HOMESPUN.

Hillsdale Co.

CARE OF FRUIT.

I think there is but little to be said on this subject except what every housekeeper must already be familiar with. However, if my thirty year's experience, with some success and many failures, will benefit any one in the least, will gladly comply.

The days of drying and preserving, so fruit can be kept the "year round," are things of the past, the art of canning having taken the preference, as it allows us to secure so much better supply, and that which is far more healthful with much less expense.

The care of fruit cans is a most essential point. As they are emptied the rubbers should be removed, and unless nearly new, thrown away, as there is no economy in using those which are doubtful. After being washed and thoroughly dried the cover should be put on loosely; never put the rubber inside, then there will be no musty odor when the hurrying time comes. At the time of filling wet a coarse towel with cold water, placing under the can. This will prevent breaking, making much easier to handle.

In cooking fruit make a syrup of the sugar and juice if possible. When hot drop in the fruit, cooking as little as possible, but always be sure to have it thoroughly heated, stirring and handling it lightly. In this way it will be beautifully whole and nice, pleasing to the eye as well as the taste. With solid fruit like peaches and pears, the syrup necessarily has to be made of water and these cooked until they can be easily pierced with a fork.

As pie plant is the very first of the season, is so fresh and welcome, one is often found wishing it could be kept later. This can easily be done by gathering when in its prime; do not wait until it becomes tough. Peel and cut into small pieces; fill the can, pressing in very tightly, immerse in a pail of cold water, allowing it to remain until all the air bubbles have escaped. Before removing from the water put the cover on securely, and you can have pie plant the entire year as fresh as in May. Also it is very nice stewed; putting in a little stick cinnamon for flavoring greatly improves it. This, too, can be put up in the usual way, and is very acceptable during the year when fruit is scarce as has been in the past.

Quinces are better used with one-half their quantity of sweet apples, using the parings and cores for jelly.

To make marmalade of plums, crab apples, etc., cook all to a mass, rub through a sieve or a colander, add three-quarters of a pound of sugar to a pound of pulp, stir constantly while cooking.

Jelly is much better if all the juice is allowed to drip than if squeezed out in the usual way. Add a pint of juice to one pound of sugar, allowing it to boil twenty minutes; put into dishes letting it stand two or three days until perfectly jellied. Before putting away fill each dish with a layer of granulated sugar, setting away in a cool, dry place, and no uneasiness need be had about its molding or working.

The canning of tomatoes is a source of anxiety to many. I have found by experience that those ripening after the vines are frost-bitten do not keep as perfectly when canned. There is a variety of opinion as to the amount of cooking required to have them keep. My way is to halve or quarter the fruit; fill a pan; placing over a kettle of boiling water for a half hour or more, allowing the juice to collect. This I dip off, as it is an acid that tends to sour the fruit; then place upon the stove letting it boil up nicely, which takes but a minute, put in the can and seal quickly. When opened they come out whole and fresh.

Since following the above rules have had the best of success in "The care of fruit."

MRS. E. M. BROWN.

Hillsdale Co.

FRUIT TREES.

"If you eat a ripe apple before going to bed,
The doctor then will beg his bread."

is a very ancient maxim that has lost none of its truth, and will apply to other fruits as well.

Fruit as a diet should be considered a necessity rather than as a luxury. Were not the eating of fruits necessary to our health, nature would not have been so lavish in her varieties and quantity. Fruit is the only food which that wise provider has furnished to man ready for his immediate use. By this we are admonished to use it unsparingly. If all would heed the injunction placed upon us "to let no year pass without planting a tree or vine,"—not one but many—it would not be long until every farm, no matter how small, would have its small fruit garden, as it should have.

Farmers, as a rule, do not seem to think they have time to as they term it, "putter with such small stuff," when the facts are they have no taste for it and do not try to inform themselves as to the requirements necessary to successful growing of the same, which they would find gives better returns for labor and money invested than any other crop, except it may be the vegetable garden, if not in dollars and cents, in real home comfort. With fruit, as with every thing else, "if we would reap we must sow."

Many think soil is all important. I feel sure that proper planting and after care have more to do with success than soil. I have in my mind a garden of about an acre upon which all kinds of small fruits do well. It is protected from the west by an apple orchard, from the north and east by buildings. The soil, or a part, is light sand, the rest hard clay. I cannot see but peaches do equally well in either soil, the same varieties ripening earlier on the sand. In the past ten years there has been but one year that there were no peaches. The off year there were but few, yet we thought that a good return for the little care we gave them, especially when those about us had none. Every spring there are a few new trees set out. The roots and soil about them are well wet, covering with some coarse litter to hold the moisture.

The sod around peach trees should not be disturbed as the roots come very near the surface, but should be well covered in the fall or early spring with coarse stable manure. Fruit bearing is very exhaustive to the tree and they need fertilizing.

By taking pains to select early, medium and late varieties, we are rewarded by a plenty of the luscious fruit from the middle of August until late in October, besides having many for the market in a good fruit year.

If we will but plant and care for them we can have an abundance of fresh fruit, on our table commencing with the strawberry in the middle of June, until Christmas, finishing with the late pear and grape.

The grape I think the most easily grown of all fruits. It will grow any place if once given a good start. I wish to speak of two vines of the Isriella variety. Twelve years ago this spring I found in the garden of which I speak, a vine that must have been set a number of years entirely neglected, on the ground, overgrown with grass and weeds. We had two strong posts set and some boards nailed on them. The vine was fastened to the frame by using leather straps. Besides the frame it was given the liberty to run in a worthless plum tree. It was not slow to take the hint and went there. The frame and tree are entirely covered. The other vine we found in the dooryard where it had been cut down with the grass until there was a hard knotty root and very feeble top growth. This we decided to set by a back porch on the west side of the house. Any one who has ever seen a woman and small boy dig in soil nearly as hard as the soil under a house can imagine our trials at setting out that vine on a warm spring afternoon. We used a plenty of chip dirt in filling in around the roots, and got it set out in good shape. It was not long

before we felt well paid for our toil, for it grew to exceed anything we had ever expected. The shade it affords the entire porch is a joy, its beauty is much admired, and the rich purple fruit that these two vines never fail to yield in immense quantities is a luxury and a blessing. But bear in mind that the grape, unlike the peach, must have the ground covering the roots entirely free from grass or weeds, and the more it is worked and manured the better. I do not know but severe pruning is good but all we do to ours is, after the young fruit is well set, to clip the ends of the fruit bearing vines, thus stopping the growth and throwing the strength into the fruit.

