

PER
S
1
C32
v.4 #52
1882



AND ORGAN OF THE ONTARIO BEE-KEEPERS' ASSOCIATION.

VOL. IV. } WHOLE No. } WELLAND, ONT., WEDNESDAY, APRIL 12, 1882. } TERMS: } ONE DOLLAR
No. 32 } 188 } } Per Annum,
IN ADVANCE

STOCK.

AMERICAN POLLED CATTLE.

The accompanying cuts are good representations of the breed of polled cattle, bred by Mr. A. W. Cheever, of Sheldonville, Mass. Mr. Cheever commenced breeding polled cattle about fifteen years ago, using bulls of the so-called "Jamestown" stock, to cross upon his own selected dairy cows. The Jamestowns were at one time quite popular in the vicinity of Boston, having sprung from a noted Suffolk heifer, imported in Jamestown, which, in the year 1847, was sent across the Atlantic with a cargo of provisions for the starving Irish. In the year 1854 this cow dropped a bull calf, which was named Jamestown, after the noble ship that brought his mother to this country. Jamestown was sired by a Jersey bull, "Beverly," out of "Flora," a cow imported from Jersey Island, by Thos. Motley, of Jamaica Plains, Mass. Flora was from the best first-prize stock on the Island, and made fourteen pounds of butter per week, when kept on Mr. Motley's farm. Jamestown's dam was a twenty quart cow, when the old beer measure was in use among the milk men of Massachusetts. Jamestown left a large progeny behind him, most of his get being polled; but until Mr. Cheever commenced breeding the stock, no one had attempted to build up a herd of polled cattle from the Jamestown blood. The cows used were such as had been selected for their butter qualities, without special regard to breeds. During five consecutive years this herd yielded not less than 225 lbs. per cow, a large proportion being heifers, and for two years the yield was from 260 to 265 lbs. per cow. It has been Mr. Cheever's aim to produce a herd of good butter cows without horns, and to stamp the polled strain so firmly into the blood, that his bulls could

be depended upon for helping other dairymen to breed off the horns from their own herds. For the past three years he has been using a bull from the pure Suffolk herd of G. F. Taber, "Arthur 446," English herd book of Norfolk and Suffolk, red polled cattle, and with marked results, not a single horn having made its appearance since the cross was made, notwithstanding the strength of the Jersey blood, as shown in the color and general appearance of the cows. Mr. Cheever writes that if a herd of good polled dairy cows had existed in this country at the time he commenced

To save correspondence, Mr. Cheever wishes to state that he has no stock for sale at present. He prefers selecting his stock still more, before launching out into the selling of this breed. He is thoroughly well satisfied with his experiment, and will soon be in a position to let others profit by his years of labor.

WALKING HORSES.

How few horses really walk well, exhibiting, as they should, a free, graceful, vigorous style as action; for the carriage horse it is in constant demand, and has long since established a

on their heel. These defects import faults in action, and defective action is both unsafe and unsalable in the best market. The walk has ever been held to be the crucial test of value. A good walker, *ceteris paribus*, will perform well either in the field or on the road. The sharp, quick lift, the graceful turn, the correct stay, the firm, flat, light grounding of the foot—these are the desiderata—elegance with precision and safety. The lift should at all times be sufficient; if insufficient he will knock his toe against a stone, or some other obstacle or in inequality of surface; whilst an exaggeration of lift,

being more than is required, will cause him to cross his feet and speedily cut. No sprawling is admissible. The horse's action in all his paces must be collected. Many high-actioned horses with strong, upright feet, and concave soles, go on their toes. The foot when flexed in the air, should evidence no lateral deviation—i.e. no disbing, no darting. This will be best observed in the trot.

The stay is executed by catching the foot sharply off the ground, to be followed by a graceful sweep, the direction being both forwards and upwards. Now this suspension in mid-air is one of the finest tests of soundness, for any horse, if screwed in his foot, would, by force of circumstances, be ready to afford the required relief at the earliest opportunity.

Hence the stay would be indifferently executed. So much for flexion or lifting, the extension or stay. Our third point is the approximation or grounding of the foot. This must be firm and flat; but no matter how high a horse may go, he must tread lightly, which a horse with longish pasterns and a deep oblique shoulder can not fail to do.—Ez.

SEEDS—Parties wanting good, reliable, fresh seeds, should read the advertisement of the CANADIAN FARMER Seed Warehouse, on page 511.



JAMESTOWN CATTLE.

breeding for that object, it would have been better to have availed himself of such blood, instead of trying to build up a breed from such material as was within reach. The Jerseys would have answered his purpose well as butter cows, though the Suffolk cross gives a little better results at the last end when the carcass goes to the butchers. One of his heifers, an exceptional one, however, dressed 1,013 pounds at five years old, while giving six quarts of milk per day, and had over a hundred pounds of tallow.

moneyed value in dealers' yards. Horses are required to move lightly, quickly, firmly; the knee to be well bent, the shoulder to evidence suppleness and freedom. A horse must be of the right stamp, for if he does not stand well he can never be firm yet corky in his gait. As a wide-chested horse is invariably unsteady in his paces, and treads unduly on the outer quarter of his foot, a horse that leans must step short and go on his toes. The nimble hackney moves his legs in quick succession; flat-footed horses go

Agriculture.

A FINE SECTION.

A valued correspondent in a communication to us, mentions a portion of Cumberland Co., N.S. and describes it as follows:

Our polling section is about twelve miles wide and sixteen long. A large portion is wood land, but it contains about 10,000 acres of marsh land inclosed from the tides of the Bay of Fundy by a dike about five feet high. This land has been growing hay the last one hundred years without any manure. About half of it grows a natural grass called broadleaf; the other is plowed and seeded. In about fifteen years it grows timothy and clover. As the land is perfectly level it has to be drained.

CLOVER AS A FERTILIZER.

The most important fertilizers are nitrogen phosphoric acid and potash. Clover will collect, store up, and furnish these essential elements of crops more easily and cheaper to the farmer than they can be obtained any other way. The clover plant absorbs nitrogen from the atmosphere and returns it to the soil, where a large portion is changed to ammonia, the very best fertilizer for wheat and other cereal crops. The great clover roots get the phosphoric acid and potash from the deeper portions of the soil and the adjacent subsoils; where, as Dr. Voelcker says: "They would remain in a locked-up condition, were it not for the agency of these roots." Thus clover collects and furnishes precisely the fertilizer our grain crops most need. Hence the great importance of ploughing under clover.

GRANGE 131.

SOME OBSERVATIONS ON CORN. BY PROF. BEAL.

In some recent remarks on corn, by Prof. J. W. Beal, of the Michigan Agricultural College, says:

"The leaves of corn are alternate, and two-ranked and parallel-veined. The lower portion of the leaf is called the sheath, and rolls like a scroll around the stalk. The staminate or sterile flowers are on the branching top of the stalk. The flowers grow in couples, the lower one being sterile; the upper bears three stamens, which bear the pollen to fertilize the ovules. The pistillate or fertile flowers are on a spike called the ear. From the end of each young kernel proceeds a long style—a thread commonly known as the silk. The pollen falls on the silk, and soon pushes out a long, slender, minute thread, which is supposed to extend down to the rudimentary kernel. The husks of the ear are composed of what answer to the sheaths of the leaves. These are often tipped with short blades. The pollen of several varieties of corn which I have studied begins to drop from one to three or more days before the silk appears, protruding from the young ear. The pollen continues to fall from a stalk for about eight days—some more some less. The pollen first ripens on the top of the center spike of the tassel, and afterwards it ripens on the side branches, finally ripening last on the lower part of the tassel."

"As before mentioned, each stalk contains from four to ten young ears. The pistils of the upper ear mature first, and so on in regular descending order. In both the staminate and the pistillate flowers, then, the order of flowering is the same—from above downwards. In some cases of sweet corn, the silk makes its appearance after all the pollen on the stalk has been shed. In rare cases, some of the

pistils appear before any pollen is ripe on the stalk. In most cases, the silk is fertilized on the first day after its appearance. From these statements, it appears that Indian corn is cross-fertilized with almost as much certainty as willows and poplars; i. e., the kernels on any ear fertilized by pollen from other surrounding stalks. As the pollen must be ready about the time that silk appears, to fertilize it, to mix or cross two sorts they must flower at the same time."

Will pollen show its effect the first year in crossing to kinds of corn?

"It is generally stated that it will. On this point I have made some experiments. In 1870 I planted in my garden, near each other, three hills of the following kinds of corn, well mixed together, viz: Waushakum (a yellow flint), white flint, black popcorn, early Minnesota sweet, black sugar, and a very dark King Philip. Every ear showed a sign of mixture by pollen from one or two of the other varieties, except those of the King Philip; perhaps there was even here some change in the texture of the kernel, but I did not perceive it. Dr. Sturtevant, in the report of the Connecticut Board of Agriculture for 1878 says: 'The red corn presents a fixity of type which overcomes, in most instances, the effect of crossing, even in its color.'

"In 1877 I planted a small piece of early, eight-rowed yellow dent corn, called Yankee or Jersey dent. In the midst of this piece I planted a single row of smut-nose, yellow flint corn. Before flowering, the tassels of the flint corn were carefully and thoroughly removed by my own hands. There was a little difference in time of flowering, so the ears of flint corn did not fill well, but there was no trace or sign of any effect caused by the pollen of the dent. On the next year the flint corn showed all gradations, from the dent to the flint. I do not know much about the dent corn used in this experiment, but the flint corn was sent from the Grand Traverse country, by Prof. Tracy, who said it had been raised in that country ever since the recollection of the oldest inhabitant. In this case, the characteristics of the flint corn had become well fixed. The corn had become thoroughbred, and retained its peculiarities with considerable tenacity. The same thing has been noticed by breeders of animals, where one was a thoroughbred and the other a common or grade animal.

"The extremes of time required for growing corn to maturity, so far as I know, are from 70 to 200 days. The small yellow popcorn, which grows from 2 to 2½ feet high, often ripens in 70 days, and perhaps less, while in the southern States corn often requires 200 day for growth and maturing."

"Climate has a wonderful effect on corn. Prof. Shelton, of the Kansas Agricultural College, sends corn to the Michigan Agricultural College which has been raised there for three years. It went to Kansas as King Philip, it comes back well marked with dent corn. He says it is the effect of the climate, and is not due to crossing with dent corn. Dr. Sturtevant mentions a similar case of an eight-rowed flint corn, removed to and cultivated in Ohio, became from seven years' use closely allied to gourd seed, being much dented, and the number of rows on the cob had increased to 12 and 20. In Louisiana, the continued cultivation of soft gourd corn from the west produced a hard flint with a larger cob, in twelve years. At Lansing, dent corn has a tendency to ripen earlier and become round at the tip of the

kernel from year to year unless care is taken by selecting seed which shows prominent dents in the ends of the kernels. In southern Ohio and Indiana there is not that tendency for dent corn to change to flint corn."

"The average yields of corn in many of the best states for this cereal does not come up to 40 bushels per acre. A hundred bushels to the acre was once thought almost incredible, but now it is nothing extraordinary. During the past summer, on Long Island, a field of four acres averaged 113.69 bushels of shelled corn per acre. The largest yield on any one acre was 159.37 bushels of shelled corn. The variety is known as the Chester Mammoth. Another field, of about seven-eighths of an acre, of Blount corn, yielded at the rate of 134.44 bushels corn per acre. E. F. Bowditch, Framingham, Mass., the past season, had a field of 17½ acres which yielded on the average 109½ bushels of shelled corn of prime quality per acre. The cost per bushel of ears was 16 cents. I saw the field of Mr. Bowditch just before it was ready to harvest. It was the finest field of corn of its size that I ever saw. The largest yield on record, on one acre, to my knowledge, is that of Dr. Parker, of South Carolina. The yield was 200 bushels and 12 quarts of shelled corn per acre. The land was underdrained, highly manured, highly cultivated, closely planted, and irrigated."

Horticulture.

PRESERVATION OF FRUIT.

An Interesting Letter from Mr. B. Gott, of Arkona.

Written for the CANADIAN FARMER.

By an announcement in your latest issue I came to the knowledge that a Fruit Canning establishment is likely to be started in our borough, with every prospect of success. This information is very timely and not without its significance. It is quite clear from our past experience that the capabilities of our section of the county for fruit production are indeed very extensive and of very fine quality. Should the people attempt the culture of fruits to the extent desired, and to the amount of our capabilities, the question as to what we would do with our fruit would at once force itself upon us with unwonted pressure. "Oh, but," will say the more sagacious and observing among us, "we are not intending to plant largely of fruit until we see a better prospect of a good market for the products; we would much rather sow the grain and grow grass and raise cattle; this we know will certainly pay. We don't want to plant trees and grow fruit to allow it to lie under the trees to rot." And really there is much practical wisdom in this view of the subject.

The question of fruit production, then, is only limited by that of the capacity and extent of the market, and this question of market is at once determined by that of fruit preservation. If our rich and luscious summer fruits can only be brought over for a short time by any means the hurry and glut of their season of ripening, and especially if these means are cheap and practical, the question of marketing them can be profitably arranged at our leisure. In this way all the fruits we can produce can readily and profitably be disposed of either in our home or distant markets, and if not at one moment they can be kept over until they can be sold. By the settlement of this question of preservation, fruit production thus stimulated would at once spring into renewed

activity, and where there is now only a bushel produced, tons would be gathered from our profitable acres, and all euro of finding a ready and profitable disposal. Amongst our neighbors in the State of New York, this subject is thoroughly and practically settled. The fruit growers of that fertile region are fully alive to the importance of fruit preservation, and they practice it to the extent of millions of lbs. annually. At the late meeting of their Horticultural Society, at Rochester, this subject was thoroughly discussed and an Association was formed to take special charge of its interests. When the reports of their county fruit committees were read, they were struck with amazement at the extent and importance of their fruit preserving processes. During the whole winter their evaporated fruits are exposed for sale in the markets in the larger cities and towns of the country, and find a ready and welcome demand in the homes of all classes of their people. There are at present but two popular methods of fruit preservation countenanced in this country, viz: I. By canning. II. By drying or evaporating. According to the extent of our observation in this matter we much prefer the latter of these methods for the following reasons: 1st, the fruit is prepared for operation with less expense. In the case of small fruits they are at once placed in the dryer, a machine carefully calculated for the purpose, and in a few minutes the fruit is taken out and is ready for packing. In the case of large fruits they are simply pared and quartered, and rapidly evaporated to a dry state ready for shipment. No expense of cans or labels or other superfluous packing is needed, and the consumer gets the goods in their simplest form, ready by the addition of a little water for preparation for the table or any domestic purpose. 2nd, it is easier and cheaper to pack and ship. For this purpose it is simply placed in boxes or barrels and sent direct to the dealer, be he ever so far away, and without any fear of breakage or loss. 3rd, it can be more readily handled, exposed and sold by the dealer, and with less risk of suspicion or delay. People soon learn that it is quite possible to place beautiful and tempting labels on packages that contain goods very dissimilar in character and value. No suspicion of this kind can attach to evaporated fruits. It is freely exposed and the purchaser can be assured of its qualities before a needless sacrifice is made, as he can see what he gets. 4th, it gives better satisfaction to the customer. He knows exactly what he has paid for, and there is no chagrin upon opening the package to find the goods are not as represented by the dealer. 5th, this fruit can be sold in smaller quantities to suit the desire of the smallest customer. In this way the area of consumption is much enlarged. Many a poor man could see his way clear to purchase a few pounds of dried fruit that could not lay out a large sum on tempting and expensive cans of fruit. 6th, there is no useless expense for cans or labels, &c., to be added to the expense of the fruit, and to be paid for by the poor man who buys. He gets exactly what he paid for and no more or less.

Many who are well acquainted with certain samples of dried fruit will be ready to object to evaporated fruits on the same grounds. This is not just, as well evaporated fruit bears no resemblance in general to that which is merely dried by the old processes. The evaporated fruit is cleaner, whiter,

richer, sweeter and better in every constitutional quality.

I find a statement in one of our public horticultural documents of a recent issue, giving a fair idea of the questions of cost and profit in connection with an evaporator in the State of New York. I think, perhaps, it would be well to transcribe this statement in this place for the benefit of my readers.

"Statement of the cost and profit of one season's working of one of the No. 2 Pacific Evaporators:

No. of bushels of apples bought	0,753
shrinkage	337
Total evaporated	0,418

Average cost of apples, per bush	17c
Number of lbs. made from above	38,279
Total receipts for sale of fruit	\$4,508.00
Total expenses for storage, handling and manufacturing	1,989.00
Net profit	\$2,509.00

Average No. of lbs. per bushel	5 90 100
Average cost of preparing and drying per bushel	11 cents

The skins and cores were utilized for vinegar for some time, and afterwards dried and sold for that purpose, from this source \$200 additional were made to be added to the net profits, amounting to \$2,809.00.

[Signed] ROGERS & BUTLER.
Alden, Erie Co., N. Y., Feb. 10, '80."

I have much pleasure in presenting this statement, as I believe it to be trustworthy in every respect. I also believe that as good a showing or perhaps a better showing could be as easily made amongst us, and for the simple reason that our raw fruit would not be likely to cost us near so much per bushel as it cost them. I should like to see it tried.

B. GOTT.

CASAPES AND GRAPE CULTURE.

Written for the CANADIAN FARMER by P. H. Henderson, Bertio Vineyards.