MRS. J. BOWDITCH.

Hillsdale Co.

CANNING FRUIT.

The first and most important feature of canning fruit is to select that which is nice, and not over-ripe. I think all fruit should be sweetened ready for the table before canning, as it retains more of the original flavor than if put up without sugar.

My method of canning for tomatoes is to bake them instead of boiling. Select nice ripe ones, peel, halve them, place in a dripper, without any water, sprinkle generously with salt, put in the oven and bake until thoroughly cooked, then can. I think they retain a much nicer flavor than when put up in the old fashioned way of boiling in a pan.

I think pie plant canned in cold water is very nice for winter use. We should also have a good supply of preserves, spice cherries, etc., to fill in with canned fruits.

MRS. G. S. OAKES.

Hillsdale Co.

EVAPORATED APPLES.

How little we appreciate the apple until we are deprived of it. For the last few years we have not had a very large crop, and what we have had have been very poor in quality, small and tasteless. The richness does not seem to be in them. I think the people of southern Michigan will appreciate the apple more when we have a crop of well matured apples. Of course our evaporated apples will not be as good, but they are far ahead of the old-fashioned dried apples to let me be the judge, and not as much work to prepare them for use. The flavor is all in them when they are evaporated. They are dried in about four hours and are cooked during the process. To prepare the apples for use for pies: Take what you will need, first cutting out the bad spots if any, then wash them thoroughly, put in a dish, pour plenty of cold water on them and let them stand overnight. Then make them as you would green apple pie. They can be used in any way that you can use a sun dried apple and are far ahead of them.

MRS. C. H. OAKES.

Hillsdale Co.

WILL IT BE WORTH WHILE TO GO TO CHICAGO?

There are some moderately intelligent people in the East who have thought it a mark of personal or local superiority to affect indifference about this World's Fair. There are a few people of high intelligence and of excellent sense who really feel no particular interest. The first class is not deserving of attention. As for the second class it is merely a case of preoccupation and unaroused curiosity. Long before the fair is ended these people will have discovered it and they will atone for their earlier lack of interest by the high degree of their subsequent enthusiasm. This paragraph, however, is meant particularly for many thousands of our readers living farther east, let us say, than Ohio, who must make careful plans in advance if they are to go to Chicago at all, and who are now asking whether or not it will be really worth their while to make effort and sacrifice to visit the Exposition. No general advice can fit all particular cases, but so far as general principles can have any bearing let us all decide that it will be immensely worth while to go. Students, teachers, all classes of men and women who have healthfully inquiring minds, would make no mistake in planning to spend as much as possible of the summer at

Chicago or in that vicinity. The opportunities for advantageous study will be almost limitless. Our industrial arts and our art industries will find a new birth in this Fair. Fine arts will obtain a powerful impetus. Our educational methods will be reformed by it. The whole world will be brought nearer together. The cause of peace among the nations will be promoted. The world's religions will have renounced somewhat of their mutual bickerings and hatreds and will have seized more firmly upon the principle of love. Do not lightly decide that you can afford to dispense with the benefit of some personal contact with all this vast congeries of undertakings. It was a great thing to be at Philadelphia in 1876 and at Paris in 1889; but it will be far more than either or both to be at Chicago in 1893.—From the "Progress of the World," May Review of Reviews.

KEEPING A WIFE YOUNG.

A certain amount of social life is absolutely essential to all of us—to the old as well as to the young, writes Edward W. Bok in a pertinent article on man's inability to see things as others see them in the *May Ladies' Home Journal*. A woman never grows so old that she ceases to enjoy the company of others, and generally the older she grows the more she enjoys it. It is always a pity to see a man fall into a state which he explains by saying: "Oh, we're getting old and don't care for so much variety in our lives." In the pure unselfishness of his soul he always speaks of "us" and "we," as if it naturally follows that because he is getting antiquated his wife must keep pace with him in his decline. Men all too often make their wives too old. It is a greater credit to a husband to keep his wife young than to make her grow old. His actions and his habits necessarily influence those of his wife. Let him keep in touch with the world, and both he and his wife will be the better and the younger for it. I like to see a man proud of his wife because she keeps young. Old age is beautiful and has its advantages, but a man makes a great mistake when he rushes a woman unnecessarily toward it. And he does it most perfectly when he deprives her of those enjoyments which every man should give his wife. No economy is so false, so hollow and so misguided as that which seeks to withhold one pleasure from the life of a good woman, a true wife or a loving mother. The best home a man can give a woman becomes "poky," as one woman I know expresses it, if she is asked to live in it three hundred and sixty-five days out of every year. The good Lord knows that woman's life in this world is hard enough. She travels a path of endurance and suffering, to which man, be he ever so heavily afflicted, is an entire stranger. It was given to man to make that path as pleasant, as easy and as bright as possible. Every dollar which a man spends for the happiness of the woman of his home will come back to him in double, yea, in four-fold measure.

EFFECTIVE STUDY.

The time devoted to the preparation of a study is no indication of the amount of study that has been done. Some students will do more real work in half an hour than others will do in two or three hours. The difference is in the manner of studying. Some make a business of school work. When a lesson is to be learned, or a problem to be solved, they devote all their energies to the subject until it is mastered. Too many persons endeavor to think of something else while preparing the lesson. They are always ready to stop and talk about what has occurred. That is not business. Concentration is the secret of success. The student who can concentrate his mind upon his lesson can study. He who has no control over his thoughts can not be a good student. But few people know how to study. Frequently young persons will take up a book and look at the lesson and in a few minutes throw the book aside and declare the lesson is too difficult. Others will study only what is in one book. The true student will master the lesson before him and then look elsewhere for information on the subject. Not much reliance can be placed upon the student who is always afraid that he will do something that is not required of him.

The first great lesson for a young person is to learn how to study. He who knows how to acquire knowledge will not long remain ignorant. Half-hearted effort will not succeed anywhere. Untiring effort and a determination to succeed will accomplish wonders in the school-room. Concentration is power.—*Western Rural*.

It scares a man who has done wrong to be told that he has an expressive face.—*Atchison Globe*.

Is a book containing illustrations, prices and descriptions of 30,000 articles in common use, a book that will show you at a glance if you are paying too much for the goods you are now buying,

WORTH ANYTHING TO YOU?

Is it worth the 15 CENTS in stamps required to pay postage or express charges on a copy?

THE BUYERS GUIDE AND CATALOGUE (issued every March and September) is the book we are talking about; you are not safe without a copy of the latest edition in the house.

MONTGOMERY WARD & CO.,

111 to 116 Michigan Ave., Chicago

In writing mention THE GRANGE VISITOR

OFFICIAL DIRECTORY

Officers National Grange.

MASTER—J. H. BRIGHAM, Delta, Ohio
OVERSEER—E. W. DAVIS, Santa Rosa, Cal.
LECTURER—MORTIMER WHITEHEAD, D. C.

Executive Committee.

LEONARD RHONE, Center Hall, Pennsylvania
J. J. WOODMAN, Paw Paw, Michigan
X. X. CHARTIERS, Fredericksburg, Virginia

Committee on Woman's Work in the Grange.

MRS. H. H. WOODMAN, Paw Paw, Michigan
MRS. C. ELECTA BOWEN, Woodstock, Conn.

Officers Michigan State Grange.

MASTER—G. B. HORTON, Fruit Ridge
OVERSEER—M. T. COLE, Palmyra
LECTURER—A. J. CROSBY, Jr., Ypsilanti

Executive Committee.

J. G. RAMSDHELL, Chn., Traverse City
H. D. PLATT, Ypsilanti
THOS. MAIRS, Berrien Center

Committee on Woman's Work in the Grange.

Mrs. Mary Sherwood Hinds, Stanton
Mrs. Mary A. Carpenter, Battle Creek
Miss O. J. Carpenter, Dimondale

General Deputy Lecturers.

MARY A. MAYO, Battle Creek
HON. J. J. WOODMAN, Paw Paw
HON. C. G. LUCE, Coldwater

County Deputies.

D. H. Stebbins, Atwood, Antrim Co.
C. V. Nash, Bloomfield, Allegan
C. R. Reynolds, Grand Haven, Benzie

Revised List of Grange Supplies

Table listing various grange supplies and their prices, including Porcelain ballot marbles, Secretary's ledger, Treasurer's orders, and various books.

GRAND RAPIDS and Indiana Railroad

Jan'y. 29, 1893.—Central Standard Time.

Table showing train schedules for Grand Rapids and Indiana Railroad, including GOING NORTH and GOING SOUTH routes with times and stations.

Sleeping cars for Petoskey and Mackinaw on No. 3 from Grand Rapids.
Sleeping cars, Grand Rapids to Chicago, on No. 4.

The People's Savings Bank of Lansing Mich

Capital, \$150,000.00
W. J. BEAL, President
A. A. WILBUR, Vice President
C. H. OSBAND, Cashier

EAGLE BRAND THE BEST ROOFING

Is unequalled for house, barn, factory or out-buildings, and costs half the price of shingles, tin or iron.

Excelsior Paint and Roofing Co.

185 Duane St., New York, N. Y.



is an arbitrary word used to designate the only bow (ring) which cannot be pulled off the watch.

Here's the idea

The bow has a groove on each end. A collar runs down inside the pendant (stem) and fits into the grooves, firmly locking the bow to the pendant, so that it cannot be pulled or twisted off.

It positively prevents the loss of the watch by theft, and avoids injury to it from a dropping.

IT CAN ONLY BE HAD with Jas. Boss Filled or other watch cases bearing this trade mark

All watch dealers sell them without extra cost. Ask your jeweler for pamphlet, or send to the manufacturers.

Keystone Watch Case Co., PHILADELPHIA.

College and Station.

THE CANADA THISTLE.

[Bulletin Guelph, Ontario Station.]

The Canada Thistle (Cirsium arvense) is a creeping perennial, which grows to the height of two to four feet, according to the character of the soil.

This weed comes up early in May, and continues to grow until the time of severe frosts in autumn. It comes into blossom in July and August, and also matures its seed in these months, but more especially in August.

It is propagated by means of the seeds, and also through the medium of the rootstocks, more especially the latter. The rootstocks which penetrate the soil horizontally to great distances, are filled with latent buds, which, when the roots become broken, as by the disturbing influences of cultivation, at once spring into vigorous life.

The following are some of the modes of dealing with this intruder: 1. Drop out of the rotation so far as practicable all such crops as allow the thistle seeds to ripen before these are cut, until infested fields have been dealt with.

2. Plow the land immediately after harvest. Plow shallow with any kind of plow that will cut the thistles off clean without breaking off the creeping rootstocks. Keep the thistles from breathing above ground until the late autumn plowing, which should be deep for the sake of the crop which is to come after. In the spring keep the thistles under by the use of a suitable cultivator, until the time of planting a crop of corn, roots or rape.

3. Plow the ground deeply in August. Sow rye early in September at the rate of two and one-half to three bushels per acre, and cut the following spring for winter fodder. Then plow the ground deeply with any kind of plow that will effectually bury the stubble. The jointer with skimmer will answer very well. Then roll at once to conserve the moisture. Harrow once a week until it is time to drill the ground for rape. Drill about the last of June or first of July by using the double mold-board plow. The drills may be 22 to 24 inches apart. Sow at once with rape by using the ordinary turnip drill and then cultivate and care for as described in section 2 above.