At no former period in the history of this country has the interest in this fruit been so intense and wide spread, and especially is this so in the neighboring States. The new varieties claiming public favor, are counted by the hundreds, and what is most remarkable, nearly all of them—if we are to accept all we hear and read about them, as true, possess merits far surpassing anything heretofore known. Now, we have no fault to find with the grape mania. The production of new varieties is a laudable enterprise, and should receive every encouragement. There is room for improvement on the old well-tested varieties. They are all more or less deficient in some important requirements, which go to make up a perfect grape. The varieties which have been found suited to general culture, are healthy, hardy and productive, are invariably lacking in quality of fruit; while the varieties which produce fruit of a higher character have not been found suited to general culture, and are wanting in either health, hardiness, or productiveness. With the large number of varieties now before the public, it is somewhat difficult to decide what kinds to choose, and no doubt some may be tempted to plant quite largely of varieties which have not yet been tested. It will be well, therefore, for those not thoroughly acquainted with the characteristics of the vine, to remember that, although many of the newer kinds undoubtedly possess superior quality and great merit, very few, if any of them will succeed in all localities. The Concord seems to be almost the only grape of fair quality known to succeed in all places, where grapes can be grown; hence the newer varieties which possess similar foliage, and other characteristics

of the Concord, are now pushed forward and recommended as suited to general cultivation. While vines of this type certainly are the most promising, I feel bound to say that our own experience proves this to be no infallible test of general adaptability. The only positively safe way is for each planter to make his own experience the test of the adaptability of the vine which he plants, other than those which have been already tested in his own locality. The reliability, as well as the general adaptability of the Concord, is what makes it the most popular grape now known; but as we previously stated there is room for great improvement on the Concord. Its quality is not best, it is a poor shipper, and will not keep well. The new grape we need, and which we hope yet to see, should possess the good qualities of the Concord with none of its defects; and he who succeeds in producing such a grape, will deserve the lasting gratitude of all who love to eat the fruit of the vine. The grape is becoming more and more appreciated by the masses as a desert fruit, and its larger consumption will prove a national blessing in point of health. We believe the time is not far distant when grapes will be used on our tables as common as apples now are, and when every family will think it indispensable to have a supply stored away for winter use.

We are testing a large number of the newer kinds, and believe some of them will be found very valuable; and as soon as we are able to speak with authority on the subject will give the public whatever there may be of value in our experience.

It has been generally understood among those who have given the matter attention that the flavor of the grape varies when grown on different soils and in different localities, but that the keeping quality is affected in a still greater degree by the same causes seems to have escaped the attention of horticultural writers. From extended observation and from personal experience in growing grapes for market, we have become convinced that the keeping qualities of grapes are affected in a large degree by the character of the soil on which they are grown. This, together with other questions relating to the successful cultivation of the grape, will afford subjects for consideration in future articles in the CANADIAN FARMER.

POULTRY.

SOME ANSWERS.

Inquirer, you all get lots of plan^s for poultry houses, but don't be in a hurry about deciding; take your time, and you will be better satisfied in the end. You can get the Houdans of a dozen different Ohio poultry breeders, and the price depends upon the quality. First-class breeders who never sell an inferior fowl for breeding purposes, will be very apt to ask a good price, and breeders who are not first class will doubtless offer some of the best "stock in the country" at a remarkably low figure. If you buy of the former you know what you are getting for your money; if of the latter, "you pay your money and take" your chance.

"Fanny Field's address" is of no earthly consequence to anybody outside of her own immediate circle of friends. She has no incubators for sale, no eggs to sell for hatching, no fowls to sell for breeders, and no time to attend to anything except her friends and her business. In regard to the housework, sometimes she does all

the work for the family, and sometimes she don't do any of it.

If you expect to keep one hundred chickens in a yard all the time give them an acre and keep a portion of the yard plowed up. A better way would be to fence in your yard and garden and let the chickens run. Your idea of having a board one foot high around the bottom of the fence is a good one. It will pay to put in all the glass you can afford; some of the best poultry houses that I know of are nearly all glass on the south side. Let the chickens scratch in the barn manure pile. One of my neighbors has had some of his fowls scratching in the manure in the barn cellar all winter, and they laid much better than those that were confined to the poultry house.

The Hamburgs will lay more eggs in a year than any other breed in existence, the Cochins and Brahmas make the best mothers, and the Plymouth Rocks are among the best, if not indeed the very best for market fowls. If you want a fowl for all purposes take the Plymouth Rocks; if you want to get the most eggs without regard to size of fowls or eggs, take the Hamburgs, and if you want to get the most meat for sale by the pound in the fall, take the Brahmas or Cochins. Hamburgs are non-sitters and will not bear confinement so well as the large breed—Leghorns, Houdans, La Fleche, Black Spanish, and Polish, are all good layers, non-sitters, but like the Hamburgs will not do their best in confinement. —FANNY FIELD.—Ohio Farmer.

INCUBATION OR HATCHING.

It is not known to farmers generally that a turkey hen can be forced to sit at any time, and that she will sit any length of time; in fact a turkey is a perfect hatching machine, the most perfect one yet invented, although the person thus training the turkey to hatch must first understand the *modus operandi*, which I have tried to my satisfaction. I will here give my first experience.

I took the turkey up on Saturday and put her to work on artificial eggs for four days; then she became cross and broody. I fixed her nest and set her with 25 hen's eggs, giving her liberty to come off and feed at her will. She stuck to her work till she had the job accomplished; and out of 25 eggs she hatched 23 chicks. I took them from her and set her again with 31 eggs; hatched out 28 chickens. I then took her off and let her mother the chicks, and a more careful mother never lived. She would mother all the chickens that came to her. She stayed with them as long as they stayed with her. There is no trouble to get them to take to strange chicks; they would take to young geese or ducks if they would take to the turkey. Nothing can equal them as careful mothers; they will actually lift about the chicks as a cat does her kittens; and all the time she is setting she may be laying, and thus pay for her keeping. This is the cheapest and most perfect way of hatching and rearing chickens ever found out, and will do away with all patent artificial incubators. I expect to hatch at least 1,000 chicks in this way during the season. A 100 egg incubator costs from \$40 to \$60 and the same amount, four turkeys, \$4; then you can sell the turkey in the fall for the same money paid out. Readers, this is worth looking after. Wm. KLINE.—Ohio Farmer.

THEY ALL DO IT.—Everybody uses "TEADERRY" for the teeth and breath, the newest, brightest, costliest toilet gem extant. Try a 5 cent sample.

ENQUIRY.

Would you kindly give the name and a description of the breed of fowls that you would recommend a farmer to keep where he intends keeping about two hundred for profit, supposing them to have suitable quarters and proper care?

GREENHORN.

Ans.—We referred you a question to a friend largely interested in fowls and give you his reply.—Ed.

For general use I prefer the Plymouth Rock, as they combine the qualities needed for profit in the farm yard. They are of good size and moderately good egg producers, are not subject to disease and do not ramble. Where hens can be properly cared for and are kept egg producing alone the Leghorns and Spanish are very profitable, but they are too small for market.

EARLY CHICKENS.

To be successful in raising early chicks, it is not only necessary to have a good location, and a house properly constructed, but it is also necessary to possess an interest in the business sufficient to ensure constant watchfulness. A dry, sandy, or gravelly soil, with nothing to obstruct the rays of the sun, is important. As no artificial heat can be made equal to that generated by the sun, the house should be located and constructed with the view of getting all of the sun's rays possible. While the cold north winds should be shut out, the house should be so located and constructed as to be easily ventilated. While the little chicks may be chilled by strong blasts of cold air, there is quite as much danger of killing them with hot, confined air. After the chicks are three or four days old, they should have fresh air a portion of every day, but the hen should not be permitted to run at large. She should be confined in a small house, made light by having the walls principally of glass. Some fresh air should be let in, even in the coldest weather, and when the weather is not very cold, fresh air should have free access. It is more important to keep the chicks dry than to keep them warm, therefore in damp, rainy weather they should not be permitted to go outside of the covered house; but in dry weather, when the thermometer is not below forty degrees, they will improve by letting them out in the fresh air, providing the hen is kept in. The chicks will not go beyond her call, and will frequently return to the house.

The health of the chicks is the most important thing to look after. This can only be obtained by giving them plenty of light and sunshine, pure air, not too cold, and food that is adapted to their age. Fine ground meal should always be given with caution. It is much better to have the corn only cracked. Millet seed in small quantities is good; hay seed and weed seed, that settles to the bottom of the hay mow, furnishes a variety of food, and keeps both the hen and chicks busy. Care should be taken not to over-feed, for food that is kept before the chicks several days becomes unhealthy. Soft bones pounded fine make an excellent food, but should be fed only in limited quantities. The same may be said of fresh meat. A variety of food should be given, and care taken not to cloy the appetite of any of them.—Mass. Ploughman.

SEEDS.—Those desiring good, reliable, new seeds should read the advertisement of the Canadian Farmer Seed Warehouse in this issue. Send for catalogue.

Bad flavored eggs is the result of one of two causes: either of the food on which the fowls are fed or the substance on which the eggs are laid. Laying hens, if fed on garlic, malted barley or fish a few days, will give eggs that will taste of the food, and if laid on strong smelling substance and allowed to remain for some time, they will likewise have an ill-flavored or taste.

The following will probably meet the eye of some of our poultry-raisers. We may further say that the *Poultry Monthly*, Albany, N. Y., or the *Bulletin*, are good mediums for the purpose named.

Please answer through your paper where pure bred poultry-breeders most generally advertise. I wish to purchase some pure bred, brown Leg-horns.
J. ROBINSON,
Sandfield.

DAIRY.

QUESTIONS ON CREAMERY.

For the CANADIAN FARMER.

DEAR SIR.—I am anxious to get some information concerning a creamery: I have thought by corresponding with you, I would receive the knowledge I desire. I would like to know what size of a building there would be required for about two hundred cows, and what would be the expense of machinery required, and also if there would be much trouble in getting a person that would understand the business and what wages do they generally have for the season.
W. C. SWITZER.

CLEANSING DAIRY STABLES.

This is a work every dairyman in this latitude, who does anything like justice to his herd, has daily to perform. The manner in which he does it modifies the results of his business. If done in a slovenly, slipshod sort of a way, his herd may go along all winter without becoming fatally sick, or losing their strength, and a stupid herdsman never notices that there is anything wrong about them. But an observing dairyman will readily discern the difference between keeping cows in a foul or an odorless stable. Intelligent horsemen appreciate the difference, and take great pains in keeping their stables clean and free from offensive odors, and they find that it pays in the increased health and vigor of their horses, and in the cost of their keeping—food being always better digested and appropriated by healthy than by sickly animals. Cows are as much affected by having their stables clean or foul as horses, though they are less demonstrative in manifesting it. Breathing the stench from the stables affects them all over, and sickens and weakens them. When an ox is taken from a filthy stall in which he has been confined to fatten, and slaughtered at once upon his removal from it, every pound of his flesh and fat will be flavored by the stall, and betray something of its odor. When an animal's flesh and whole body are thus saturated with noxious effluvia, what else could be expected than general debility and a loss of flesh, as well as a loss of vigor, and at least a tendency to disease, if it is not positively produced?
— *National Life Stock Journal*.

COWS, NATIVE AND FOREIGN.

The American Dairyman in a curious and lengthy article deprecates the "worshiping" of cattle and foreign origin, and pleads the cause of our native cows. The Dairyman thinks that imported stock does not in the hands of dairymen generally, prove any better than the old natives; and

the majority of cases, the new cattle, if required to work side by side, year in and year out, with the old native, could not in the end show so good a record.

The paper alluded to odds. "The great claim for the foreign breed is that they are thoroughbred, and therefore reproduce their good qualities with precision. Does not this rule apply to their bad qualities also? Taking six heifer calves of well selected imported cows of any of the fancy breeds, and which six will produce the greatest number of heavy milkers? If those six natives were selected out of the best herds in our dairy districts, we are not altogether certain that the foreigners would beat them. With our system of handling cattle, if those twelve calves were put in the hands of one of our dairymen, it would be found that the natives would adapt themselves to their surroundings as their ancestors had done before them, and in this way, if in no other, in the end prove the most profitable animals of the twelve. The chances are that by the introduction of foreign blood we will weaken the constitutions of our cattle, and find in the end that instead of improving on our hands they have slipped behind and left us with a herd that has retrograded as we have advanced.

A MONSTROUS COW.

In a recent issue of the *Ohio State Journal* we notice an account of a monstrous cow owned by Martin S. Stakes of Grayville, White county, Illinois. This cow is seven years old and weighs 3,000 pounds, is 17½ hands high, 10½ feet long from the end of nose to buttock, 17¼ feet long from the nose to the end of the tail (considerable tail), 8 feet 9 inches around the garting, 26 inches around the forearm and 31 inches across the hips. She has been exhibited in four States— Illinois, Indiana, Missouri and Tennessee. She is white and red, mostly the latter, well formed and a perfect beauty; has two calves, one three years old and the other three months old. She was raised in Posey county, Indiana. Now this is a little the biggest cow story we ever heard of, and if these are facts, she is probably the largest cow in the world. However, we shall not dispute the writers word at all, for while this may be true, we can refer to a singular occurrence, which is true, and sufficient proof can be obtained to testify of the same. We have a cow ten years old, that has given birth to ten calves, being three years old before having the first calf. Now some may think this a dream; but it is a fact, and can be proven. She is a grade Short-horn, very large; however, not so large as brother Stake's cow (indeed much smaller) She is of a light roan color, almost white. When three years old she gave birth to a very fine heifer calf. When four, a pair of twin bull calves. When five, twins again, one of each sex; and when six years old she had her third pair of twins, one of each sex. Thus you see she had three sets of twins in succession, making her as many calves as she is years old, or averaging one calf for every year of her life. Now if any of the brother farmers has a cow that can beat that, let them trot her out.—*Cor. Ohio Farmer*.

BUTTER AND OLEOMARGARINE.

The growth of the manufacture of oleomargarine and the skill which the manufacturers have attained in its production has alarmed the butter makers throughout the country. A few days since the subject was presented to a committee in Congress by representatives of the dairy interest. In the course of the present

tation of facts, it was stated by a New York dairyman that if nothing was done to compel the manufacturers of oleomargarine to stamp every package of their goods, the dairy interest of the country would suffer a loss of 50 per cent. in its production and profits. The dairy interest ask Congress to compel the manufacturers of oleomargarine to stamp every package they put upon the market, in order that people may not be deceived.

It appears from a report of the proceedings at a meeting of the International Dairy Fair in New York, recently that the oleomargarine interest actually undertook and came very near getting control of the organization. This was a bold push on the part of those who make butter by other than dairy methods to get control of an association of dairymen.

The St. Louis Globe-Democrat recently published an article in which it was asserted in the most positive terms that what is known as "creamery" butter is largely adulterated with oleomargarine. The statement seems incredible, and will be received with many doubts. It states that creameries where this quality of butter is made are often located near oleomargarine factories. In these the tallow and grease are made into an oil, which is mixed with the cream at the creameries, and made into the finest appearing creamery butter. It is further stated that this oil is shipped in barrels to distant parts of the country.—*Journal*.

A CORRESPONDENT asks if some of our readers would give information as to the best churn in use and wants to know if the figure "8," churn is strictly first class.

Premiums, April 1882.

Any subscriber, or member of his family, or any school teacher or postmaster, sending us a new name accompanied with one dollar, will be entitled to a choice of any one of the following articles or collection. Grape vines— from the celebrated Bertie Vineyards of P. Hendershot, Stevensville— one well-rooted vine, one year old, of either of the following varieties, viz., Concord, Lindley, Agawam, Creveling, Eumelin or Champion; 25 strawberry plants, Crescent seedling; 15 packages of garden, vegetable or flower seeds; or 15 packages of assorted seeds. Seeds to be selected from the catalogue of James Rennie, of Toronto. The seeds are being put up for the CANADIAN FARMER and are guaranteed to be pure and true to name.

MOTHERS.— Have you delicate, weakly children, who are always taking cold and subject to Croup? Remember, there never was a case of Croup which did not originate in a Cold! ALLEN'S LUNG BALSAM is your remedy.

A GENTLEMAN, aged 65, writes:—"I heartily thank you for the great boon I have obtained through the use of your wonderful rejuvenator, known as Mack's Magnetic Medicine. I am fully restored—feel like a young colt." Read the advertisement in another column. For sale by H. W. Hobson, Welland, and by all druggists everywhere.

Bucklen's Arnica Salve

The Best Salve in the world for Cuts, Bruises, Sores, Ulcers, Salt Rheum, Fever Sores, Tetter, Chapped Hands, Chilblains, Corns, and all skin eruptions, and positively Cures Piles. It is guaranteed to give entire satisfaction or money refunded. For sale by all druggists. 1198 1882

ST. JACOBS OIL
TRADE MARK.

THE GREAT GERMAN REMEDY.
FOR
RHEUMATISM

Neuralgia, Sciatica, Lumbago, Backache, Soreness of the Chest, Gout, Quinsy, Sore Throat, Swellings and Sprains, Burns and Scalds, General Bodily Pains, Tooth, Ear and Headache, Frosted Feet and Ears, and all other Pains and Aches.

No preparation on earth equals St. Jacobs Oil as a safe, sure, simple and cheap External Remedy. A trial entails but the comparatively trifling outlay of 50 cents, and every one suffering with pain can have cheap and positive proof of its claims.

Directions in eleven languages. Sold by all Druggists and Dealers in Medicine.

A. VOGELER & CO
220
Baltimore, Md. U. S.

RETIRING FROM BUSINESS.
We are prepared to transfer the
MARKHAM NURSERY,
(stock, say, 50,000 apples) and premises, if desired, on favorable terms.
L. CROSBY, MARKHAM.

Grape Vines!

A Few Thousand well rooted Grape Vines of the following varieties, can be had from the

BERTIE VINEYARDS

DURING APRIL:

Concord, Lindley, Agawam, Creveling, Eumelin, and Champion.

Intending purchasers should send orders early.

P. H. Hendershot.
Stevensville, March 28, 1882.

\$5 to \$20 per day at home. Samples worth \$5 free. Address, ESTINSON & Co. Portland, Maine. 188

H. E. SPENCER, Centre Village, N. Y., has for sale pure bred Poultry, Pigeons, Rabbits, Ferrets, &c. Rabbits \$2 a pair, Ferrets \$3 a piece, White Mice \$1 a pair, Gasts or Hees, all ready for use, \$1.25 a pair, some blue pit gamms, cheap. 3 cents for circular.

Ti Tegrof T'nod.

BEE-KEEPERS' EXCHANGE!

A LIVE Progressive Monthly. Is edited by Practical Bee-Keepers, and is richly worth the Subscription Price, which is \$1 per annum, post paid; or, three Months on trial at 25 cents. SAMPLE COPY FREE. Our Price List of—

Apiarian Supplies is now ready, and you will consult your best interests by securing a copy before you buy. Address:— H. S. JACK & PRET, Canajoharie, N. Y.

Salesmen Wanted

To begin work at once on sales for Fall, 1882, for the

FONTHILL NURSERIES

The Largest in Canada.

Head Office: Toronto; Ont. Branch Offices: Montreal, P. Q., and St. Paul, Minnesota Nurseries: Fonthill, Ont.

We can start, in addition to our already large force

100 ADDITIONAL CANVASSERS!

And want men who can give full time to the business. Steady employment and good salaries to successful men. It does not matter what your previous occupation has been. If you are willing to work your success is almost certain. The best of references required. Apply to

Stone & Wellington.