4. Plow under pasture land in June, or land from which a crop of hay has been removed early in July. Work the land thus plowed upon the surface, so that all thistles will be kept under until the time of sowing winter wheat. Sow the wheat with clover and repeat the process if necessary, after having cut one, two or three crops of the clover. This method is applicable to stiff soils, where winter wheat can be grown. In sections where winter wheat will not grow, substitute for it rye, spring wheat or barley, as may be desired.

5. Where the land has been sown to clover, cut the crop twice for hay, or once for hay and once for seed. Then follow with a hoed crop properly cultivated. The smothering influences of the two crops of clover in one season, and then two cuttings, are very helpful in reducing the thistle.

6. When the thistles are well brought under they should be kept so by the use of the spud. The grain fields should be gone over before harvest to prevent the thistles from blossoming, and after harvest the meadows and fields sown to grass.

7. In removing thistles from permanent pastures, we must be governed by the character of the soil and subsoil as to our mode of procedure.

Some of the strongest attachments in this life are made by officers of the law.—Free Press.

MICHIGAN EXPERIMENT STATION

Potatoes—Amounts of Seed.

Bulletin No. 93, of the Michigan Experiment Station, is on "Potatoes: Amounts of Seed."

"The conclusion arrived at is that the potato growers of Michigan do not plant enough seed. Our own experiments, corroborated by those of other stations, go to show that for ordinary distances the half potato gives better results than any smaller amounts. For weak growing varieties, or varieties having small tubers, even a larger amount of seed will be found more profitable.

"A careful investigation shows clearly:

"First, That an increase in seed within ordinary limits produces a marked increase—both in total yield and in marketable yield.

"Second, That an increase in seed, from one eye up to the half potato, produces an increase in the net value of the crop; but the increased yield from the whole potato over the half potato is not sufficient to cover the cost of the greater amount of seed."

The above conclusions are the result of hundreds of experiments, extending over many years. They practically agree with the results of twelve other stations as compiled in the bulletin. It would seem that such a large number of experiments under such widely varying conditions as are furnished by the thirteen states in question, would practically settle the question of the best amount of seed potato to plant.

In reality the whole question is not what gives the greatest yield, but what amount gives the greatest profit. When seed is high in the spring it will generally be advisable not to plant whole potatoes at ordinary distances, but when they are cheap it will generally pay.

Since it has been proven that the yield is more in proportion to the weight of seed planted than the number of eyes, the cutting out of the eyes for seed, common in some parts of the State, is to be strongly condemned.

So also, the use of small potatoes for seed, not only lessens the profits the first year, but if followed for a series of years tends towards rapid deterioration, in accordance with the laws of heredity.

The larger amounts of seed gave a more vigorous growth of vines, and on the "whole tuber" plots the crop matured five to ten days earlier than on the "single eye" plots.

The data from which the above conclusions were drawn is to be found in Bulletin 93, before mentioned, and can be had free by sending a request for the same to H. G. REYNOLDS, Secretary, Agr'l Coll., Ingham Co., Mich.

LUMPY JAW.

[Bulletin Kansas Station.]

Actinomyces bovis or lumpy jaw of cattle is a parasitic disease caused by the growth in the tissues of a fungus called actinomyces. It appears as a lump or tumor, usually in the region of the head or neck, and may grow to a large size. This tumor usually discharges a yellowish pus, which contains portions of fungus known as actinomyces. It is not transmissible from one animal to another by means of the actinomyces as they are found in the pus. It can be transmitted to other cattle by inoculating with a piece of tissue from the tumor which contains the organism in a growing state. The actinomyces which cause this disease are probably a degenerate form of some fungus which grows naturally upon feed stuffs or grain. When the spores of the original fungus are taken into the animal economy, they may gain entrance to the tissues, vegetate, and produce the disease known as Actinomyces bovis, or lumpy jaw. There is no danger of persons contracting this disease from eating the flesh of affected animals, provided the visibly diseased portion is removed.

The treatment consists in removing the tumor, either with a knife or by the use of caustics. The iodide of potash given internally may effect a cure.

There is no good reason why blind asylum attendants shouldn't consider themselves entitled to rank among our leading citizens.—Buffalo Courier.

TRANSPLANTING TREES.

It is in the hope of creating some discussion of the matter that may eventually lead to a solution of the problem that I offer the following as my method of transplanting trees.

When Arbor day arrived, I shouldered my longest bladed sharp spade and pruning shears, and seeing neighbor Brown and his man and team headed for his wood lot, I made my way down to mine. Neighbor Brown and his man had dug several holes along the roadsides where the trees were wanted and were now going after their trees. Arriving at the wood lot Mr. Brown selected some of the most thrifty looking young trees and by their united efforts in pulling, prying and cutting roots he and his man soon had the required number of trees ready and proceeded to take them to the roadside. Mr. Brown placed what roots remained on a tree into one of the holes and, paying no attention to the fact that he had turned what was formerly the north side of the tree to the south where it would be blistered by the hot sun, had his man shovel in the earth that had been removed and carefully replace the sods around the tree so as to leave the surface smooth and green. Mr. Brown had the pleasure of seeing a fine row of promising young trees adorn his roadsides that day before I had removed a tree from my wood lot. I finally came back from my wood lot with nothing but my spade and pruning shears and neighbor Brown remarked to his man, "I guess Smith has given up the job and won't set out any trees on his roadside. I'll show him what he has lost in a few years when my trees spread their branches over the roadway." Now I will give an account of what I had been doing in my wood lot. I had determined the number of trees I should probably want to transplant and added a few so as to be sure of enough. I selected and marked the trees which I wished to remove. Then I began with the pruning shears and cut the tops back quite severely and as symmetrically as their angular growths would permit. Then I took the long bladed sharp spade and cut a circle about each tree from a foot to eighteen inches or so from the body as deep as the spade would go, thus cutting off all side and surface roots which were more than 18 inches long. This work could have been done any time during the spring and summer. I then left the trees in their places during the whole summer, during which time the ends of the branches and roots which had been cut were healed over, many new, fine roots had formed near the body of the tree on the stubs of the roots which had been cut off, and the top had many new short branches started, thus giving it a more symmetrical appearance. Now my trees are ready to transplant.