NURSEYMEN. TORONTO, ONT. March 16, 1882.

Seals AND RUBBER STAMPS



I. C. FELL & CO., 7 Adelaide Street, TORONTO. Good Work at Reduced Prices.

Mammoth Pearl Potatoes.

PURE SEED. HEAVIEST CROPPER in America in 1881. Beautiful in appearance and of excellent quality, scarcely one in a hundred of the potatoes unmarketable. Vines are such rapid growers that huge stands no chance. By the bag \$2 per bushel. Bags 50c extra. Write to order from

J. A. RAMSDEN, Sherkston P. O. Ont.

SMALL FRUITS

A Specialty. All kinds in Stock.

Sharpless Str. \$1 per hundred, Cuthbert & Gregg Rasp and Taylor Blackberry, \$0.05 per dozen, —by mail, post paid, at these rates. GRAPES—Jefferson, Moore's Early, Worden, Pookington at lowest rates.

T. C. Robinson, Owen Sound, Ont.

TO FARMERS!

AGENTS WANTED

TO SELL Improved Plows and other Implements. Apply to

H. R. IVES, & CO, Montreal.

Ensilage Congress. REPORT OF PROCEEDINGS, with statements of many Ensilagers, 64 pages, Price 50cts. Latest facts published by The New York Plow Co., 65 Beekman St., New York. Southern Road Corn, \$3 per bu., (\$2.50 single) bag & cartage free.

GILT-EDGED MAPLE SUGAR AND SYRUP.

Parties wanting either the above should order at once.

LEVI R. WHITMAN, Lakoview Farm, Knowlton, Quebec

Advertisement for John Damer & Co. featuring a leather shoe and the text 'THE SOLID LEATHER SHOE HOUSE. JOHN DAMER & CO., Manufacturers of and Wholesale and Retail Dealers in

Boots & Shoes,

77 King St. East,

TORONTO, ONT.

Advertisement for Stewarts' Patent Friction Drive Chain. Includes an illustration of the chain and pulley system, and a table of numbers and prices.

EGGS

From all the leading varieties of pure breed Poultry. Send for illustrated Circular. T. SMITH, P. M., Fresh Pond, N. Y.

A BEE-KEEPER WANTED.

To work in a large apiary. Must be experienced, and able to assist in making hives. No person need apply who uses intoxicating liquors or tobacco. Address,— JAS. MOFFATT, Jr., Pendleton Ont.

The Bee-Keepers' Guide,

A TWENTY-COLUMN PAPER,

Devoted to BEE CULTURE, with Description and Prices of Hives, Sectional Honey-Boxes, Shipping Crates, Honey and Wax Extractors, Comb Foundation, Bee-Feeders, Smokers, ITALIAN QUEENS, &c.

Subscription 50 Cents a Year.

1st SPECIMEN COPY FREE.

Address, A. G. HILL, Kendallville, Ind. 100

Dr. S. A. Richmond & Co's SAMARITAN

CURES FITS.



NEVER FAILS. NERVINE

The only known Specific Remedy for Epileptic Fits.

SAMARITAN NERVINE

Cures Epileptic Fits, Spasms, Convulsions, St. Vitus Dance, Vertigo, Hysterics, Insanity, Apoplexy, Paralysis, Epileptism, Neuritis, and all Nervous Diseases. This infallible remedy will positively eradicate every species of Nervous Derangement, and drive them away from whence they came, never to return again. It utterly destroys the germs of disease by neutralizing the hereditary taint of poison in the system and thoroughly eradicates the disease, and utterly destroys the cause.

SAMARITAN NERVINE

Cures Female Weakness, General Debility, Leucorrhoea or Whites, Painful Menstruation, Ulceration of the Uterus, Internal Heat, Grav. I, Irritability of the Bladder. For Wakefulness at Night, there is no better remedy. During the change of life no female should be without it. It quiets the Nervous System and gives rest, comfort, and nature's sweet sleep.

SAMARITAN NERVINE

Cures Nervous Dyspepsia, Palpitation of the Heart, Asthma, Bronchitis, and all diseases of the urinary organs. Nervous debility, permanently cured by the use of this invaluable remedy. To you young, middle-aged and old men, who are covering your sufferings as with a mantle by silence, look up, you can be saved by timely efforts, and make ornaments to society, and jewels in the crown of your Maker if you will. Do not keep this a secret longer, until it saps your vitality, and destroys both body and soul. If you are thus afflicted, take Dr. Richmond's Samaritan Nervine. It will restore your shattered nerves, arrest premature decay, impart tone and energy to the whole system.

SAMARITAN NERVINE

Is for sale by druggists everywhere, or may be had direct from us. Those who wish to obtain further evidence of the curative properties of Samaritan Nervine, will please enclose a 3-cent postage stamp for a copy of our illustrated Journal of Health, giving hundreds of testimonials of cure from persons who have used the medicine, and also their pictures photographed after their restoration to perfect health. Address,— DR. S. A. RICHMOND & CO., World's Epileptic Institute, ST. JOSEPH, MO.

SEEDS

We have advantages as Seedsmen of which we wish to tell the public. Thirty years experience as PRACTICAL MARKET GARDENERS AND FLORISTS, gives us such knowledge as to enable us to judge not only what are the best kinds for Fruit, Flower or Vegetable crops (whether for Private or Commercial Gardening), but also to thoroughly test the quality of all Seeds and Plants. Our Greenhouses and Frames in Jersey City, are the largest in America, covering upwards of four acres, solid in glass, employing an average of seventy men throughout the year.

We send our illustrated Catalogue of Everything for the Garden FREE on application.

PETER HENDERSON & CO.

35 Cortlandt Street, New York.

Plants

CONTENTS OF THIS ISSUE

Stock, American Filled Cattle, Walk ing Horses	501
Agriculture.—A fine Section Clover as a Fertilizer. Some observations on Corn by "Professor Deal"	502
Poultry.—Some Answers, Incubation or Hatching, Enquiry; Early Chickens	503
Horticulture.—Preservation of Fruit, Grapes and Grape Culture	503-4
Dairy.—Question on Creamery, Cleansing Dairy Stables, A Monstrous Cow, Butter and Oleomargarine	504
Editorial and Otherwise.—Spring Work, Acknowledgment; C. F. Answers to Cor- respondents, Good Suggestion, An Inter- esting Letter; Another Offer, American Land Monopoly	504-07
Apilary.—With Movable Frame Hives as early as 1762; Bee Jatter	504
Young Folks.—Communications &c	504
Commercial.—Toronto Market; Mon- real Market By Telegraph	509
The Grange.—Meeting of Elgin Divi- sion Grange, Secret and Open Grange Work, Women in the Grange; Report of Commit- tee on Education, Grange Lectures, Grange Topics	510-11
Miscellaneous.—Mound-Making Birds of Australia, Froeseance, Short Rules for Long Count at Home, Agnostics, Let us Help one another; Strength of Manganese Bronze	511-12
Household.—Useful Receipts for the Kitchen	512
Literary.—A Texas Adventure	513

Contributors, &c., to the "Canadian Farmer."

HORTICULTURE.

T. C. Robinson, Owen Sound
C. L. Whitney, Lecturer Michigan State
Grange, Muskegon, Mich.
T. H. Henderson, Bertie Vineyards,
Stononsville, Ont.

POULTRY.

Geo. Elliott, a taker of eight prizes at
the Provincial Poultry Show—Port Robinson
Ont.

APIARY.

D. A. Jones, of the Beekeepers Association
of Ontario, Boston Ont.
R. McKnight, Sec'y-Treas. Beekeepers
Association, Owen Sound.
M. Richardson, a large exhibitor at Pro-
vincial Shows, Port Colborne, Ont.

MAPLE SYRUP, SUGAR, &c

Levi R. Whitman, an extensive manufac-
turer, Knowlton, Quebec.

GRAPE CULTURE.

Dr. Joy, Tilsonburg, Ont.

GENERAL FARM SUBJECTS.

M. McQuade, Egmondville, Ont.
B. T. Pettit, Belmont, Ont.
E. S. Creed, Newport, N. S.
George Creed, South Rawdon, N. S.

LADIES' DEPARTMENT.

Mrs. S. H. Nelles, Grimsby, Ont.

YOUNG FOLKS' COLUMN.

Children of our numerous subscribers from
every part of the Dominion, under the super-
vision of "Our Little Folks' Editor."

LIST OF NEWSPAPERS CLUBBING
WITH "CANADIAN FARMER."

Below we give the names of different
newspapers throughout the Dominion
that advertise to club with the CAN-
ADIAN FARMER. From our personal
knowledge of the way each one of
them do business, we can cordially re-
commend them to our patrons as good,
reliable houses to deal with, in sub-
scriptions, job work, or advertising:

Witness, Brdaford, Ont.
Herald, Bracebridge, Ont.
Herald, Carleton Place.
Vindicator, Oshawa, Ont.
Herald, London, Ont.
Plaindealer, New Glasgow, N. S.
Tribune, Chatham, Ont.
Telegraph, St. John, N. B.
Examiner, Sherbrooke, Que.
Chronicle, Beeton, Ont.
Eastern Beacon, Port Hawkesbury,
Cape Breton.

The Canadian Statesman, Bowmanville
Ont.
Newmarket Era, Newmarket, Ont.
Times, Wingham, Ont.
Echo, London.

ARE you fond of flowers? See the
list we make for April.

The Canadian Farmer.

The Only Weekly Agricultural Paper
in Canada.

Is published every Wednesday morning by
the Welland Printing and Publishing Co. at
their offices, Welland, N. B. Colcock, Gen-
eral Manager.

To insure prompt attention send ALL re-
mittances by registered letter or Post-office
order, and ALL communications etc., to

CANADIAN FARMER,
Drawer A, Welland, Ont.

Parties living or visiting in Toronto, will
find it convenient in advertising, etc. to ad-
dress our editor, Mr. W. Pemberton Page.
His office is at No. 63, King St. East, Toronto.

W. P. PAGE }
S. W. HILL } Editors.

WEDNESDAY, APRIL 12, 1882.

EDITORIAL.

SPRING WORK.

The time for active work on the
farm is fast approaching, and although
there is at all times plenty to do, at
least the successful farmer always
finds plenty to do at all seasons of the
year. yet the approach of Spring
brings with it duties more urgent,
requiring activity of thought, as well as
body. At this time all machinery
should be looked over, and put in or-
der, if not already done. Stock re-
quires special attention, particularly
working teams want a little higher
feeding than when idle, as most farm-
ers' teams are through the winter.
This is the time generally taken by
farmers for repairing fences, also for
trimming orchards, which work should
be done before the hard work in the
fields commences. Gardens should be
straightened up, berry, currant, and
other bushes trimmed; and grape
vines also, although we like trimming
these earlier if possible. A good kitch-
en garden is a blessing to any farm-
er's family, and the man who neglects
this, is neglecting not only the com-
fort, but health of his family. Too
often this work is left to the female
portion of the household to attend to,
while there can be no objection to
their doing a certain amount of work
in the garden; yet the ground should
be at least spaded up, and the bushes
trimmed, and the garden generally
cleaned up by the men first, when the
more delicate hands of wife and
daughters might put in the seeds.

While speaking of the vegetable
garden, we must refer to the flower
garden, which is also a necessity to the
comfort, happiness, yes, and health to
the farmer's family. What will make
a home look more cheerful and pleas-
ant, than plenty of beautiful flowers
about a garden and yard. They are
nature's beautifiers, and should find a
place about every home; their rich
beauty and fragrance lend a charm, a
happy influence to all the surround-
ings. Then don't neglect this part of
Spring work. Prepare the flower
beds and flower garden with taste.
Plant some more shrubs and vines.
Make your home look as though you
intended to stay there, and that you

wanted people to admire them. In
the fields there will soon be plenty to
do, those who raise corn, potatoes, &c.,
should get out their manure soon.
Ploughing may be commenced as soon
as the land is sufficiently dry; but
care should be taken not to plough the
ground when it is wet, as it has an in-
jurious effect in the spring of the year.
Done in the Fall, when the frost
through the Winter can act upon it, no
bad effect is seen; but we have seen
good land so injured by ploughing
when it was wet, that the crop would
be almost an entire failure. When
Fall ploughing has been done on
heavy land, grain can be got in pretty
early. Spring wheat and oats we
like to have in as early as possible.
Planting can be delayed until after
seeding, unless for early use. As soon
as the ground is settled, meadows
should be rolled, and all stones, sticks,
&c., gathered up. This will save a
broken machine in haying time when
everybody is in a hurry, and time is
money.

There is plenty to do now in every
department. Farmers want to wake
up and shake off the ennuis contracted
around the kitchen stove in Winter.
The word for the next few months
will be work, work, work.

ACKNOWLEDGEMENT.

We are in receipt of some sample
maple sugar, from our esteemed friend
and brother, Levi R. Whitman,
Knowlton Que., whose favors in this
respect are annually received and much
appreciated. Long may he live to con-
tinue this great work and sweeten
the joys of his friends. Those of our
readers wanting syrup or sugar, will
do well to purchase from Bro. Whit-
man. See his advertisement in an-
other column.

The Florida Dispatch, published at
Jacksonville, Fla., came out last week
in its new dress as a 16 page paper.
It is well illustrated, and the enterprise
of its publishers will doubtless be
thoroughly appreciated by its many
readers. We wish them all success.

O. F. ANSWERS TO CORRESPON-
DENTS.

T. O. R., Owen Sound.—We note your sug-
gestions with thanks. Hints from our sub-
scribers are always acceptable. We send
three of No. 184 and five of No. 185. If not
sufficient please write.

J. C., Johnsons.—Thanks; your favor shall
receive prompt attention.

J. H. L., Falmouth Station, N. S.—We re-
gret you should have had so much trouble
in getting your paper. The address has
been changed according to instructions.
The following extract from your letter we
take very kindly and thank you for the ex-
pression:—"I regret losing the papers as I
find much valuable information in them, as
I am a young farmer, just beginning."

J. L., Naticook.—Pardon the error we
made in entering name. We gave credit in
the wrong place; regret it, but will at once
remedy.

C. C. O., Port Dover.—Glad you are to have
the "Home and Science" and cabinet pic-
tures; feel sure you will like them.

R. McK., Owen Sound.—Thanks for names,
changes and remittances.

W. W., Bensford.—Your seeds will be for-
warded this week from Toronto, thanks.

J. S., Elderslie.—Thanks for your favor and
the suggestion you make re price lists. As
you are aware the CANADIAN FARMER, as a
newspaper cannot be very profitable. The
fact is it costs fully one dollar per annum to
supply the paper. Our profit depends en-
tirely upon advertising and jobwork. We
have endeavored to do business for and
with the Association you referred to, but

could not without sacrificing, and have since
placed our advertising space at the disposal
of friends who are willing to acknowledge
value received. When the company started
the advertisement referred to in your letter
they also started the sheets for the purpose
of simply advertising their wares.

J. E. G., Thanks for your favors received
and placed. We gladly forward your order
for seeds, feeling assured Mr. Ronnie will
fill it.

Mr. B. GOTT, of the Arkona Nur-
series, has a very interesting article on
the "Preservation of Fruit," in this
issue. It will repay you to read it.

GOOD SUGGESTION.

Written for the CANADIAN FARMER.

As this is the time of year that the
drovers commence to buy fat cattle
for shipment to the English market,
would it not be well for farmers in
the different parts of the Province to
make known to their brother farm-
ers through the columns of the CAN-
ADIAN FARMER of any sales made in
their locality, and so to keep posted
in the markets? There have been sales
made in the County of Lambton of
several fat cattle to be delivered the
first of May at from 5c. to 5½c. per lb.
live weight. If this is worth putting
in print, I will try and send you some-
thing better soon. D. P. C.

A London Druggist says: "During
the many years I have been in the
drug business, I have never had a
medicine that gave such general satis-
faction, or for which there was such a
large sale, as there is for Mack's Mag-
netic Medicine, advertised in another
column of your paper." For sale by
H. W. Holson, Welland, and all drug-
gists everywhere.

AN INTERESTING LETTER.

Written for the CANADIAN FARMER.

I made my first visit to the Province
of Ontario when attending the meet-
ing of Dominion Grange held at To-
ronto, in February last. Only one
member of that lodge had I ever met
before, except my co-delegate from
Nova Scotia. I had seen Bro. E. H.
Hilborn, who had visited this place as
Lecturer of Dominion Grange, and had
enjoyed his company at my own house
and at the residence of friends. The
weather during my visit was very fine
for the season of the year and I had a
better opportunity of seeing the coun-
try than I expected, when I left home,
as there was no snow on the ground in
southern and western Ontario. The
country there is so much more level
than Nova Scotia that I was quite
struck with its appearance, so different
too from that of the North Eastern
States, much of which I had seen. It
is also much more extensive in farming
lands than Nova Scotia, and has a
great interest to an agriculturist visit-
ing it from these parts. The soil here,
in the principal agricultural counties,
Cumberland, Colchester, Hants, Kings
and Annapolis, is red loam, for upland,
which is cultivated for grain and root
crops, and the Alluvial or Dyke land
(reclaimed from the sea) for hay.
These soils form our best agricultural
districts, and are situated on the head
waters of the Bay of Fundy, which
makes up between Nova Scotia and
New Brunswick. Other counties are
engaged considerably in agriculture,
but mining, fishing, lumbering and
ship building are the most important
industries in many counties. The soil
also varies from sand, sand-loam, clay-
loam to clay, with low meadow and
some black swamp land; but the soil
changes here frequently and in short
distances, and the country even in our
best districts is hilly and broken. The
districts where farming is made really
profitable are those situated where the
tides have made extensive deposits of

Alluvium, commonly known here as "Marsh Mud", which is extensively used as a fertilizer or manure, by being drawn upon the upland in the winter, spread in the spring, and ploughed into the land; and our dyke land consists of this alluvial soil, reclaimed by dykes built to keep out the tides, similar to the levees on the Mississippi River. The best quality of these dyke lands is the most valuable land for grass, hay or grain known. It is mostly kept for hay, and two hundred dollars an acre is not an uncommon price for this land for farm purposes. Much of the interior of the country is too rough and rocky for successful farming, but is used for lumbering and mining.