When the autumn rains have softened the earth I will prepare the holes for my trees in the places where I wish to set them by putting some fresh earth from the wood lot in the bottom of each and mixing some surface soil with it. I will mark each tree on the same side with a small pot of paint and be sure to set it out so that the painted side shall face the same point of the compass as before. I will handle the trees with care and spread the fine roots out in a natural position and compress the earth carefully about them. Then I will bank the earth up around the tree and leave it alone for the winter. The freezing and thawing weather of winter will settle the earth carefully above the fine roots, thus putting the trees in good condition for growth in the spring. In the spring I will remove part of the bank of earth from around each tree and put a liberal mulch of old straw around each tree, throwing some dirt upon it to keep it in place.

With these methods of handling the trees I rest assured that I will in a few years be able to show neighbor Brown and others of his ilk the truth of the old adage, "The more haste the less speed," and that it is the part of wisdom in transplanting trees as in many other things to "Make haste slowly."

DWIGHT COLE.

Mason. There are accidents that are peculiar to the seasons. The balloonist gets the worst of it in the fall.—Binghamton Leader.



Notices of Meetings.

NEWAYGO POMONA.

Newaygo County Pomona Grange No. 11, will be held with Hesperia Grange on Wednesday and Thursday, June 21-22. The meeting will be public in the day time.

Program.

"From what Books have I received my best impressions," Mrs. Mary Robertson. "The Figures and income from a Small flock of Sheep," A. L. Scott. "How to keep up repairs on the Farm," O. T. Blood.

"How may the institution of Marriage be improved in order to conduce more surely to human welfare physically, morally and intellectually?" Mrs. Wm. Hillman.

"Some of the most interesting things I saw at the Columbian Exposition," John and Mary Barnhard. "Why did the Anti-Option Bill fail to become a Law," S. V. Walker.

"Should Farmers patronize the race course?" W. C. Stuart.

"How shall Farmers meet the increased demands of Labor?" Augustine White.

Recitation, John Bunnell. "What can we look for as the probable fruits of the Road Craze?" M. W. Scott.

Recitation, Miss Lizzie Macumber. "What Trade shall we fill our boys and girls for?" Mrs. P. W. Hall.

"What do we want done with the Silver question?" Jas. Robertson and J. H. Macumber.

"Lessons learned from the Grange," paper by Mrs. Lewis.

"Farmers' vacations," L. Reinoldt. "The Rise and Fall of Nations, Calvin Lillie.

"Benefits of the Farm Home Reading Circle of Michigan," Miss Emma Walker. "A young Man's Chances," B. C. Moor.

"Can the Mortgage Tax Law with the proposed amendment be enforced as against the power of Money," Neil McCollum.

Recitation, Miss Minnie Carter. "What Benefit financially, will the World's Fair be to farmers?" Dan Mallery.

Recitation, Fred Moor. "Draper ventilation of School rooms and Homes," T. S. Frey.

"The Best Ways for Saving Strength and Time in doing House Work," Mrs. James Calwell.

Song, Dan Mallery.

WM. W. CARTER, Lecturer.

ALLEGAN COUNTY COUNCIL

will hold its next session with Cheshire Banner Grange at their hall, Tuesday, June 8, and will respond to the following program:

Call to order at 10 o'clock by President Houser.

Opening song by Cheshire Grange. Reading of the minutes of last meeting.

Address of welcome, G. W. Lewis of Cheshire Grange.

Response by Allie Leggett of Watson.

"Resolved, That we need better legislation and a stricter enforcement of the laws in regard to the extermination of Canada thistles," S. P. Albertson of Watson.

"Power of Habit," Sister Alice Cook of Otsego.

"Agitation as a means of Reform," "Is there more virtue in the enlightened, than in the ignorant classes?" Emma Andrews of Hopkins.

"Why is it that Silos are not more generally used by our stockmen?" T. G. Adams.

"What is the effect of rank and wealth upon the character," C. A. Jewett.

"An ideal home," M. J. Leggett.

Our young people, and others interested, are cordially invited to attend and assist in music, recitations, etc. If we may judge the future by the past, the session will be well worth attending.

Bear in mind time and place.

Mrs. N. A. DIBBLE, Lecturer.

BRANCH COUNTY POMONA GRANGE

will hold a meeting with Quincy Grange at the home of C. C. Sears, one and one half miles west and one mile north of Quincy on Thursday June 8, commencing at half past 10 a. m. The morning session will be devoted to the regular order of business and all fourth degree members are invited. A class of twenty-five will be initiated in the fifth degree. The afternoon session will be public and the following program has been prepared:

Opening music by Quincy grange. Address of welcome by C. C. Sears, of Quincy grange.

Response by A. L. Smith, Master of Pomona grange.

Music by Coldwater grange. "The relation of farmer to his local newspaper," paper by M. L. Evans, of Butler grange.

Discussion, "Old time neighborhood life compared with the present," paper by Mrs. Helen Wagoner, of Girard grange. Music by Coldwater grange.

"How can we secure more temperance teaching in our district schools," paper by W. A. Lott, of Butler grange. Recitation by Mrs. J. F. Button, of Batavia grange.

"The necessity of a thorough business education," paper by Mrs. Anna L. Koe, of Union grange.

Recitation by Mrs. Ford Ferguson of Coldwater Grange.

Closing music by Quincy grange. Mrs. E. A. HORTON, Lecturer.

Little Dick C—got into trouble with a schoolfellow the other day, and agreed with him to "have it out" before school the next morning. That evening when Dick knelt by his mother's side to say his prayers before going to bed, he delivered himself as follows, after the usual "Now I lay me;" "And, O God, please make me as strong as lions an' things 'cause I got to lick a boy in the morning—Amen!"

NEWS NOTES.

WORLD'S FAIR OPENING.

Up to date the advocates of Sunday opening are on the winning side. It remains to be seen what the federal government will have to say about it. The question has ceased to be one of religion and is merely one of common honesty and good faith.

DR. BRIGGS.