I was glad to meet so many of the members of our Order in Ontario whom I know by reputation, and have always looked up to as the guardians or patriarchs of the Institution in Canada, which gave me a greater interest in making their personal acquaintance. I am pleased to say that I was treated in a brotherly manner, and the pleasant and agreeable intercourse with the founders and chief supporters of the Grange in Canada, as also with brothers Professor C. L. Whitney and the Hon. Chas. E. Mackley of the Order in the States, greatly strengthened my "attachment to our pursuits." The Dominion Grange itself appeared to me to be in the hands of sound members of the order, able debaters, ready writers and active and thorough business men. The institutions founded by or through the Grange, viz, the Fire Insurance Company, Mutual Aid Association and Wholesale Supply Company spoke well for themselves and for the institution which founded them. The CANADIAN FARMER AND GRANGE RECORD, offspring of the Grange, deserves favourable mention and a wide circulation among the members of the order (every Grange family should have it in the house) and every where among farmers and men of other calling, and I may say that it was among the pleasant and agreeable occasions of my visit to make the personal acquaintance of Bro. Page, Editor, and Bro. Colcock, Publisher of this Weekly Agricultural Journal and organ of the Dominion Grange.

In view of all I have mentioned and much more, that time and space will not allow me so much as to notice, I think I am safe saying that the Dominion Grange of Canada merits the full confidence of the Subordinate, Division and Provincial Granges and all members of the order everywhere.

Now, while I have no reason to be dissatisfied with anything that was done, or that more was not done at this session, so far as the interests of Nova Scotia and New Brunswick are concerned, yet, I think it necessary for the Dom. Grange to take into consideration some very important changes that might be made, and some solid work that might be done, to place the Institution upon yet a firmer basis; that is to say, to simplify the work of the Subordinate Granges, and reduce the gratations by abolishing the Provincial Granges, and substituting therefor Electoral Boards, for the purpose of regulating the representation to the Dominion Grange. The Provincial Grange of Nova Scotia may be made useful, if the funds will admit of its continuance, and its expenses are not large; but it appears to me, that for Ontario, the Provincial Grange and the Dominion Grange is the same Institution repeating itself, with simply a reduced membership of the Provincial Grange meeting as the Dominion Grange, doing the same work over largely, or going around a course to come out where they were in the Provincial Grange. The ex-

pense of running the Provincial Grange might be nearly all saved, as the Dominion Grange is composed of nine-tenths Ontario members, and is therefore all that is needed for that Province, meeting, as it does, in the business centre of the Province, and dealing with all its local affairs, in which a large majority of its members feel interested. Some discussion upon this matter through the columns of the CANADIAN FARMER, might be profitable. It is a matter in which the Maritime Provinces are not much interested, as we are differently situated; but so far as the Provincial Grange of Nova Scotia is concerned, it may stand in the place of an Electoral Board, or otherwise, as may be considered for the best interest of the Order. If the plan I have mentioned does not meet the views of others, there is another method by which the institutions may be consolidated, which if the matter meets with the favorable consideration of the members, may be discussed hereafter.

Since my return home, I have found the people interested in much of the work engaged in by Dominion Grange and the Subordinate Granges, although some are interested the wrong way, nevertheless they are interested, and I have taken the opportunity to address several public meetings, as well as the Granges, and a deep interest has been shown in the objects we are endeavouring to accomplish.

In concluding this letter, Mr. Editor, you will permit me to say that I will recall with a very distinct recollection everyone present at our meeting at Toronto, and the long distance which now separates us in space, does not separate us in the work we have to do, and in our interests for the general benefits of the Order; nor does it separate me from the brotherly regard I have for those who are labouring in that Institution to accomplish the objects set forth in our "Declaration of Purposes." yours fraternally,
D. B. NEWCOMB.

ANOTHER OFFER.

We have an offer to make to the reading public which we think will take with every one. We offer to send to any person, remitting \$1.50 a copy of the CANADIAN FARMER, a copy of an excellent literary monthly journal, "Our Home and Science Gossip," a 16 page paper, and one beautifully finished cabinet portrait of each of the following: Queen Victoria, the late President Garfield, Mrs. Garfield, and President Arthur. The portrait of Queen Victoria is from a photograph taken since the death of President Garfield, and is therefore an exact representation of our beloved Queen as she is now. The portraits are from the celebrated publishing house of Ralph Troutman, and the pictures alone could not be purchased at retail for the price for which we offer papers and pictures combined.

WHAT A GERMAN NEWSPAPER SAYS.

We Germans are in general not inclined to believe at once in great announcements and puffs; we are rather suspicious, and often with perfect right, of exaggerations and humbugs. Our motto is, "What the eye sees the heart believe;" and we therefore desire to see and examine ourselves before we speak about things and praise them. This was our idea when we heard and read so much about Dr. S. A. Rich-

mond's justly celebrated World's Epileptic Institute, and we therefore sent a reporter to the building. We are now able to give the best information on the subject, based on a personal review and examination of the premises.

Our reporter found Dr. Richmond in his office. The doctor kindly received him, and not only answered all his questions, but showed and explained everything about the place to him. His office is on the first floor of the building, and its walls are covered with thousands of photographs of gentlemen and ladies restored to health by the use of Samaritan Nervine, among whom our reporter recognized several of his own countrymen, and its glass cases contain innumerable certificates of cures and letters in praise of this world-famous remedy.

About ten years ago Dr. Richmond came to St. Joseph. He was then a poor young man, with but little money, and no friends to assist him. He rented a small office on Francis street, and commenced the struggle for success single-handed and alone. He has achieved a grand triumph, in the face of stubborn opposition on every hand, and is to-day one of the wealthiest men in our midst. This fact alone is amply sufficient to show the merits of his invaluable preparation, even though there were no other sources from which to procure valid and reliable testimony.

But besides the money which this great medicine has been the means of bringing to the inventor, the doctor receives daily the blessings of thousands of patients restored to health and happiness through his instrumentality. These letters are open for inspection at his office, and it requires two clerks to attend to this branch of the business.

Dr. Richmond is a living example to be imitated by all young men who have a disposition to reach eminence in the world by diligence in the use of their own exertions, and besides the enjoyment of the prosperity which surrounds him, he has the satisfaction to be regarded a human benefactor.—*St. Joseph Volksblatt, Aug. 22, 1881.*

AMERICAN LAND MONOPOLY.

The growth of land monopoly in America is becoming alarming, as will be seen by the following list of thirteen owners and the number of acres held by each:—

Sir George Reed, K. C. B., M. P. (in Florida).....	2,000,000
H. Disston (in Florida).....	2,000,000
Earl of Dunraven (in Colorado).....	60,000
Ex-Senator in Dorsey (in New Mexico).....	500,000
Duke of Sutherland.....	410,000
Col. D. C. Murphy.....	4,000,000
Phillips, Marshall & Co., London, (in Eng., in Mississippi).....	1,300,000
Earl of Dunmore.....	100,000
Col. Church, of New York, 130 farms, from 500 to 500 acres each.....	75,000
Mr. Clark, of New York.....	30,000
Standard Oil Company (in several States).....	1,000,000
Mr. Scully, Ireland, (in Illinois, about.....)	4,000
Dr. Glenn, (California).....	60,000
Total.....	11,607,000

Or 18,136 square miles.

These thirteen men own an amount of land equal to the area of Vermont and New Hampshire, and more than the four States of Massachusetts, Rhode Island, Connecticut, and Delaware. And nearly all of these vast owners are foreigners, whose rents will go abroad and some day impoverish the people and the country, as those of Ireland have pauperized the people. The day is coming when the possession of land will be limited by law to the needs and cultivation of the possessor, and the sooner such a law is enacted the lighter will be the struggle for its emancipation from the salvery of monopoly. No absentee landlord or foreigner should be permitted to

own land in America, and no man or corporation should be allowed to purchase or hold for speculation a foot of American soil.—*American Express.*

SCARCELY any disease to which human beings are subject, is so thoroughly discouraging as Fever and Ague. The periodical return of alternate chills, fever, and sweating, is terribly depressing. Ayer's Ague Cure is the only remedy known, which is certain to cure permanently, by expelling the malarial poison which produces the disease. It does this surely, and leaves no ill effect upon the system.

MANY—Who had that little lamb
Had Teeth as white as snow;
She always brushed them twice a day
With "TEABERRY" you know.

DESTRUCTION OF AMERICAN FORESTS.—In our own country we have gone to the forests in a kind of freebooter style, cutting, and burning more than we could cut, acting for the most part as though all the while in a frolic or a fight, until now at length, after a century or two of this sort of work, we are waking up to the fact that our once boundless woods are disappearing, and that we are likely to suffer no little loss thereby. But it is only the few who seem now to have any adequate sense of our condition as affected by the threatened loss of the trees. In a recent publication, issued by authority of one of our Western States for the express purpose of attracting settlers from European countries, the statistics of its great lumber production are elaborately set forth, accompanied by the assurance that the present enormous consumption of trees for this purpose may be continued ten or fifteen years longer before the forests will be destroyed. The cool unconcern in regard to the future shown in this is very noticeable. "After us, the deluge." A corresponding feeling, though working on a much smaller scale, is seen in an advertisement, and of a class often appearing in our older States. "Brace up, young man. You have lived on your parents long enough. Buy this farm, cut off the wood, haul it to market, get your money for it, and pay for the farm. The owner estimates that there will be 500 cords of market wood." And so, all over the country, on the large scale and on the small, the axe is laid at the roots of the trees, and our forests are disappearing. It is estimated that 8,000,000 acres of forest lands are cleared every year, and that in ten years previous to 1876, 12,000,000 acres were burned over simply to clear the land.—N. H. Eggleston, in *Harper's Magazine for April.*

BWARE OF THEM.

A good article that has achieved success, and attained a world-wide reputation by its true merits and wonderful results, is always imitated. Such is the case with Dr. King's New Discovery for Consumption, Coughs and Colds. Already unprincipled parties are endeavoring to delude an unsuspecting public, by offering imitations of this most fortunate discovery. Do not be deceived, but insist upon having the true remedy, and take no other. For sale by all reliable druggists everywhere.

MR. PARRETUS BOLLEAT, Ottawa, says: "I was radically cured of piles, from which I had been suffering for over two months, by the use of Dr. Thomas' Electric Oil. I used it both internally and externally, taking it in small doses before meals and on retiring to bed. In one week I was cured, and have had no trouble since. I believe it saved my life."

Our Young Folks.

By sending ten cents to us we will have Mr. James Reule, of Toronto, forward to your address, or any address you may name, five packages of flower seeds, valued at 25 cents, or for 25 cents we will forward to you five packages of flower seeds and also five packages of vegetable seeds.

Communications.

ED. YOUR FOLKS—I have not written to you for some time but I have been reading all the other letters. I am glad that spring is here again. Some of our neighbors are going to Dakota and Manitoba, but I think those going to the States will be sorry, as I believe Canada is the best country in every respect. I hope your column will continue to prosper in the future as well as it has in the past. I send 25 cents for seeds. LEVI BUTTON.

Oxford Co.

ED. YOUR FOLKS—I am pleased to see that you are getting along with your column so well. I will try and write you a letter. I take the CANADIAN FARMER and the first thing I do when the paper comes I look for the young folks column. It belongs to Moncrief Grange. I like your paper very much. I am 14 years of age. I go to school in the winter and work in the summer. I want to get five packages of flower seeds and five of vegetable. I enclose 25 cents for the 10 packages of seeds. NEIL N. McTAGGART.

Huron Co.

Puzzles From Young Contributors.

No. 1.

1—What goes round the woodpile squeaky squeak, has more horns on than 10 score of sheep?
2—Around the house, around the house that peeps in every hole, that sleeps in the corner at night?

NEIL McTAGGART.

Bible Questions.

Neil McTaggart sends us the following—

1—Where in the Bible are all the letters of the alphabet except J in one verse?
2—Where in the Bible will you find the word "girl" mentioned?

Answers to Puzzles in March 20th.

No. 1.

1—A woman knitting. 2—The people were all married.

No. 2.

1—Hay. 2—A dre.

No. 3.

1—The moor. 2—A wagon. 3—A bin. Boyd J. Yorke, of Middlesex Co., answered correctly the puzzles 1 and 2 in No. 2, and 3 in No. 3.

Answers to Words Transposed in March 20th.

Gazette; Milwaukee; Oswego.

Answers to Bible Questions in March 20
1—Ezekiel 12, 38 verse. 2—Numbers 7, 56 verse.

AN APRIL JOKE.

BY M. D. BRINE

Master Ned on the door-step sat,
Busily thinking away,
Now what shall I plan for a clever trick
For an April-fool to play?
There's Tom, he's mean as a boy can be,
And no never can pass me by
Without a word that is rude and cross,
And maybe a punch on the sly.

"Some trick I'll find that'll pay him off
And teach him a lesson too.
So Master Ned he pondered awhile,
Till the dimples grey and grew
And he laughed at last as away he ran.
"I'll make him sorry," thought he,
"For the many times he has done his best
To tease and to trouble me."

On April first, with the early dawn,
Was found at Tommy's door
A package tied, and "Master Tom"
Was the only address it bore.
"It's only a trick of Ned's," said Tom,
"He owes me many a one;
But I'll match him yet—he'd better beware—
Before the day is done."

Then Tom peeped in at his package. Oh,
What a shamefaced fellow was he!
A handsome book and a line which read,
"Accept this, Tom, from me."
And this is the way in which Tom was
"fooled".

And afterward meeting Ned,
"Your trick has beaten all mine for good—
Forgive me, old fellow," he said.
—Harper's Young People.

SEEDS.—Those desiring good, reliable, new seeds should read the advertisement of the Canadian Farmer Seed Warehouse in this issue. Send for catalogue.]



APIARY.

OFFICERS OF THE ONTARIO BEE KEEPERS ASSOCIATION.

President, Hon. L. Wallbridge, Belleville.
1st Vice-Pres., J. B. Hall, Woodstock. 2nd Vice-Pres., W. F. Cla. Co, Listowel. Sec'y-Treas., R. McKnight, Owen Sound.
Executive Committee—D. A. Jones, Beeton Dr. Nugent, Strathroy, Dr. Shaver, Stratford, S. Cornell, Lindsay, W. O. Wells, Phillipsstown

BEE MATTER.

Written for the CANADIAN FARMER.

I beg to apologize for the awful mistake, either you or I made in my last letter to you. I am made to call D. A. Jones the "king bee," where it should have been the "bee king." If it is your mistake please say so; if mine, I beg pardon. While writing that correspondence I was at a loss for a name to call him, as I wanted to call him something more important than D. A. Jones. I thought at first of calling him Father Jones, but at second thought that would not do as he has not been called by that endearing name yet that I know of, although he is certainly the father of bee-keeping in this vicinity. I hope Mr. Jones will accept this apology if I made the mistake.

Now Sir, as to my own affairs. I have made another careful examination of my bees and find them all in good condition. I have just finished making 50 Jones' hives for my own use and must say I don't see how he can sell his hives so cheap unless he steals his lumber, for I could not afford them at less than 65 cents each in the flat. I think parties wishing to purchase had better order before he finds out he cannot afford them for that. The next thing in order should be spring dwindling. I would like to see a good essay on that important part of bee-keeping, and no doubt it would be of some use to others, although I do not expect to need it. I have also made 1/2 doz. hives packed with sawdust, which I think will be splendid for putting a nucleus in or weak stock to breed up, as they are only about 1/2 size and packed with sawdust 1 1/2 thick all round, and 6 inches on top. I hope all the other bee-keepers are fixing to give an account of their winter operations by the first of May, which will soon be here.

C. R. TENCH.

[Our friend, Mr. Tench, is responsible; his copy reads "King Bee," although we do not see why he need feel bad over it, as the "King Bee," in such a hive as ours is a title no one need be ashamed of.—Ed.]

WITH MOVABLE FRAME HIVES AS EARLY AS 1762.

Swammerdam, who wrote in the latter part of the seventeenth century, mentions a bee-keeper, who knew the art of producing queen bees at pleasure, and of securing thereby four times as many swarms annually as were usually obtained by the old plan of natural swarming. In 1762, Graewell, in his "Approved Bee Culture," gave directions for making artificial swarms and dividing colonies,

and Schirach published a special treatise on the subject in 1770, in which he first announced the fact, previously known to but few, that bees are able to raise a queen from worker brood. The practice seems to have been of but little success, as many facts having an important influence were then unknown, and the hives then in use were ill-adapted to the business. The elder Huber and others of his time, made a success of artificial swarming, when they developed the movable-frame system (not Langstroth's, as is credited to him) and made their important discoveries in the physiology of the bee. Their practice, though, was necessarily imperfect, and was seldom practiced successfully, except by the most expert and well-informed aparians. Since that time rapid advances have been made in this branch of bee-culture. It would require a volume to describe all of the different modifications of artificial swarming, with the advantages and disadvantages of each. The reader can consult the works already published, in most of which this subject has been extensively discussed. We only introduce it here to describe some of the newer and simpler methods later introduced, and now successfully practiced.

Artificial swarming is based on the following facts:

First—A queen and some workers, few or numerous, constitute a swarm capable of carrying on all the labors of the hive. Drones are only necessary in the case of a young, unfertile queen.

Second—Worker bees, without a queen, can rear one if they are furnished with comb, having in it a worker or female eggs or larva which is still uncapped.

Third—A queenless colony will adopt a strange queen, if given to them at the proper time, and with the proper precautions.

Fourth—A part of the bees may be taken from the hive, with or without the queen, without disorganizing the others.

Fifth—A part or all the comb may be taken, with its contents, from a colony of bees without destroying them, as they will immediately go to work and replace it.

Sixth—Queens can be reared in any desirable number by taking a piece of comb containing worker brood less than six days old, with workers enough to cover and nurse them, and placing them in a separate hive or box.

Seventh—The bees will start a number of queen cells, from four to eighteen, each of which can be made to produce a perfect queen, by separating them and giving each of them to a pint of bees, in other hives. These facts, while they form the basis of artificial swarming, are subject to many qualifying conditions, and a knowledge of them alone would not enable a novice to set up at once as a successful apiarian. A thorough knowledge of the economy of the bee hive, and of the habits and peculiarities of its inmates, are necessary, and also some practical experience in handling and manipulation.—Cincinnati Bulletin.

MR. M. RICHARDSON, of Port Colborne, in a report concerning his apiary says: "I wintered twenty-five hives in good condition with the exception of one which is queenless. Sold them all but five colonies, and could sell a hundred if I had them for sale."