Dr. Briggs trial is now on in all its heat and feeling. It is one of the most remarkable trials of the kind in modern times and the discussions are read with general interest. It is quite doubtful whether the energy expended in trying Dr. Briggs is put to as good use as it would be in reaching after the fallen. When religionists seek more along the highways and byways for sinning human beings and spend less time in the Sanhedrim, more good will come of their efforts.

LIKE LIGHTNING.

A fast train over the New York Central and Lake Shore railroads has been put on to run between New York and Chicago. It is expected to make the run in twenty hours or five hours shorter than at present. It will be compelled to keep pretty close to sixty miles an hour to do this. The first train through was three minutes ahead of time.

EULALIE.

The Spanish Infanta, Eulalie, is being feted and entertained in the eastern cities. She is in some respects a national guest. The first reports of her coming bore the impression that she was filled with snobbish ideas. But if the later newspaper comments are true, she has behaved admirably for a royalist in this people's land.

A SERIOUS FIRE.

Saginaw was visited by a very serious fire last week. Many homes were destroyed, homes of workingmen and homes of wealthy men, besides large mills.

MICHIGAN STATE LIBRARY, LANSING, MICHIGAN.

The State Librarian desires and will be grateful for gifts of books of every useful kind, newspaper files, maps, historical relics, manuscript narratives, and original documents of every sort which may throw light on the early history of Michigan or of any portion of the United States.

The Librarian wishes to call especial attention to THE IMPORTANCE OF CONTRIBUTING PAMPHLETS OF EVERY KIND.

Ephemeral in form of publication and commonly thought not worthy of preservation, pamphlets are often difficult to collect a short time after issue. They reflect the spirit and sentiments of the age, however, better than elaborate treatises and are indispensable treasures in a good reference library, where historians, biographers, statisticians and men of letters in general naturally look for everything, no matter how apparently trivial, that may shed light on the subjects of their investigation.

All gifts may be sent by express to the State Library, where transportation charges will be paid.

Very respectfully, MARY C. SPENCER, State Librarian.

THE MAGAZINES.

The complete novel in the June number of Lippincott's is "The Translation of a Savage," by Gilbert Parker, author of "The Chief Factor," "Pierre and his People," "Mrs. Falconer," etc. It has an unusual subject, and tells how an Englishman of family and wealth married an Indian girl of Hudson's Bay and took her home, with results naturally mixed, but better than might have been expected.

One of the papers in the June Atlantic which will be looked at with more than ordinary interest is that by Justin Winsor, Librarian of Harvard University, in which he writes about "The Future of Local Libraries," which he thinks could be best administered under the supervision of a central board, which by their gain in experience in managing libraries in certain localities would know precisely what the probable needs of each library were.

The June Arena is a mammoth number. It is probably the largest magazine ever published as a monthly issue of a review, containing one hundred and sixty-four pages, of which one hundred and forty-four are in the body of the magazine, and twenty pages of carefully written book reviews by such well known critics as Rev. W. H. Thomas, D. D., of Chicago, Helen Campbell, Hattie C. Flower, Hamlin Garland, and the editor of the Arena. Among the leading papers in this notable anniversary issue are: "Insanity and genius, by Arthur McDonald; The Liberal Churches and Scepticism, by Rev. Marion D. Shutter, D. D.; Arsenic versus Cholera, by R. B. Leach, M. D., is interesting and timely; Woman Wage-earners in the West, by Helen Campbell; Does the Country Demand the Free Coinage of Silver, by A. C. Fisk; Save the American Home, a Striking economic paper, by I. E. Dean; Islam, Past and Present, by Prof. F. W. Sanders, one of the most scholarly religious essays of recent times, and should be read by all interested in obtaining a correct idea of what Mohammedanism is; Union for Practical Progress, by the Editor, a strong plea for the union of progressive and reformative impulses for educational and practical work.

Book Table.

The May number of the Literary Century is a Columbian souvenir number of the Michigan Woman's Press Association and is the finest thing of the kind ever published in the state. There are sketches of the members together with twenty-seven fine half tone engravings including Mrs. L. H. Stone, the honorary president, Mrs. Belle M. Perry, the president, and Mrs. Beatrix Johnstone, editor of the

Farmer Household. It is the first time Mrs. Johnstone ever permitted her picture to go into print and probably will be the only opportunity her many readers and admirers ever will have of securing her picture. A sketch portrait also appears of Miss Jennie Buell, Secretary of the State Grange, and for many years associate editor of the GRANGE VISITOR, and of E. Cora DePuy, editor and founder of the Literary Century.

The cover is in white of a special design and the whole a splendid number. Single copies twenty cents. Send at once and secure a copy but do not send postage stamps. New subscribers sending in one dollar now for a year's subscription will receive this splendid number free. Address, THE LITERARY CENTURY, Ann Arbor, Mich.

The janitor of one of the Portland public schools, coming into the class room one day recently, saw on the blackboard this sentence: "Find the greatest common divisor." "Hullo," said he, "is that darned thing lost again?"—Kennebec Journal.

AN HONEST PAINTER.

Amite Co., Miss., May 20, 1893. G. W. INGERSOLL, DEAR SIR—Yours to hand and would say in reply that Color Cards and prices are satisfactory, I expect to order two bills of paint from you. I do the painting for this community and always order the paint for the parties. I used your paint some 15 years ago and am convinced it is better than I can mix by hand and shall continue therefore to use your Ready Mixed Paint. There are a good many talking of having painting done and as per request I give you some addresses to whom you may send Color Cards and prices, perhaps it will stimulate them to have their work done sooner. Yours respectfully, J. L. JACOBS.

[See Adv. Ingersoll's Liquid Rubber Paints.—Ed.]

A GLIMPSE AT THE WORLD'S FAIR.

The passenger entering Chicago from the east by any of the MICHIGAN CENTRAL trains will observe, after passing Kensington and Grand Crossing, that the tracks are gradually elevated until, from a point of view some twenty feet above the level, he sees to the right an assemblage of domes, towers and spires rising above the trees between the railroad and Lake Michigan. These are some of the colossal and magnificent palaces of the World's Columbian Exposition, far surpassing, not only in number and magnitude, but in beauty and artistic harmony of design, any assemblage of buildings that the world has ever before seen.

First to be noticed and directly in front of the railway station where the MICHIGAN CENTRAL trains will enter the Exposition, rise grandly the four square pavilions of the Administration building, crowned by its great dome, 260 feet above the ground—"almost as lofty as that of St. Paul's in London," says Mrs. Van Rensselaer, "and almost as graceful in outline as that of the Florentine Cathedral." In front of it stands the magnificent bronze fountain by MacMonnies, facing the great basin in the center of the great court, upon which front the Agricultural building and Machinery Hall on the south, and the palaces of Mines and Mining, Electricity, and of Manufactures and the Liberal Arts on the north. The domes and towers of these buildings may be seen in the distance, and particularly the great arched roof of the last named building, the largest in the world. It covers an area of more than thirty acres—three times that of the largest building of the great Paris Exposition of 1889.

As the train approaches more closely to the grounds, the Transportation building is clearly seen to the left of the Administration building. It covers, with its annexes, fourteen and a half acres of ground, and its massive arched doorway, elaborately decorated and known as the "Golden Portal," is one of the most striking external features of the Exposition.

Next to the left is the Horticultural Building, a thousand feet in length, and with a central pavilion, under the glass dome of which is grouped the finest known collection of bamboos, tree-ferns and palms. Northward, and still nearer to the train, is the Woman's building, a chaste and noble structure, first of all to be completed, and the architect, artists and decorators of which were all women. It will be filled with the fruits of the genius, skill and labor of the women of all nations.

Crossing the Midway Plaisance, which connects Jackson Park on the east with Washington Park on the west, and in which are located a section of Paris, a street of Cairo, Irish, German, Austrian and Turkish villages, a Dutch East Indian settlement, ice, sliding and spiral electric railways, and numerous other interesting features, of some of which the traveler may get a glimpse as he dashes by. On the right, grouped at the north end of Jackson Park, are the various State and Foreign buildings of diversified architecture and representing an expenditure of millions of dollars.

No passing glimpse of the World's Fair, however, nor the most detailed and glowing description that can be penned, can give any idea of its surpassing size and extent, the splendid harmony of its design, or of its rich artistic sculpture and decorative features. Nothing but frequent visits and careful observation can do it. But while every passing traveler will surely resolve upon this, he will also surely be thankful that he is journeying upon the MICHIGAN CENTRAL, the only Eastern line that gives him such a passing view, or that takes him directly by and in full view of Niagara Falls, the grand natural wonder of the world.

The Hand-Made Harness Co., OF STANTON, MICH.

E. D. HAWLEY, Pres. WM. H. OWEN, Treas. O. MOORE, Sec'y. Retail their own make of goods at wholesale price. We make a specialty of \$20 double team work harness and \$10 single harness. We guarantee satisfaction, and proper freight on five cents. By permission we refer to Hon. H. H. Hinds, of Stanton.

Readers will assist the prosperity of the paper by patronizing our advertisers.

ALLIANCE CARRIAGE CO., CINCINNATI, OHIO.