THOMAS MYERS, Bracebridge, writes: "Dr. Thomas' Electric Oil is the best medicine I sell. It always gives satisfaction, and in cases of coughs, colds, sore throat, &c., immediate relief has been received by those who use it."

RESOLUTIONS OF CONDOLENCE.

Whereas it has pleased the Almighty God to remove from our midst our Brother James Ferguson, one of the members of Forest Rose Grange, we hereby express our heartfelt sympathy with his catocemed wife and family in their bereavement, and trust that they may be enabled to look for strength and comfort to him who has promised to be a "Father to the fatherless" and a "husband to the widow."

Resolved, that a copy of this resolution be given to the family, and one sent to the CANADIAN FARMER for insertion.

JOHN DUNDAS, Master,
JACOB BAINARD, Sec.

ALSIKE CLOVER.

BY L. C. ROOT.

One of the important questions of the day in connection with our bee-keeping interests, is that of supplying forage for our bees.

It is an indisputable fact that the natural sources of honey are in most sections decreasing.

The basswood in our forests is being largely cut for timber, and farm lands are being cleared of berries, and other honey affording trees and shrubs.

It is also true that in most localities, even where forage is most abundant, there are times during every season when there is not an abundant flow of honey from general sources.

With these facts in view it should not be a matter of surprise that thoughtful bee keepers are interested in supplying this lack in some substantial manner.

The matter has been brought most forcibly to our notice and has received our attention to a considerable extent. Much has been said in regard to the feasibility of cultivating various plants for this purpose alone. Let me say that I have little hope that this will ever be made a success. For a brief period, while a demand may be created for the seed that may thus be raised, motherwort &c., might be cultivated in quantity and the seed disposed of, but as a dependence, I am convinced that the yield of honey must be derived from a more general source, and one of greater value as a general crop.

After quite a thorough investigation, I find nothing which seems so likely to supply the demand as alsike clover. I shall endeavor to show its value as a general farm crop, as well as a honey plant, and also to show how it may, if properly understood, be quite generally cultivated, and fill this vacancy.

I think I am correct in saying that but few have tested the value of alsike clover to an extent that would enable them to speak of its worth with any degree of certainty. Many have sown it in small quantities and I think that all who have done so, will agree with me that bees work very freely upon it.

My experience has been that they work upon it much more than upon white clover. In establishing its value as to quality of hay, and as a honey plant, I might give instances where it has been tested in the past, but as we have a recent report of more than usual importance, I will simply refer to this.

Those of your readers who read the report of C. M. Wolver, of Hallsville, N. Y., will remember that he gives as one of the reasons why he secured his large yield was that his bees had access to several acres of alsike clover.

Mr. Wolver informs me that basswood yielded but little honey with them, and that his crop would have been far short of what it was, had it not been for the clover referred to.

It is generally known that alsike clover is a median between the white clover and the coarse red clover. I have grown it over two feet high, and it was fine and full of branches.

Mr. Woolver runs his apiary upon one of the best farms in Montgomery county which is conducted by his father and brother.

Of the hay as a general crop, they say it is not equalled by any kind of clover they have ever raised.

I am an advocate of mixed grasses for hay and should use it to this extent if not farther.

In answer to the question as to how it stands the winter, Mr. W. says, that, tested by the side of the red clover, he finds it fully equal in hardiness.

One point in Mr. W.'s experience is of particular interest to me. With the large area of this clover to which his bees had access, and the scarcity of the yield of honey from other sources, they were able to ascertain to a certainty the quality of honey it afforded.

It was of such superior quality that they sold it for a price which was above the market price for best white clover honey.

In conclusion, what I desire to substantiate is this. That the sources from which this lack of forage is to be supplied, must be of the nature of a general field crop. That from the desirability of alsiko clover, as to quality of hay, it will be found worthy of attention and adoption, by farmers generally.

If necessary it might be desirable to furnish our neighboring farmers with seed and thus induce them to test its worth, and if they find it valuable as a farm crop, as I believe they would, they would not only receive benefit themselves, but would also benefit bee keepers.

Mohawk, N. Y.

WHY BEES ARE CROSS.

BY B. WATCHER.

Under the caption of "A word for the new races," page 28, February Exchange Mr. H. P. Sayles asks whence comes this diversity of opinion in regard to the disposition of the Cyprian bee. Suppose I compare notes a little, compare dispositions of men and animals, yes even the whole feathered tribe, (Mr. S., I am not intending to differ with you, but look from another point for a different possible cause), and we will see that association either develops or deadens nearly all characteristics in everything. To illustrate it, A. comes here and sees me open a hive containing a strong stock, neither of us scarcely touch a smoker until the hive is closed, we work careful and not too fast, no bee is carelessly pinched or killed, if he only had such gentle bees it would be just fun to handle them, had I got more like them? yes, plenty and to spare. He takes four or five queens so as to have some, takes that queen, too, to be sure of one to show to friends. In five or six weeks I go to see how they behave at A's place. See A. out among them with veil and gloves on and two smokers burning. Why is that? I watch a while unobserved, then ask A. "How are those gentle bees?" "They are as bad as any others are, and that gentle one, why they are perfect demons." Now why is it? A. goes and snatches off the cap, jarring the hive all through, he then catches hold of the quilt with one hand and the smoker in the other, applies the smoke in quick sharp puffs as fast as the quilt is pulled back, remarking, "These fellows are the very d—s to sting, and why is it." Can't anybody guess why they are so cross? It must be the breed. I say it is not, the illustration is a fact, and I have time after time examined others' hives and been fearfully stung, when I know that their owners made their disposition.

Last summer I was sent for to examine a stock that had driven four others off that had attempted to open the hive. I was sent for to see me driven off. I asked a few questions and found out they had been smoked to

death, so I thought, I would coax a little. I made about three gills of sugar syrup, gave them some at the entrance, took off the cap very carefully, spooned a little syrup along the top edge of the hive and as soon as a crack was made under the quilt, syrup met the bees in the place of a deluge of smoke as they expected. It took me 15 minutes to get the hive all to pieces, but I did not get stung, neither did any one else, nor was any one drove off, I don't doubt I was an hour fooling around that stock, because I never saw another like it before. But why were the bees pleasant to me and cross to others? If you go to work at a stock with a yank, and snatch, kick and pull everything to pieces in a minute, you will find out that it takes longer than it does to work slower, and more carefully; and there will be a less number of bees killed, you will be stung less times, the bees will be better natured and you will feel better. Just think on't a little.—Bee-Keepers' Exchange.

SEEDS.—Those desiring good, reliable, new seeds should read the advertisement of the Canadian Farmer Seed Warehouse in this issue. Send for catalogue.

ANECDOTE OF JUDGE STORY.—The following anecdote about the famous jurist Story is in private circulation, but it is good enough for the public eye. It was prepared for story's biography by his son, but Charles Sumner, who edited the work, struck it out. The narrative runs like this: In his younger days Story lived in the aristocratic old town of Salem, in Massachusetts. His great ability was not then tempered by as much wisdom as he afterwards displayed, and he was looked upon with disfavor by some of the old families. One day Mrs. A. called upon Mrs. B., and in the course of their conversation—there being a seamstress present—Mrs. A. asked Mrs. B. if her daughter was going to the party that evening. "No," was the short reply; "I don't propose to let my daughter go to any place which is frequented by that insignificant young puppy Story." Years afterwards when Story was a judge on the Supreme Bench, he visited Salem, and was warmly welcomed by those who had known him formerly. Among the best friends apparently was Mrs. B., and he accepted her pressing invitation to dinner. Now, in the years which had elapsed, the seamstress had become possessed of a home of her own, to which was attached a garden, with a pear-tree, which was just then loaded with fine fruit. After the invitation to dinner had been accepted the seamstress received a call from Mrs. B.'s servant, asking her to send up a basket of her excellent pears for dinner, as "Mr. Justice Story, of the Supreme Court of the United States, was to be present." The good-natured seamstress sent the pears at once, and with them this message, "Tell your mistress that I am glad that the insignificant young puppy Story has grown to be so fine a dog."—Harper's Magazine for April.

An Indian chief in Washington, went to see the Ideal Opera Company. When M. W. Whitney gave a particularly low bass note, he said, "Ugh! him heap dug out."

COMMERCIAL.

Toronto, April 10th, 1882.

Prices in the Old Country are a little better. In New York the market was rather dull, but Western markets were generally active. In Montreal there is beginning to be a brisker tone prevalent, owing to the near approach of the opening of ocean navigation.

The sales of grain have been numerous and prices fair.

Flour is firm with rates some advanced since our last report. Superior Extra 1. quoted at \$6.25, 2. \$6.35, Spring Extra \$6.00 to \$6.05, Strong Bakers' \$6.50 to \$6.75, and Fine \$4.90 to \$5.00.

In regard to dairy products, the Gazette says:

"The dearth in the supply of new butter has thrown the local demand upon the stocks held here, and these are beginning to exhibit a rapid shrinkage. Sales of over 100 pkgs. of old butter are reported, consisting of grades which retail dealers would not look at a week or ten days ago. For new stock, an animated competition has existed between jobbers during the past week, and some exorbitant prices have been paid, but dealers seem to think the highest limit of values has been reached. Prices, however, are very irregular, for while 35c to 36c was obtained to-day for a few pkgs. of new, we know that equally as good butter was bought at 30c. The New York market was reported weak to-day and to go lower. Since the commencement of winter a Boston firm of packers has shipped to New York more than 1,000,000 lbs of leaf lard to be sold for making butter, for which 1 1/2 cents were received more than for rendered lard. The cheese market is steady with sales of 50 boxes of choice reported at 13 1/2c, and quote for the home trade 13c @ 14c. The Liverpool cable was steady to-day at 6 1/2c. The New York Bulletin of yesterday says: 'The development of a stock of 87,000 boxes shows an amount rather in excess of estimates, beside which the sale of 150 boxes now cheese by the Springville Factory in Erie County, said to be at 13 1/2c.'

BUTTER.—Wholesale prices— c. c. Creamery, late made, per lb. 00 @ 00 " medium, per lb. 00 @ 00 Townships, good to choice, per lb. 22 @ 23 Morrisburg and district, per lb. 19 @ 24 Brockville, per lb. 18 @ 22 Western dairy, per lb. 18 @ 19 Kamouraska, per lb. 15 @ 16

CHEESE.—Sept to Oct, choice, per lb. 13 1/2 @ 13 3/4 Fair to fine qualities, per lb. 12 1/2 @ 13 Medium grades, per lb. 10 @ 11 Skims, per lb. 6 @ 7

Here matters on the Produce Market are rather dull although prices are somewhat better. Wheat brings \$1.30 for No. 2 Fall, and Spring ranges from \$1.32 to \$1.34 respectively for No. 2 and No. 1.

On the street grain has come in quite freely during the past week and prices are better. Fall wheat brings \$1.37 to \$1.29 and Spring \$1.30 to \$1.36. Oats bring 43c to 44c, and barley 35c to 36c. Clover seed is quoted at \$4.60 to \$4.90. Butter, for lb. rolls, brings 27c to 30c.

PRICES AT FARMERS' WAGGONS.

Table listing prices for various agricultural products like wheat, barley, oats, peas, rye, dressed hogs, beef, mutton, chickens, geese, turkeys, butter, eggs, potatoes, apples, onions, cabbage, celery, turnips, carrots, beets, ham, straw, and wool.

LIVE-STOCK MARKET.

BUFFALO, April 8, 1882.

CATTLE. Receipts for cattle thus far this week 11,145 head, against 13,023 to corresponding date last week; decrease 1,877. Shipments 11,252 against 12,221 last week; decrease 969. With fair offerings to-day the market ruled quiet and a trifle easier. The bulk of the stock was sold, however, as Eastern buyers took hold to some extent. A load of fancy steers was taken by Mr. Geo. F. Christ at \$6.65, and six loads of choice to extra brought \$6.57 @ \$7.00. The following sales were reported:

Table showing live stock market prices for cattle, including items like Pfeiffer & Windsor Bros. extra steers, Same, choice do., Doty & Watkins Mich. do., Same, extra Ohio do., McDonough & Co. Michigan steers, Same, do bulls, Rankin & Sparrow, Michigan steers.

*\$15.00 added.

Receipts of sheep and lambs thus far this week 17,200 head, against 15,120 to corresponding date last week; decrease 2,080. Shipments 10,200 against 10,000 last week; decrease 200. The offerings and demand were both moderate, while prices were weak, yet about everything was sold. Good to choice Western sheep brought \$6.75 @ 7.00, and common to fair \$5.60 @ 6.00. Lambs firm, sale one week-load of good quality at \$8.00. The following sales were reported:

Table showing sheep and lamb sales with columns for Seller, No., Wt., and Price.

Receipts of hogs thus far this week 2,315 head, against 2,005 to corresponding date last week; decrease 310. Shipments 27,668 against 32,600 last week; decrease 4,932. The supply of good hogs was light, while the market ruled fairly firm, and with the exception of about a ton of pig weights all changed hands, fair to choice York weights bringing \$6.57 @ 7.10, and a load and a half of good medium weight \$7.35 to 7.50, with a load of still fed at \$8.

BY TELEGRAPH.

MONTREAL.

April 10.—Quotations.—Flour—Superior, \$6.25 to \$6.30; extra, \$6.15 to \$6.20; spring extra, \$6.00 to \$6.05; superfine, \$5.60 to \$5.75; strong bakers', \$6.50 to \$6.00, fine, \$4.90 to \$5.00; middlings, \$4.00 to \$4.25; pollards, \$3.50 to \$3.75; Ontario bags; \$2.05 to \$3.05; city bags, \$3.80 to \$4.00. Wheat—Red winter, \$1.45 to \$1.47; white, \$1.38 to \$1.39; Canada spring, \$1.42 to \$1.43; corn, 80 to 85c; peas, 90 to 77c; oats, 41 to 42c; barley, 65 to 67c; rye, 85 to 87c; oatmeal, \$3.00 to \$3.20; cornmeal, nominal. Butter—Western, 10 to 19c; Eastern Townships, 22 to 25c; Brockville and Morrisburg, 18 to 22c; creamery, 23 to 34c; cheese, 12 to 13c; pork, \$21 to \$22; lard, \$15 to \$14; bacon, 12 to 13c; hams, 13 to 14c.

Chicago.

April 10.—Flour—Nominal. Wheat—Weaker No. 2 spring, \$1.35 to \$1.36. Corn—Active, 66c. Oats—Active, 47c. Rye and barley—Unchanged. Pork—Higher, \$17.45 to \$17.50. Lard—Easier, \$11.10. Whiskey—Unchanged. Receipts—Flour, 4,000 bbls; wheat, 15,000 bush; corn, 49,000 bush; oats, 65,000 bush; rye, 1,000 bush; barley, 18,000 bush. Shipments—Flour, 8,000 bbls; wheat, 6,000 bush; corn, 363,000 bush; oats, 101,000 bush; barley, 10,000 bush.

New York.

April 10.—Flour, Easy. Wheat—Steady, Chicago, \$1.30 to \$1.31; Milwaukee, \$1.32 to \$1.34; No. 2 red, \$1.43 for cash; \$1.43 for March; \$1.42 to \$1.43 for April. Corn—easier, at 61 to 61 1/2c. Oats, quiet. Receipts—Flour, 13,073 bbls; wheat, 33,000 bush; corn, 11,000 bush; rye, 40,000 bush; rye, 1,000 bush; barley, 8,000 bush; pork, 163 bbls; lard, 623 lbs; whiskey, 94 bbls. Exports—Flour, 7,068 bbls; wheat, 77,237 bush; corn, 37,006 bush.

Oswego.

April 10.—Wheat, Steady; white State, \$1.36; red State, \$1.40. Corn—Unchanged sales, 1,500 bush; Western mixed, 78c; barley—Firm. No. 2 Canada hold at \$1.16; No. 1 Canada, \$1.18; No. 1 bright Canada, \$1.19; extra bright Canada, \$1.17. Rye—Quiet.

Milwaukee.

April 10.—Wheat, \$1.30 1/2 for cash, \$1.27 1/2 for June; \$1.27 1/2 for May; No. 2, \$1.14.

Detroit.

April 10.—Wheat—No. 1 white, \$1.28 for cash or March; \$1.30 1/2 for April; \$1.31 1/2 for May; \$1.31 1/2 for June; \$1.27 for July.

Toledo.

April 10.—Wheat—No. 2 red, \$1.33 for cash; \$1.31 for March; \$1.31 for April; \$1.32 1/2 for May; \$1.31 for June. Corn—High mixed, 72c; 71c for April; 72c for May.

English Markets.

The following table shows the top prices of the different kinds of produce in the Liverpool markets for each market day during the past week:—

Table showing English market prices for various commodities like flour, wheat, barley, peas, and pork, with columns for market days (Apr 1, Apr 2, Apr 3, Apr 4, Apr 5, Apr 6, Apr 7, Apr 8).

The Canadian Farmer

WEDNESDAY, APRIL 12 1892.

RATES OF SUBSCRIPTION.

Five Copies \$1.00 per year in advance to any address. Postage pre-paid.

The money must accompany the subscription. Remittances by P. O. Order or registered letter, will be at our risk.

All communications, subscriptions and matters of business connected with this paper, should be addressed to Canadian Farmer, Drawer A., Welland.

Published by the Welland Printing and Publishing Co., Incorporated October, 1881. N. B. Coleock, General Manager.

THE ADVERTISING RATES

Made known on application to this office.

THE GRANGE.

DOMINION GRANGE OFFICERS.

- A. Gifford, Meaford..... M.
- D. H. Nowcomb, Sheffield Mills, N. S..... O.
- Luther Cheyne, Brampton..... Sec.
- J. P. Bull, Downsview..... Treas.
- L. VanCamp, B. A. Manville..... I.
- J. C. Shepley, Kingsville..... C.
- W. Brock, Aderado..... S.
- T. S. McLeod, Dalston..... A. S.
- I. Cameron..... G. E.
- Mrs. VanCamp..... Cores
- Mrs. Hillborn..... P.
- Mrs. Wilkie..... F.
- Mrs. McLeod..... L. A. S.

EXECUTIVE COMMITTEE—Jabel Robinson, Middlemarch, R. Wilkie, Bondsu.

AUDITORS—A. J. Hughes, Sharon, E. H. Hillborn, Uxbridge.

OFFICERS OF PROV. GRANGES.

ONTARIO.

Jabel Robinson, Master, Middlemarch, A. Gifford, Sec'y., Meaford.

NOVA SCOTIA.