Advertisement for Alliance Carriage Co. featuring illustrations of various carriage models and text describing their products and services. Text includes: "You should order no BUGGIES, CARRIAGES, WAGONS or HARNESS from any one until you have seen our New Grand Catalogue for 1893, which is mailed free to any address. It shows over one hundred new styles, with prices of vehicles ranging from \$30 upward, and Harness from \$5 upward. Our goods are strictly hand-made and fully warranted for two years, and our Spiral Springs are warranted for 12 years. We are recognized manufacturers for the above organizations. Examine our mammoth display at the World's Fair, in Chicago. The only manufacturer in the world that sell their entire output direct to the consumer. Factory and Salesrooms: 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125, 127, 129, 131, 133, 135, 137, 139, 141, 143, 145, 147, 149, 151, 153, 155, 157, 159, 161, 163, 165, 167, 169, 171, 173, 175, 177, 179, 181, 183, 185, 187, 189, 191, 193, 195, 197, 199, 201, 203, 205, 207, 209, 211, 213, 215, 217, 219, 221, 223, 225, 227, 229, 231, 233, 235, 237, 239, 241, 243, 245, 247, 249, 251, 253, 255, 257, 259, 261, 263, 265, 267, 269, 271, 273, 275, 277, 279, 281, 283, 285, 287, 289, 291, 293, 295, 297, 299, 301, 303, 305, 307, 309, 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 339, 341, 343, 345, 347, 349, 351, 353, 355, 357, 359, 361, 363, 365, 367, 369, 371, 373, 375, 377, 379, 381, 383, 385, 387, 389, 391, 393, 395, 397, 399, 401, 403, 405, 407, 409, 411, 413, 415, 417, 419, 421, 423, 425, 427, 429, 431, 433, 435, 437, 439, 441, 443, 445, 447, 449, 451, 453, 455, 457, 459, 461, 463, 465, 467, 469, 471, 473, 475, 477, 479, 481, 483, 485, 487, 489, 491, 493, 495, 497, 499, 501, 503, 505, 507, 509, 511, 513, 515, 517, 519, 521, 523, 525, 527, 529, 531, 533, 535, 537, 539, 541, 543, 545, 547, 549, 551, 553, 555, 557, 559, 561, 563, 565, 567, 569, 571, 573, 575, 577, 579, 581, 583, 585, 587, 589, 591, 593, 595, 597, 599, 601, 603, 605, 607, 609, 611, 613, 615, 617, 619, 621, 623, 625, 627, 629, 631, 633, 635, 637, 639, 641, 643, 645, 647, 649, 651, 653, 655, 657, 659, 661, 663, 665, 667, 669, 671, 673, 675, 677, 679, 681, 683, 685, 687, 689, 691, 693, 695, 697, 699, 701, 703, 705, 707, 709, 711, 713, 715, 717, 719, 721, 723, 725, 727, 729, 731, 733, 735, 737, 739, 741, 743, 745, 747, 749, 751, 753, 755, 757, 759, 761, 763, 765, 767, 769, 771, 773, 775, 777, 779, 781, 783, 785, 787, 789, 791, 793, 795, 797, 799, 801, 803, 805, 807, 809, 811, 813, 815, 817, 819, 821, 823, 825, 827, 829, 831, 833, 835, 837, 839, 841, 843, 845, 847, 849, 851, 853, 855, 857, 859, 861, 863, 865, 867, 869, 871, 873, 875, 877, 879, 881, 883, 885, 887, 889, 891, 893, 895, 897, 899, 901, 903, 905, 907, 909, 911, 913, 915, 917, 919, 921, 923, 925, 927, 929, 931, 933, 935, 937, 939, 941, 943, 945, 947, 949, 951, 953, 955, 957, 959, 961, 963, 965, 967, 969, 971, 973, 975, 977, 979, 981, 983, 985, 987, 989, 991, 993, 995, 997, 999, 1001, 1003, 1005, 1007, 1009, 1011, 1013, 1015, 1017, 1019, 1021, 1023, 1025, 1027, 1029, 1031, 1033, 1035, 1037, 1039, 1041, 1043, 1045, 1047, 1049, 1051, 1053, 1055, 1057, 1059, 1061, 1063, 1065, 1067, 1069, 1071, 1073, 1075, 1077, 1079, 1081, 1083, 1085, 1087, 1089, 1091, 1093, 1095, 1097, 1099, 1101, 1103, 1105, 1107, 1109, 1111, 1113, 1115, 1117, 1119, 1121, 1123, 1125, 1127, 1129, 1131, 1133, 1135, 1137, 1139, 1141, 1143, 1145, 1147, 1149, 1151, 1153, 1155, 1157, 1159, 1161, 1163, 1165, 1167, 1169, 1171, 1173, 1175, 1177, 1179, 1181, 1183, 1185, 1187, 1189, 1191, 1193, 1195, 1197, 1199, 1201, 1203, 1205, 1207, 1209, 1211, 1213, 1215, 1217, 1219, 1221, 1223, 1225, 1227, 1229, 1231, 1233, 1235, 1237, 1239, 1241, 1243, 1245, 1247, 1249, 1251, 1253, 1255, 1257, 1259, 1261, 1263, 1265, 1267, 1269, 1271, 1273, 1275, 1277, 1279, 1281, 1283, 1285, 1287, 1289, 1291, 1293, 1295, 1297, 1299, 1301, 1303, 1305, 1307, 1309, 1311, 1313, 1315, 1317, 1319, 1321, 1323, 1325, 1327, 1329, 1331, 1333, 1335, 1337, 1339, 1341, 1343, 1345, 1347, 1349, 1351, 1353, 1355, 1357, 1359, 1361, 1363, 1365, 1367, 1369, 1371, 1373, 1375, 1377, 1379, 1381, 1383, 1385, 1387, 1389, 1391, 1393, 1395, 1397, 1399, 1401, 1403, 1405, 1407, 1409, 1411, 1413, 1415, 1417, 1419, 1421, 1423, 1425, 1427, 1429, 1431, 1433, 1435, 1437, 1439, 1441, 1443, 1445, 1447, 1449, 1451, 1453, 1455, 1457, 1459, 1461, 1463, 1465, 1467, 1469, 1471, 1473, 1475, 1477, 1479, 1481, 1483, 1485, 1487, 1489, 1491, 1493, 1495, 1497, 1499, 1501, 1503, 1505, 1507, 1509, 1511, 1513, 1515, 1517, 1519, 1521, 1523, 1525, 1527, 1529, 1531, 1533, 1535, 1537, 1539, 1541, 1543, 1545, 1547, 1549, 1551, 1553, 1555, 1557, 1559, 1561, 1563, 1565, 1567, 1569, 1571, 1573, 1575, 1577, 1579, 1581, 1583, 1585, 1587, 1589, 1591, 1593, 1595, 1597, 1599, 1601, 1603, 1605, 1607, 1609, 1611, 1613, 1615, 1617, 1619, 1621, 1623, 1625, 1627, 1629, 1631, 1633, 1635, 1637, 1639, 1641, 1643, 1645, 1647, 1649, 1651, 1653, 1655, 1657, 1659, 1661, 1663, 1665, 1667, 1669, 1671, 1673, 1675, 1677, 1679, 1681, 1683, 1685, 1687, 1689, 1691, 1693, 1695, 1697, 1699, 1701, 1703, 1705, 1707, 1709, 1711, 1713, 1715, 1717, 1719, 1721, 1723, 1725, 1727, 1729, 1731, 1733, 1735, 1737, 1739, 1741, 1743, 1745, 1747, 1749, 1751, 1753, 1755, 1757, 1759, 1761, 1763, 1765, 1767, 1769, 1771, 1773, 1775, 1777, 1779, 1781, 1783, 1785, 1787, 1789, 1791, 1793, 1795, 1797, 1799, 1801, 1803, 1805, 1807, 1809, 1811, 1813, 1815, 1817, 1819, 1821, 1823, 1825, 1827, 1829, 1831, 1833, 1835, 1837, 1839, 1841, 1843, 1845, 1847, 1849, 1851, 1853, 1855, 1857, 1859, 1861, 1863, 1865, 1867, 1869, 1871, 1873, 1875, 1877, 1879, 1881, 1883, 1885, 1887, 1889, 1891, 1893, 1895, 1897, 1899, 1901, 1903, 1905, 1907, 1909, 1911, 1913, 1915, 1917, 1919, 1921, 1923, 1925, 1927, 1929, 1931, 1933, 1935, 1937, 1939, 1941, 1943, 1945, 1947, 1949, 1951, 1953, 1955, 1957, 1959, 1961, 1963, 1965, 1967, 1969, 1971, 1973, 1975, 1977, 1979, 1981, 1983, 1985, 1987, 1989, 1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2019, 2021, 2023, 2025, 2027, 2029, 2031, 2033, 2035, 2037, 2039, 2041, 2043, 2045, 2047, 2049, 2051, 2053, 2055, 2057, 2059, 2061