W. P. Starratt, Master, Paradise, N. S., A. McQueen, Sec'y., Point de Bute, N. B.

DOMINION GRANGE MUTUAL FIRE INSURANCE COMPANY.—A. Gifford, Meaford, President, S. Parsons, Baltimore, Vice-President, B. J. Doyle, Owen Sound, Managing Director and Secretary, J. P. Bull, Downsview, Treasurer.

Canadian Mutual Aid Association.

Wm. Renne, Esq., President, Toronto. W. L. Harrison, Esq., Secretary, Toronto. S. W. Hill, Membership Supt., Ridgville.

Dominion Grange Secretary's Notices.

All matters of business connected with Grange should be addressed to Toronto, All matters connected with this paper to Drawer A., Welland, Ont. Patrons will confer a favor by keeping the Grange and newspaper business entirely separate as above.

Patrons answering or in any way corresponding with those advertising in these columns will oblige us by saying they saw the advertisement in these columns.

MEETING OF ELGIN DIVISION GRANGE.

Some Valuable Reports Presented.

The Elgin Division Grange met in the Court House, St. Thomas, at one o'clock on Thursday, March 15th, with the following delegates present.—

Bros. Wm. Chamberlain, J. Robinson, D. Ferguson, Robt. Jelly, Jas. Glen, H. Westover, B. Payne, B. F. Hathaway, Jos. Wilson, C. Neff, John Wight, R. Sutherland, A. Duncanson, Higb. Allemand and Russel, Sisters Robinson, Payne and Westover.

Bro. Robinson, delegate to Provincial Grange, reported in a very able manner. Sister Payne read the report of the committee on house and home. A vote of thanks was tendered the above committee for their very able report, coupled with a request that it be sent for publication in the local press. On motion Bros. Hathaway, Glen and Jelly were appointed a press committee. Bro. Payne submitted the report on raising and feeding stock. Bro. Allemand submitted the report on agricultural implements, which was adopted.

An interesting discussion took place on the raising and feeding of stock in

which Bros. Jelly, Glen, Ferguson and Allemand took a part.

Bro. Robinson submitted the report of the committee on seed grain, and roots. Bros. Ferguson, Payne, Glen and Allemand. The report was adopted. Bro. Harris, manager of the Grange Supply Company, was introduced and addressed the Grange on the working of the company. A vote of thanks was tendered him for his able address.

The Grange then adjourned to meet next morning at 9.30.

To the officers and Patrons of Elgin Division Grange:—

In regard to roots as food for stock, we believe them to be almost indispensable on the farm. Cattle can be kept in excellent condition all winter on straw and roots if kept in warm and comfortable quarters. Owing to the ravages of the fly and other causes, farmers in some sections have almost abandoned the growing of seed turnips. We would recommend that wherever seed turnips cannot be successfully grown that their place should be supplied with mangold wurzel, sugar beet and white Belgian carrots. We think that for milch cows, horses, and pigs the latter are preferable.

The following is a chemical analysis of mangold wurzel and swede turnips.

MANGOLDS.		SWEDE TURNIPS.	
Water.....	89.0	Water.....	87.0
Ash.....	.8	Ash.....	.1
Albuminoids.....	1	Albuminoids.....	1.3
Woody Fibre.....	.2	Woody fibre.....	.11
Carbonates.....	.1	Carbonates.....	.25
Fat.....	.1	Fat.....	.01

It will be seen by the above that the turnip contains one per cent less water but are about equal in fatty matter. When we take into consideration the fact that a much larger bulk and weight can be obtained from an acre of mangolds than from an acre of swedes, we find that the mangolds are the most profitable, especially when we know that if the soil is in good condition, the mangold crop is almost a certainty. We prefer to plant mangolds, beets and carrots on the level, marking the drills two feet six inches apart in the rows and carrots five inches apart, turnips should be sown in drills and thinned about twelve inches apart in the drills. The mammoth and yellow globe mangolds are the most profitable. In regard to seed grain we believe that agricultural societies receiving Government money could spend a portion of it judiciously by introducing new varieties of seed grain. We also think that when prizes are awarded to seeds and grain by the agricultural societies some steps should be taken to distribute them among the farming community.

We find the tendency to use seeds imperfectly ripened and of poor quality too prevalent at the present time amongst the majority of farmers, that with the view of larger crops of superior quality we would recommend that none but the best well ripened seed should be sown or planted. Your committee would recommend the frequent change of seeds from one locality to another, also from one class of soil to another, none but pure clean seed should be sown, and we recommend that the law relating to the sale of foul and obnoxious seeds should be strictly enforced. All of which is respectfully submitted.

OUR HOMES.

Our homes should be places of labor, of learning and of rest. Of labor, a great deal is required by the housewife to keep things as they should be kept in a farm house, she should therefore have all the different appliances at her command, for helping her with her work as quickly as possible. There is the preparing of meals which should be done with economy and taste, as a good deal depends on the appearance of the food, that it may be relished

without being extravagant. Then there is the washing, ironing and mending and here we would say a great deal may be saved by neatly mending. We find it to our advantage to buy more than enough material for any garment so as to have some of the same to mend with, which can be done with such neatness as scarcely to be observable. There is the every day chamber work and dusting and cleaning and keeping things tidy in general, for no man likes to see an untidy house, though sometimes they forget to clean off their boots or hang up the boot-jack and such little minor things. There is also the dairying to be attended to, the skimming and scalding and butter making and packing or marketing as the case may be. And last though not least the making of the clothes which is done to a great extent by the farmer's wife. But we must not forget the flower garden which should adorn every farm home, to make it both attractive and cheerful. Of learning, one has said "give me the first seven years of a child's life and I don't fear for his future," as much as to say the training or learning as you may please to call it of a child's first few years tends to make them what they will be in after years when they become men and women. And as the mother is more with them when they are small, than the father, so much will depend on her for the kind of training they will receive. She should teach them obedience, for without strict obedience from children to their parents no home can be truly happy. They should be taught truthfulness and honesty both by precept and example in their play as in business. They should learn the golden rule, to do unto others as you would they should do unto you. They should be taught industry. The girls should be taught to cook, to make bread, to make beds, to make and mend their own clothes. They should also be allowed to do a certain amount of shopping, so as to understand what it takes to dress them from year to year; and they should be taught their dependance upon God. We think no home perfect without this, and we say no good grangers can neglect this all-important duty if they carry out the principles of the grange, as we believe no grange whether, Dominion, Provincial, Division or Subordinate is open for labor without imploring the Divine aid and blessing. So no day's labor should be begun or ended without imploring the same divine aid and blessing, for if it is necessary in the one case it surely is in the other. Our homes should be places of rest. After the toils of the day are over there should be rest. It may take the form of music, reading or recreation, but let it be rest, not scolding or fault-finding, but kindly feelings of words and cheers. Mothers should find some time for reading to improve their mind, for the mind requires food as well as the body. All minds are not satisfied with gossip and common chit-chat, but are reaching after something more ennobling, something of greater good. We would recommend farmers' wives and daughters to attend the granges as much as they can. They will find something to amuse and instruct them, and it will draw off the mind from those little annoyances and anxieties which are common to their lot; and while it entertains it will rest both body and mind.

to our obligation—both as regards secrecy and fidelity. The lessons taught in the Grange room are strictly moral and refining in their influence, but if they are disregarded, of course their good intent is lost. The obligation to which every Patron must assent, covers a much greater ground than is comprehended at an initiation, where more or less embarrassment or timidity prevents an insight into the impressiveness which the lessons, with their moral, are intended to convey; and too often but a small share of the meaning or responsibility assumed is remembered. We promise to exercise a brotherly love one toward another, in all our deal as well as in our social intercourse, to conform to all the laws and regulations of our superiors, and to guard with fidelity the secret instructions of our Order. Upon this point, much more should be said, and most properly, by the Master. There are many conversations that are proper among our own members, which should never be listened to by other ears, and many discussions on points pertaining to our own affairs which should be confined to the Grange room alone. It is not sufficient that the promise of secrecy and fidelity be given, but it is necessary that it should be fulfilled. The violation is not often due to a wilful or wrong intent, but to thoughtlessness and want of discipline. There is a broad field for each lecturer in this direction, and his labor would surely result in much good to the Order.

Another point to which we would invite attention is that, if an application for membership is rejected, no person outside the Grange room should ever know it. This is very important, but it is often entirely disregarded. The reasons for this requirement are very obvious. If it were publicly known that a neighbor had been denied admittance to our Order, he would be subject to more or less ridicule, and derisive remarks, which could be only to his injury, and could only serve to disgust him with that which once he was favorably impressed. It is not necessary that even our own members should know by whom among them the applicant was rejected, and the old adage, "Let not thy right hand know what thy left hand doeth," would apply admirably to this point.

When work in the Grange does not forbid, the reading of our by-laws and rehearsal of many of the important lessons which we are taught, would surely be of advantage to all members—and here allow my opinion, that the greatest good resulting from the Grange movement will never be financially, but in the elevation of society, both intellectually and socially, uniting in the bond of friendship neighbors, friends and communities hitherto estranged.

And now, in conclusion, I would say, let us not put on a priestly robe in the Grange room and go away without it, but strive to illustrate the virtues of our Order in our own homes, rejecting all hypocrisy, being ever truthful, and never forgetting to cultivate a forbearing charity—the greatest virtue of which the human heart is susceptible—toward all mankind.—MRS. A. S. PROUT, in "Grange Visitor."

SECRET AND OPEN GRANGE WORK.

Brothers and Sisters of the Grange: Among the many interesting subjects discussed in the Grange, there is one upon which, we think, not enough is or ever has been said. We allude

to our obligation—both as regards secrecy and fidelity. The lessons taught in the Grange room are strictly moral and refining in their influence, but if they are disregarded, of course their good intent is lost. The obligation to which every Patron must assent, covers a much greater ground than is comprehended at an initiation, where more or less embarrassment or timidity prevents an insight into the impressiveness which the lessons, with their moral, are intended to convey; and too often but a small share of the meaning or responsibility assumed is remembered. We promise to exercise a brotherly love one toward another, in all our deal as well as in our social intercourse, to conform to all the laws and regulations of our superiors, and to guard with fidelity the secret instructions of our Order. Upon this point, much more should be said, and most properly, by the Master. There are many conversations that are proper among our own members, which should never be listened to by other ears, and many discussions on points pertaining to our own affairs which should be confined to the Grange room alone. It is not sufficient that the promise of secrecy and fidelity be given, but it is necessary that it should be fulfilled. The violation is not often due to a wilful or wrong intent, but to thoughtlessness and want of discipline. There is a broad field for each lecturer in this direction, and his labor would surely result in much good to the Order.

Another point to which we would invite attention is that, if an application for membership is rejected, no person outside the Grange room should ever know it. This is very important, but it is often entirely disregarded. The reasons for this requirement are very obvious. If it were publicly known that a neighbor had been denied admittance to our Order, he would be subject to more or less ridicule, and derisive remarks, which could be only to his injury, and could only serve to disgust him with that which once he was favorably impressed. It is not necessary that even our own members should know by whom among them the applicant was rejected, and the old adage, "Let not thy right hand know what thy left hand doeth," would apply admirably to this point.

When work in the Grange does not forbid, the reading of our by-laws and rehearsal of many of the important lessons which we are taught, would surely be of advantage to all members—and here allow my opinion, that the greatest good resulting from the Grange movement will never be financially, but in the elevation of society, both intellectually and socially, uniting in the bond of friendship neighbors, friends and communities hitherto estranged.

And now, in conclusion, I would say, let us not put on a priestly robe in the Grange room and go away without it, but strive to illustrate the virtues of our Order in our own homes, rejecting all hypocrisy, being ever truthful, and never forgetting to cultivate a forbearing charity—the greatest virtue of which the human heart is susceptible—toward all mankind.—MRS. A. S. PROUT, in "Grange Visitor."

BRIGHT'S DISEASE, DIABETES, KIDNEY, LIVER OR URINARY DISEASES.

Have no fear of any of these diseases if you use Hop Bitters, as they will prevent and cure the worst cases, when you have been made worse by some great puffed up pretended cures.

WOMEN IN THE GRANGE.

Gov. Porter, at the late meeting of the Indiana State Grange, among many other sensible and progressive things, said: "Women are admitted as members of your order, and I am glad to see so many ladies here to day. Those who are consulted so much at home in regard to the conduct of the farm and household are counted worthy to be consulted with and to take a part in discussions in your councils in regard to the most important questions that concern you. The time has gone by when it is considered un-feminine for women to understand business; and the farmer who must place reliance, in case of death, upon his wife, if upon anybody, to preserve his estate until his children shall have attained an age and capacity to manage it, likes now to make sure that she is instructed in business, and will not have to lean upon some unknown and incompetent or fraudulent person for advice or assistance.

There are 90 halls in Michigan owned by the Granges. One of them is valued at \$3,000, another \$2,000 several at \$1,500 each, 33 at \$1,000 and over, the balance ranging from \$200 to \$900 each. The Grange in Michigan is in a very flourishing condition, that is one reason.

REPORT OF COMMITTEE ON EDUCATION.

Adopted at last Annual Meeting of Provincial Grange.

To the Worthy Master and Members of Ontario Provincial Grange, in Annual Session Assembled—

We, your committee on education, to whom was referred the various suggestions from Division and Subordinate Granges relative to matters affecting the above named subjects, beg leave to report that we have endeavored to give the same our most careful consideration, the results of which are embodied in the following recommendations, viz.

1st. That non-residents shall have equal privilege with residents in the benefits of attending our public schools providing they are ratepayers in the section they desire to attend.

2nd. That no further change as to holidays take place at present, inasmuch as the law in that particular was lately amended at the request of the Patrons of Husbandry, so that the summer holidays need now only extend from July 15th to August 3rd.

3rd. That the attention of the members of our Order be called to the question and requested to investigate as to whether the system of county grants to public schools shall be continued or whether the amount required to support the schools in addition to the Government grant shall be raised by direct taxation from each school section, and also as to whether the system of inspection of said schools as at present conducted cannot be improved so as to make it more efficient and less expensive.

4th. That the study of agricultural chemistry be introduced into all our schools, believing that thereby we would materially aid in a more successful cultivation of the soil, and, consequently, an improved condition of the agriculture of our Province.

5th. That the greatest care should be taken in the change of school books, inasmuch as we believe that many changes in the past have not given advantages proportionate to the increased cost to the community; also that greater option be allowed in the choice and numbers of studies pursued in our public schools. We are aware that the opinion prevails, and we believe not

without foundation, that the general standing of the scholars in our public schools is not equal in accordance with their ages to what it was in times past, when such exactness in reference to proficiency in each study was not required previously to general advancement. Also we would urge that care be exercised in the granting of permits to teachers.

6th. That we believe that it would be of advantage to our schools if the engagement of teachers should commence and end with the summer vacation, inasmuch as a change of teachers at that time would be the least interruption to the general progress of the scholars.

7th. We would also recommend that this Grange petition the Local Legislature for a grant to Granges establishing libraries the same assistance as is now extended to other bodies, believing that it would be a great aid in the more general education of the farming community of our Province; and your committee would further ask the attention of our members to the advisability of the Government taking action to secure the delivery of evening lectures throughout the country on agricultural subjects.

All of which is respectfully submitted.

Signed { A. J. HUGHES.
ROBR. MCGUFFIN
S. A. NELLIS.
JOHN TOLMIE.
D. McDERMID.
H. D. IRWIN.

DR. P. MEREDITH, of Cincinnati, says: "About one year ago I took a cold, which settled on my lungs. A violent cough was the consequence, which increased with severity. I expectorated large quantities of phlegm and matter. During the last winter I became so much reduced that I was confined to my bed. The disease was attended with cold chills and night-sweats. A diarrhoea set in. My friends thought I was in the last stages of Consumption, and could not possibly get well. I was recommended to try ALLEN'S LUNG BALSAM. The formula was shown to me, which induced me to give it a trial, and I will only add that my cough is entirely cured, and am now able to attend to my profession as usual.

GRANGE LECTURE.

(Reported for the CANADIAN FARMER.)

Bro. E. H. Hilborn, Past Master [of Dom. Grange, addressed the patrons and farmers of Rainham Grange, No. 325, Haldimand Co., in the Town Hall, Rainham Centre, on Friday March 24th, in the afternoon and evening, on the subject of the Grange, and its connections, with an improved system of agriculture. In the afternoon the audience was medium, the hall being only partly filled.

Bro. Hilborn addressed the public about three-quarters of an hour, referring very briefly to the necessity of a union of effort, interest and action among farmers, and went on to show the advantages to be gained by such a union, after which the public were dismissed, and a private meeting held, at which the Worthy Bro. exemplified the unwritten work, and explained several matters which had heretofore been a mystery to a large number of our members.

In the evening the hall was filled to its utmost capacity by farmers interspersed with ladies, not more than one-third being members of the Order. The Worthy Bro. entered more fully into the discussion of a number of subjects, in which farmers are all interested; such as an agricultural edu-

cation in public and high schools, as well as in the colleges; and the practical results likely to flow from such a system; the Legislation of our country as viewed from a farmer's standpoint; the benefits of union among farmers, from a social and intellectual stand-point, as also the advantages of co-operation generally; the auxiliary institutions of the Grange were also explained, and made clear to many who had heretofore but little idea of their working: Such as the Insurance Co., The Grange Wholesale Supply Co., and the Canadian Mutual Aid Association.

Bro. Hilborn has the rare talent of holding, and interesting an audience; and I do not remember of ever being present at any public meeting, where the order was better, or the audience more deeply interested, than at this lecture. The meeting was closed, with a unanimous vote of thanks to Bro. Hilborn. G. E. FITZGERALD, Sec.

Rainham, March 27th.

GRANGE TOPICS.

Question.—Is organization and co-operation a necessity among farmers?

Suggestions.—By isolation farmers live single-handed and are at the mercy of corporate powers, and are compelled to submit to the assumed authority unjustly exercised by corporations. Other classes and interests have organizations for the purpose of co-operation, and by the application of its power have gained many advantages, and have made the farmers bear burdens of injustice that a just Government should seek to remove. But by co-operative efforts through political instrumentalities to control legislation and government, such removals are prevented and the burdens of farmers annually increased. But united and consolidated efforts of the farmers only can they protect their own interests and secure justice to themselves. Such consolidation cannot be made, or the efforts employed, without thorough organization. Hence, organization of the farmers is an absolute necessity, and strict co-operation must be employed in all Grange work. By thorough organization and co-operation the farmers can accomplish desirable results. JAMES CALDER, Sec. Pa. State Grange.

Miscellaneous.

MOUND-MAKING BIRDS OF AUSTRALASIA.

The mound makers are members of a small family of birds peculiar to Australia and the neighboring islands as far as the Philippines and northwest Borneo. They are allied to our common domestic fowls, which they resemble in appearance, but differ from them in never sitting upon their eggs. Some of the family, like the *Macops* of the Celebes, and the *Megapodius wallacei* of Gilolo, Ternate, and Bouru, deposit their eggs in the warm beach sand, just above high water, in holes three or four feet deep, many birds laying in the same hole. The young birds work their way out of the sand as soon as hatched, and look out for themselves without any help from their parents.

The most of the family, however, lay their eggs in mounds built of earth, stones, sticks, sea weed, and other rubbish, which they bring together with their large grasping feet. The mounds are often six or eight feet high and twenty or thirty feet in diameter. The eggs are buried in the center of the mound, at a depth of two or three feet, and are hatched by the gentle heat produced by the fermentation of the vegetable matter of the mound. In his "Malay Archipelago," Wallace

says: "When I first saw these mounds in the island of Dombok I could hardly believe that they were made by such small birds, but I afterward met with them frequently, and have once or twice come upon the birds engaged in making them. They run a few steps backward, grasping a quantity of loose material in one foot, and throw it a long way behind them. When once properly buried the eggs seem to be no more cared for, the young birds working their way up through the rubbish and running off at once into the forest. They come out of the egg covered with thick downy feathers, and have no tail, although the wings are fully developed." The Lombok birds are miscellaneous feeders: others species live exclusively upon fruit.

The curious departure of the entire family of megapodidae, or brush turkeys, in their breeding habits, from the usual habits of gallinaceous birds, Mr. Wallace traces to their peculiar organization. The eggs are extremely large for birds of their size, each egg completely filling the abdominal cavity. An interval of nearly two weeks is required before the successive eggs can be matured. Each bird lays six or eight eggs in a season, the time between the first and the last being two or three months.

Now, if these eggs were hatched in the ordinary way, either the parents must keep sitting continually for this long period; or if they began to sit only after the last egg was deposited, the first would be exposed to injury by the climate, or to destruction by the large lizards, snakes or other animals which abound in the district, because such large birds must roam about a good deal in search of their food.

"Here, then," Mr. Wallace concludes, "we seem to have a case in which the habits of a bird may be directly traced to its exceptional organization; for it will hardly be maintained that this abnormal structure and peculiar food were given to the megapodidae in order that they might not exhibit that parental affection, or possess those domestic instincts, so general in that class of birds, and which so much excite our admiration."

All the members of this curious family, whether laying their eggs in holes in the sand, or in mounds of their own making, would appear to be semi-nocturnal, their loud wailing cries being heard late into the night and long before daybreak in the morning. The eggs are deposited apparently at night. They are good eating and are much sought after by the natives. — *Scientific American*.

FORBEARANCE.

There are probably few qualities on which so much of the daily peace and happiness of men and women depends as that of forbearance. It is sometimes considered as a passive virtue, dwelling chiefly in calm and unexcitable natures, and not to be expected in union with boldness, courage, strength and impetuosity. Yet whatever qualities may lay claim to the name of passive virtues, certainly forbearance is not one of them. It is essentially active in its nature, demanding frequently the utmost strength of will, self-control and determination, and is, therefore, much more the virtue of a strong character than of a weak one. A feeble individual, mentally and morally, would not be likely to exercise much forbearance. He will rather yield to his first impulses, whatever they may be; whereas, the strong nature, if guided by wisdom, will learn self-control, and only through that is forbearance made possible. The very word implies this.

To forbear is to refrain from doing or saying something which impulse had prompted us to do or say; it is the conquest of wiser second thought over first desires, it is the curbing of anger or indignation; the stern self-discipline that represses the unkind criticism, the uncharitable interpretation, the cutting reply. Thus it implies restraint and force, and is the fruit of active energy, not of passivity or weakness.

SHORT RULES FOR LONG COMFORT AT HOME.

Put self last.
Be prompt at every meal.
Take little annoyances out of the way.
When any good happens to any one, rejoice.
Tell of your own faults rather than those of others.
When others are suffering drop a word of sympathy.
A place for everything and everything in its place.
Hide your own troubles, but watch to help others out of theirs.
Never interrupt any conversation, but wait patiently your turn to speak.
Look for beauty in everything and take a cheerful view of every event.
Carefully clean the mud and snow from your boots before entering the house.
Take hold of the knob and shut every door behind you without slamming it.

If from any cause you feel irritable, try the harder to do little pleasant things.

Do not keep your good manners for company, but be equally polite at home and abroad.

When inclined to give an angry answer, press your lips together and say the alphabet.

When pained by an unkind word or act, ask yourselves, "Have I not done as badly and desired forgiveness?"—*Sparta Planter*.

NINE PHYSICIANS OBTAINED.

It is generally considered a pretty difficult task to outdo a physician, but the following will conclusively prove where nine were completely outdone. Mr. Helen Pharviz, 331 Dayton St., Chicago, Ill., was treated for Consumption by nine physicians, and all pronounced her case incurable. Seven bottles of Dr. King's New Discovery for Consumption completely cured her. Doubting ones, please drop her a postal and convince yourselves.

LET US HELP ONE ANOTHER.

This little sentence should be written on every heart and stamped on every memory. It should be the golden rule practiced not only in every household, but throughout the world. By helping one another we not only remove the thorns from the pathway and anxiety from the mind, but we feel a sense of pleasure in our own hearts, knowing we are doing a duty to a fellow-creature. A helping hand or an encouraging word is no loss to us, yet it is a benefit to others. Who has not felt the power of this little sentence? Who has not needed the encouragement and aid of a kind friend? How soothing, when perplexed with some task that is mysterious and burdensome, to feel a gentle hand on the shoulder and to hear a kind voice whispering, "Don't be discouraged; I see your trouble; let me help you." What strength is inspired! What hope created! What sweet gratitude is felt! and the great difficulty is dissolved as dew beneath the sunshine. Yes, let us help one another by endeavoring to strengthen and encourage

the weak and lift the burden of care from the weary and oppressed, that life may glide smoothly on, and the fount of bitterness yield sweet waters; and he whose willing hand is ever ready to aid us will reward our humble endeavors, and every good deed will be as "bread cast upon the waters."

Mr. PETER VERMETT, Hochelaga, P.Q., writes: "Dr. Thomas' Electric Oil cured me of Rheumatism after I tried many medicines to no purpose. It is a good medicine." Just think of it—you can relieve the twinges of rheumatism, or the most painful attack of neuralgia—you can check a cough, and heal bruised or broken skin, with a bottle of Dr. Thomas' Electric Oil, costing only 25 cents.

AGNOSTICS.

In a recent sermon Mr. Beecher spoke of the agnostics, the know-nothings in philosophy, who say that what they admit as true must be demonstrated. They say there may be a God and a future life, but they don't know, and not to know is as bad as not to believe. "I have no venomous feelings against these men, but an inexpressible sadness for them; they have drifted so that the verities of religion are matters of ignorance to them. Things are true which are not susceptible of material proof. The soul is not measured by the tests of reason. Every man knows the difference between calm reason and being thunderingly mad, but he cannot explain it. The man who gives up all he can't prove, must give up honor, poetry, heroism and much that is best and richest in life. It is all beyond the last analysis of science."

STRENGTH OF MANGANESE BRONZE.

The twin screws of the new English Ironclad Colossus, launched March 21, are of manganese bronze. This metal was adopted in place of gun metal, as first ordered, after a series of comparative tests of the two metals made in the presence of the representative of the Admiralty at the works of the contractors for the engines. In these tests bars of both metals, one inch square, were placed on supports twelve inches apart, and first subjected to a steady pressure applied in the middle of the bars, and afterward to impact by a weight of fifty pounds falling from a height of five feet. With a steady pressure the gun metal bars slipped between the supports or broke with a strain of 28 cwt., while the manganese bronze bars required 51 cwt. to break them. Tested by impact gun metal bars broke with from seven to eight blows, while it took from thirteen to seventeen blows to break the manganese bronze bars. The ultimate bend of the latter was also in both cases more than that of the gun metal, thus showing fully the double strength with superior toughness. The advantages claimed for manganese bronze over gun metal are—first, a considerable saving of actual weight of machinery, and second, that it enables a thinner and consequently a better blade to be made, offering less resistance to the water and equaling in strength the gun metal blade of greater dimensions.

The Colossus is intended to be the most formidable vessel of the British navy. She is of 9,146 tons burden. Her engines are 6,000 horse power.

JOHN HAYS, Credit P. O., says:—"His shoulder was so lame for nine months that he could not raise his hand to his head, but by the use of Dr. Thomas' Electric Oil the pain and lameness disappeared, and although three months has elapsed, he has not had an attack of it since."

HOUSEHOLD.

BOSTON CAKE.—One pound sugar, 1 pound butter, 1 pound flour, 6 eggs, 1 teaspoonful of soda dissolved in hot water. This is my favorite cake.

FEATHER CAKE.—One half cup butter, 1 cup milk, 2 cups sugar, 3 eggs, 3 cups flour, a little yeast powder.

TRANSPARENT PIE.—Three eggs, 2 tablespoonsful sugar, 1 cup rich cream, three tablespoonsful jelly. Bake with one crust.

CHESS PIE.—Four eggs, 2 cups sugar, 1 cup sweet cream or milk, $\frac{3}{4}$ cup butter, 1 tablespoonful flour. Bake only with one crust.

GREEN TOMATO PIE.—Pare and slice five or six green tomatoes, place in pan covered with crust, and $\frac{1}{4}$ teacup vinegar, 1 cup sugar, small piece of butter. Flavor with allspice, put on top crust and bake in moderately hot oven.

VALUE OF LEMON-JUICE.—A piece of lemon bound upon a corn will cure it in a few days; it should be renewed night and morning. A free use of lemon juice and sugar will always relieve a cough. Most people feel poorly in the spring, but if they would eat a lemon before breakfast every day for a week—with or without sugar, as they like—they would find it better than any medicine.—*Lancet*.

APPLE JELLY.—Slice apples thin, without peeling. Cook in water enough to cover them. When perfectly done, drop through bag, being careful not to squeeze them, if you do, your jelly will not be so clear. When the apples cease to drip, boil juice rapidly twenty minutes. Then measure and to each pint of juice add 1 pint of sugar. Boil rapidly until it jellies, which you can know by cooling a little in a saucer. Apples a little green are best. Plum jelly can be made in same manner, only to each pint of juice add $\frac{1}{4}$ pint sugar.

STEWED STEAK.—Piece of rump steak, one inch thick, fry in butter on both sides, add enough hot stock just to cover the steak, a faggot of sweet herbs, pepper and salt to taste, two carrots sliced, and a dozen very small onions. Cover saucepan and let contents simmer very gently for about two hours. Mix a piece of butter and some flour in a saucepan on the fire. Add the best part of the liquor in which the steak has been stewing, put in a little Worcestershire or mushroom sauce, lay the steak on a dish, the carrots and onions around it, and pour sauce over.

Here are three ways to prepare potatoes for breakfast. First, boil some small potatoes in their jackets; the moment they are done take them out of the water; do not allow them to become soft, as they will not keep their shape. Remove the skins, have some lard, very hot, as for fried cakes; drop the potatoes in and fry till brown, turning them gently from side to side. The next way is to heap mashed potatoes on a small mound or oval platter; shape it like a pyramid and perfectly smooth, then cover with a well beaten egg, and set it in the oven to brown. Still another way is to make little cakes of cold mashed potatoes; flour your hands well, and put on as much flour as will stick on the outside of the cakes; scatter the flour on the plate on which you lay them; fry them brown in butter.

IF YOU ARE RUINED

in health by any cause, especially from the use of any of the thousand nostrums that promise so largely, with long fictitious testimonials, have no fear. Resort to Hoop Bitters at once, and in a short time you will have the most robust and blooming health.

FACETIÆ.

Miss Kindlin, of Chicago, recently married a man named Wood. The marriage was headed, "Kindlin-Wood." This is what may be called adding fuel to the flame of love.

At a church festival at Halifax the fried oysters were spoiled, and condemned as unfit for food. The pious benevolent managers by a formal vote, sent them to the Old Ladies' Home without mentioning the source from which they came. Thus another act of charity is registered above.

A gentleman, giving a lecture to some boys, was explaining how no one could live without air. He then said: "You all have heard of a man drowning; how does that happen?" The ready answer was, "Cause he can't swim."

"Yes," said the landlady, in speaking of a deceased lodger—"Yes, we shall miss him; for notwithstanding he had a touch of ferocity, and a temper that kindled with velocity, yet his verbosity, although it inclined to ponderosity, and was never relieved by luminosity, often excited jocosity in spite of his pomposity."

"There is nothing like settling down," said the retired merchant confidentially to his neighbor. "When I gave up business I settled down and found I had a comfortable fortune. If I had settled up I should not have had a cent."

A gentleman was talking about a popular judge to Sergeant Ballantine. "He is a very good fellow, for he never says a word against anyone," observed the gentleman, "It would be surprising if he did" replied the sergeant; "for he never talks of anyone but himself."

COMEY! ATTRACTIVE! WINNING!—These expressive words are often and properly applied to the fair ladies of our favored land, who keep their hair abundant and natural in color and lustre by the timely use of Ayer's Hair Vigor. The Vigor is safe and agreeable; and its effects are lasting, making it the most economical, and at the same time the most beneficial and elegant of toilet preparations.

A Memphis darkey stole a mule not long ago in payment of wages which he could not collect from the owner. Upon being arrested he sent for a lawyer who had saved him from prison once before, when the law was after him for stealing bed-clothes. The lawyer reminded his quondam client that a fee was still due for services in the bed-clothes case, and refused to help him further until that was paid. "Why boss," exclaimed the disconsolate darkey in a last attempt to touch the lawyer's heart, "I stole dat mule specially to sell him and pay you." At last accounts he was still without a legal adviser.

"Do you think, Mary, you could leave father and mother, this pleasant home, with all its ease and comforts, and go to the far west with a young lawyer, who has but little besides his profession to depend upon, and with him search out a new home, where it should be your joint duty to beautify and make delightful like this?" Dropping her head softly on his shoulder she whispered, "I think I could, Archie." "Well," said he, "there's Tom Jones, who's going West, and wants to get a wife. I'll mention it to him."

FROM ROSWELL M. KENNEDY, M. D., MANSVILLE, N. Y.

I do not hesitate to say that the **PERUVIAN SYRUP** has claims to confidence equal, if not superior to those of any medicine that has ever come to my knowledge. I have used it with great success for Dyspepsia and Epilepsy. Sold by dealers generally.

LITERARY.

AWFUL.

Awful is a word
Every awful minute
For 'tis an awful world
With awful people in it;
And some are awful tall,
Some are awful large
And some are awful small;
Some are awful fat,
And some are awful lean,
Some are awful good,
And some are awful mean.

Some girls are awful sour,
And some are awful sweet,
Some wear awful obnoxious,
And some have awful feet;
Some are awful silent,
And some are awful loud,
Some are awful modest,
And some are awful proud.

Some chaps are awful silly,
And some are awful wise,
Some wear an awful mustache,
And some have awful signs,
Because their awful hearts
So awful soft are found,
That Cupid's awful darts
Their awful cores have found.

And so 'tis awful, awful,
Awful is the word;
From every awful mouth
Some awful things are heard.
Some folks are awful nice,
Some girls are awful pretty,
Some men are awful wise,
Some women are awful witty

In the awful morning,
From awful sleep we wake
With the awful warning
That 'tis awful late;
And through the awful day,
We hear the awful clatter,
Of awful, awful, awful—
That's what's the awful matter!

A Texas Adventure.

Four of us, my ranch partner, Alfred Dinmore, and myself, and a German house-carpenter named West Anspach, and a colored boy named Grant, had set out that day for a load of honey.

A load of honey will sound oddly, perhaps, to readers East, but that is the way we get it here. Wild honey, rich stores of it, is laid up by the native bees. The settlers often have resort to a "bee-tree," when their stock of sugar and molasses runs low. The honey is drained from the comb and put away in jars, and the wax makes excellent candles.

Twelve or thirteen miles up north of our location, in the canyon of Lipan creek, (headquarters of Wichita River), there is a "bees' nest" which has supplied us and the families of three other stockmen for the last four years.

This enormous bee hive is in the cliff on the north side of the canon, fronting south.

The entrance to it is up some forty feet above the creek bed, where there is a horizontal crack eight or ten inches wide, running along the face of the precipice for 400 or 500 feet.

This creek opens back into recesses in the shattered crags behind; and here the bees, colony on colony, have their nests, and have laid up honey for many years.

By going round and operating from the top of the cliff, we have at odd times dislodged considerable portions of the rock, with blasts of gunpowder and crowbars—sufficient to secure many hogsheads of comb.

Still deeper down, in great pits and holes, there seems to be a vast deposit of old, thick, candied honey, which had been drained from the tiers of comb above, year after year.

Lower down the cliff, the honey, especially on hot days, weeps and oozes out at little cracks and seams of the fissured sandstone—so much so that the creek bank is there completely honey-soaked, and the water for a mile or two below will at times be perceptibly sweetened.

Much of this oozing honey, the bees themselves carry up the face of the cliff.

On a pleasant June day, the canyon, and high above it, the air will be darkened by the incoming and outgoing

clouds of bees, millions on millions of them, along the whole length of the crevice. The ordinary drowsy hum of a hive is here intensified to a deep, solemn roar, distinctly audible a mile below.

To go honey gathering there on a summer day might be a perilous business. We have always made our raids on the nest during the cold weather, generally on some chilly day toward Christmas when the bees are lying torpid, and a winter silence has fallen upon the whole vast apiary.

It was one of the last days of November, and when we started that morning the weather was quite warm, almost "muggy," with a thin, bluish fog rising from the prairie, which had lately been burned over and lay coal-black under foot. But we had not gone more than eight or ten miles when a "norther" came down on us in full blast. The first we saw of it was a sudden whirling of the fog over the tops of a belt of mesquits to our left. Then came a puff of cold air as damp and chilling as when in summer one steps into a cellar.

A minute later, this monitory whiff was followed by a second puff, a perfect gust, which set our hats whirling and upse: the hogsheads off the spring board.

The norther was upon us!

That is the way these freezing gales always come here; sometimes they don't even give one time to get on one's great coat and mittens. How cold they are, and how they cut through one's body! In half an hour the mercury will fall forty and even fifty degrees.

Often rain, sleet, and sometimes snow come with it.

No one tries to do anything during a norther here. You can not even get a blacksmith to shoe your horse while a norther is blowing, and it often blows three days at a bout.

The folks "den up," and keep a great fire going. You will not see a person stirring out anywhere, no old settler at least, even in the vil lage.

When the norther struck us, we set out to go home, but as the canyon was now no great distance ahead, we drove on and got into that at a place about two miles below the great "bees' nest."

The cliffs here broke the force of the gale, and selecting a spot where a big rick of drift stuff had been lodged against the crags by floods, we built a roaring fire, and made a shed, partly of the half hogsheads and spring-boards, and partly of the driftwood and brush. Here we made ourselves comfortable, gave the mules their corn, and had no thought of going on the prairie for honey, or anything else while the gale held.

The crag on the side against which we had our fire was sixty or seventy feet high, but as I have mentioned above, was here all along much fissured and cracked, showing crevices and crannies where the broken strata had worked apart, about three or four feet in width. The drift-rock which served us for a woodpile burned well, the blaze mounting half way up the cliff, and casting a warm glow back into our shed.

Here throughout the rest of the day we lay at our ease and told stories, going sound asleep, wrapped up in our buffalo skins.

Some hours must have passed for our big fire had burned low, when I was roused by a scratching, raking noise on the rocks in front of our shed. Before I was yet half awake, something,—it was so dark I could not tell what, but some heavy animal. I felt sure—came down the rocks and fell partly into the open front of our shed, and right on Anspach's extended feet and ankles.

With that Wert jumped to get up and we all arose, fumbling for our guns. But, before Anse or I, or any of us, had gained our legs, down came

the shed, the half hogsheads we had brought for our honey, our tilted-up spring-board wagon, brush and all.

Who had the most to do with it I am sure I don't know. It was a free scramble. One of the half-hogsheads tipped over in such a way as to completely shut Grant, the colored boy under it all but his shanks, and as the fore wheels of the spring-board lay partly across the bottom of the hogshead, he was caught fast.

The noise he made was as nothing compared to the racket the German was making, for the other half-hogshead had fallen over him and he was snapping at an unknown wild beast, whose growls mixed with his shouts.

"Anse, vare bees you?" we heard call in reproachful tones.

The moment we had extricated ourselves from the brush and stakes, Dinmore and I sprang to our feet and tried to take in the situation. It was too dark to see much. The brush was snapping and the half-hogshead bobbing up and down; and just then a savage, growling head of some animal was thrust repeatedly out between the spokes of the hind wheels of the cap-sized spring-board.

Anse, who had seized upon the camp ax, let it drive for the growler's head. His first stroke knocked two spokes out of the wheel. At the next plunge the animal came head and shoulders through the gap. But I had secured one of the guns, and at this juncture, by great good luck, shot it.

Almost with the report, Wert, who had been making frantic efforts to get out through the brush on the back side, scrambled to his feet, shouting: "Charles, be careful vare you shoots! Whole dozen dem buck-shots go puz by my ear!"

"It's a bear," said Alf, peeping between the spokes of the wheel; but before we had time to haul out the carcass, or even get Grant from under the hogshead tub, another bear came sliding down the rocks with a scratch and a growl, and fell sprawling into the ashes and still glowing embers of the fire. A perfect smother of coals flew up.

He whirled around with a low yelp, and leaped over some logs at the end of our shed. I had just time to cock my left barrel and fire as his hind legs disappeared over the logs. We heard him give a growl as the shot struck him.

"Queck, Shales, mit your goon! In de holler up de rock! Don d you hears him yow? Anoder von comin' down."

Surely enough there was another bear looking from a great fissure in the rock, and making as if to descend.

"Zhoust you hear dem berk, boys! Only hear dem sing!"

If there had been a whole meungerie shut up back among the rocks, it could hardly have made more music—growling, whining and roaring.

There must be an awful big den back in those rocks, and it's just lillin' over full of em.

Every minute or two a head would pop out in sight from the crevice. The firing and noise had started them up. It looked as if the animals had climbed up to the den over the heap of driftwood which our fire had burned up. The smoke and fire flaming up to the mouth of the hole had kept them in during the first part of the night; or else they had all been comfortably asleep in there passing the norther. But now they all wanted to come out—hungry perhaps.

During the forenoon we got logs and stuff from the drift-ricks lower down, which we set up in such a way that we could climb to the entrance of the den.

Al and I climbed up, and together we pecked about for some time. When we looked into the dark hole there would be a low growling.

Three or four hours were spent.

We found it was no use trying to shoot them in the dark.

There was a cave back in there as large as a large hall—a great irregular cavity, emitting a very strong bearish stench.

In the afternoon we assailed them on a new tack. Wert and Grant split up a lot of wood, which with their assistance, we carried up our log ladder, half a cord of it at least, and then pitched it into the cavern. A brand was then fetched up, and we soon had a bonfire going, which lighted up the whole inside of the den. From where we stood up in the fissure, the bears could be seen crouching behind the black bowlders, and in the far corners of the cave, snarling uneasily at the fire. I counted five, and Alf soon made out two others.

To shoot game thus cornered up may be deemed an unsportsmanlike method of hunting, but my friend and myself were troubled by no such scruples.

An hour later, we hauled seven bears—dead ones—out of that cave, which, added to those already secured made ten carcasses!

They were remarkably fat bears too with one exception. Their flesh had a noticeably sweet taste, which we attribute to their getting so much honey thereabouts.

TRUTHS FOR WIVES.

In domesticque, the wife's influence is much greater than her husband's; for the one, the first cause—mutual love and confidence—being granted, the whole comfort of the household depends upon trifles more immediately under her jurisdiction. By her management of small sums her husband's respectability and credit are created or destroyed. No fortune can stand the constant leakages of extra balances and mismanagement; and more is spent in trifles, than women would easily believe. The one great expense, whatever it may be is turned over and carefully reflected on ere incurred; the income is prepared to meet it, but, it is pennies imperceptibly sliding away which do the mischief, and this the wife alone can stop—for it does not come within man's province. There are often unsuspected trifles to be saved in every household. It is not in economy alone that the wife's attention is so necessary, but in those niceties which make a well regulated house, an unfortunate cruet stand, a missing key, a buttonless shirt, a soiled collar, a soiled tablecloth, a mustard pot with its old contents sticking hard and brown about it, are severally nothing; but each can raise an angry word or cause discomfort—depend on it, there's a great deal of domestic happiness in a well-dressed mutton chop or a tidy breakfast table. Men grow asted of beauty, tired of music, are often too wearied for conversation—however until lectual—but they can always appreciate a well swept hearth and smiling comfort. A woman may love her husband devotedly—may sacrifice fortune, friends, family, country for him—she may have the genius of a Sappho; the enchanted beauties of an Armida; but, melancholy fact, if with these she fail to make his home comfortable, his heart will inevitably escape her, and women love so entirely in the affections, that without love their existence is a void. Better submit, them to household tasks, however repugnant they may be to your tastes, than doom yourself to a loveless home. Woman of a higher order of mind will not run this risk; they know that their feminine and domestic duties are their first duties.

FAITH,

NOTICE TO THE PUBLIC.

We have been informed that some person or persons are circulating a report that the Great Clearing Sale at our premises on King Street, known as Petley & Co., Golden Griffin, is done only for the purpose of advertising the stock, and that we are not retiring from the retail business. To this we give a most emphatic denial, and here state, over our respective names, that we are retiring from the business. The entire stock, amounting to over \$200,000, will be run off at greatly reduced prices, as we desire the inhabitants of the City and vicinity who have supported us so liberally for over thirty years, and to whom we are very grateful, should get the benefit of the Great Clearing Sale. We may further state that the stock is entirely new, and comprises, without exception, the finest stock in the Dominion of Canada. Our stock of Carpets alone amounts to over \$80,000. Our Dry-Goods stock amounts to over \$80,000, and the Clothing and Woollens amount to over \$40,000. We now leave it to the public who have known us so long and favorably, to judge how far they can rely on such unfounded reports, when we say most positively that we are retiring from the retail trade.

Yours respectfully,

Signed, } PATRICK HUGHES,
 } B. B. HUGHES.

TEMPERANCE COLONIZATION SOCIETY, (Limited.)

The Board of Directors are now prepared to receive the first call of 10 per cent on subscriptions of September, October, and November (1881). On receipt of which (in every case) they will in return issue scrip entitling the bearer to the quantity of land subscribed for by him on the condition of such subscription (not exceeding 640 acres to one party), with the number and conditions of his choice. All parties are cautioned against negotiating purchases of pretended claims from those who can show no such title, as the Company will not be bound to any subscriber until he pays his 10 per cent., and so obtains his scrip.

Subscribers—or parties who may hold scrip by transfer—prepared to settle this season will please communicate at once with the Secretary, as the Government will survey out or allow us to survey out this season as much of the tract (two millions of acres) as may be needed for this season's settlers. Persons not having subscribed in the months above-mentioned, and wishing to settle this season, can obtain from us, out of our First Third Reserve, a limited amount at \$3 per acre, payable in five years—entitling the holder to preference before any of the above-named subscribers. There may be forfeits of non-paying subscribers which will be allotted to settlers at a little advance from \$2 per acre according to the value of the priority. The best of these lands along the banks of the South Saskatchewan—a noble river, navigable to steamers, which will soon run regularly on it—and in the heart of so large a settlement, should be very valuable, as within three years not less than 50,000 inhabitants will surround it, including the settlers in other small projecting colonies skirting all around us. Intending settlers for this season should communicate at once with us. By Order,

J. ALPH LIVINGSTON, Secretary,

114 and 116 King street West, Toronto.



Our New Catalogue of the Planet Jr. Farm and Garden Implements is free to all, and we guarantee it to interest every one who plants seeds or cultivates the soil. It is a beautiful descriptive work of 16 pages, full of illustrations. We want Market Gardeners and Horticulturists to examine closely our fine Garden Tools: Farmers who value Labor-Saving Tools to study out our Combined Horse Hoe, Cultivator and Coverer, and every one who has even a small vegetable garden to learn what the Firey Garden Plow will save them. S. L. ALLEN & CO. 127 and 129 Catharine St., Philadelphia, Pa.

THE TEN COMMANDMENTS!

We have at great expense got up something which we feel every Christian Family should possess. No Sunday-School teacher or scholar but should have one. Agents will find this one of the most instructive and saleable articles ever placed upon the market. We will endeavor to give our readers a full description of this work of art.

THE TEN COMMANDMENTS

Have been made the subject of a stone engraving, size 10x24, the elegance of which should be seen to be appreciated. Engraved in all the choicest styles of varied type, are the Ten Commandments, with the control to be seen the figure of Moses descending from the Mount of Sin and smoke, bearing in his hand the two tables of stone. Upon each side the picture is supported by a faithful and beautiful representation of the pillars of fire and cloud, that went before the children of Israel by night and day. The whole combined to make one of the finest, grandest and most beautiful picture series ever offered the public. This is no fancy sketch, but a very full description of one of the choicest gems ever manufactured, and we will gladly forfeit the amount paid to any one finding it otherwise than as we have described it. In order to introduce them quickly we have put them down much lower than any other picture of the same quality. Agents should not lose a single day, but order at once, and cause their neighborhood before others get ahead of them.

WHOLESALE PRICE LIST:

Sample by mail, post paid, 25c.; 1 dozen post paid, \$2.00; 25 by mail, prepaid, \$3.50; 50 by Express, \$6.50; 100 by Express, \$12.00; 250 by Express, \$30.00.

EXTRA INDUCEMENTS.—With every order for 25, we send FREE a set of our four beautiful premium Chromos, 16x22. With every order for 50, a handsome seven-shot Nickel-Plated Revolver. With every order for 100, a handsome Hunting Case Watch, and with every order for 250, we will send FREE 3 splendid Watches, and 3 fine heavy Gold-Plated Watch Chains.

JAS. LEE & CO., MONTREAL, P.Q.

“CANADIAN FARMER” SEED WAREHOUSE!

We have just concluded arrangements whereby the wish of a large number of our readers may be gratified. Frequently, of late, have we been urged to supply our readers with

Reliable Seeds

Of all kinds. We are now in a position to do so. Satisfactory contracts have been made whereby we can now supply in

ANY QUANTITY,

(packages or bulk) every variety of Foreign and Domestic

FLOWER, GARDEN & FIELD SEEDS

of the Finest Quality. The seeds we have procured are

ALL NEW

and thoroughly sorted and cleaned.

SEND FOR FREE CATALOGUE.

Special reduction to Granges or Agricultural Associations sending in large orders. Change your seed, and get something reliable. It will pay you. Address,

Canadian Farmer Seed Warehouse,
Welland, Ont

GREAT AMMONIA CONDENSER.

GYPSUM OR PURE LAND PLASTER. Cheapest and Best Fertiliser in the World. The Grand River Gypsum Co. has entirely new and improved machinery for the manufacture of Pure White Land Plaster.

W. H. Merritt, Esq.

My Dear Sir, - In accordance to your request, I have obtained Average Mercantile Samples of Land Plaster from dealers in Toronto, and beg to report as follows:

Table with 3 columns: Item, Grand River White, Oswego Grey, Paris Grey. Items include Calcium Sulphate, Carb. Lime and Magnesia, Iron and Alumina, Insoluble Matter, Water and Organic Matter.

The insoluble matter consists of clay and sand, being the residue left after boiling with hydrochloric acid. Yours obediently, Thos. Hays, Analytical Chemist.

The above adds theoretical proof to the practically known fact that the Grand River White is 95 per cent. purer than any other Land Plaster on our market.

Place your orders this Month. W. HAMILTON MERRITT, Office of Grand River Gypsum Co., Mail Building, Toronto.

Advertisement for 'Hop Bitters' featuring a portrait of a man and text describing the medicine's benefits for various ailments.

SEEDS! Reliable SEEDS!

OUR Descriptive Priced Catalogue, beautifully illustrated, containing all necessary information for the successful cultivation of Vegetables, Flowers, Field Roots, Potatoes, etc.

JOHN A. BRUCE & CO., Seed Grower, Hamilton, Canada.

Grange Supplies

- List of supplies and prices: Applications for Membership, Blank Deeds, Membership or Trade Cards, Bonds for Secretary and Treas., Receipts, Orders on Treasurer, Letter heads, Envelopes, Blank Quarterly Reports, Granges at the rate of, Blank Deeds (in duplicate), special blank for use of Granges acquiring property.

Attention! Fruit Growers.

- 25,000 pure Wilson Straw Plants at \$1.50 per M, 50,000 Sharpless " 2.50 " 10,000 Outhort Rasp " 7.00 " 5,000 La Versailles Currants, 30.00 "

Pure Scotch Collies from import and working stock. Price of Pups, \$10 each. Skye Terriers \$10 each. First class stock. Satisfaction guaranteed.

JAMES MOODIE, Chesterville P. O., Dundas Co., Ontario.

Advertisement for a book 'How to Preserve Life or Self-Protection' by Dr. W. H. Parker, featuring a portrait of the author.

KENT BROS.

Sign of the Indian Clock, The leading Jewelers in the Dominion. Our

\$12 Watch!

Heavy solid Silver Hunting, full jeweled Patent Lever, made to order. BEST VALUE EVER OFFERED. Sent to any address on receipt of price, a guarantee accompanying every watch. If not satisfactory money will be refunded. 168 YONGE ST., TORONTO



Prices Reduced.

Our New Circular for 1882 is Now Ready, and FREE,

Giving Prices of our two-storey Hives, Winter and Summer Sawdust Hives, Honey-Comb Foundation, Section Boxes, Honey Extractors, Wax Extractors, Bee Smokers, Bee Feeders, Shipping Crates, Bee Journals &c. Wax worked for 10c per lb.

12,000 lbs Bees Wax Wanted. Will pay Cash for any amount. Address, - M. RICHARDSON, Box 213, Port Colborne, Ont.

IMPERIAL BANK of Canada.

Capital Paid up, \$1,000,000 Reserve Fund, 175,000. DIRECTORS: H. S. HOWLAND, Esq., President, T. R. MERRITT, Esq., Vice President, P. R. WILKIN, Cashier.

HEAD OFFICE. - TORONTO.

BRANCHES: - Forus, Ingersoll, Port Colborne, St. Catharines, St. Thomas, Wolland, Winnipeg, Woodstock.

Drafts on New York and Sterling Exchange bought and sold. Deposits received and interest allowed. Prompt attention paid to collections.

Manitoba & North West Territories.

Drafts, Letters of Credit, Transfers by Telegram issued at all Branches available in Winnipeg, Portage La Prairie, etc.

Mack's Magnetic Medicine.



Brain and Nerve Food.

Is a Sure, Prompt and Effectual Remedy for Nervousness in ALL its stages, Weak Memory, Loss of Brain Power, Sexual Prostration, Night Sweats, Spermatorrhoea, Seminal Weakness, and general Loss of Power. It repairs Nervous Waste, Rejuvenates the Jaded Intellect, Strengthens the Enfeebled Brain and Restores Surprising Tone and Vigor to the Exhausted Generative Organs.

Mack's Magnetic Medicine is sold by Druggists at 50 cts per box, or 12 boxes for \$5, or will be mailed free of postage, on receipt of the money, by addressing Mack's Magnetic Medicine Co., Windsor, Ont., Canada.

HEAD-QUARTERS

Watches, Clocks, Jewelry, Plated Ware, and Fire-Arms.

Will supply any Grange in the Dominion with the above goods at Rock Bottom Wholesale prices. We do not ask you to pay for goods till examined and approved. If not satisfactory can be returned. All orders for goods for examination must be stamped with the seal of your Grange and signed by your Secretary.

CHARLES STARK, 52 Church street, opposite St. James Cathedral, Toronto.

DO YOU KEEP

Hens, Turkeys, Ducks, Gosso, Pigeons, Canaries, Rabbits, Dogs, Cattle, Sheep, any sort of domestic Pet Stock?

THEN YOU WANT THE POULTRY BULLETIN

The oldest Poultry Journal in America. The Best Poultry Magazine in the World.

Devoted to the care and management of Poultry, Pigeons, Birds, Rabbits, and Pot Stock of all kinds.

Reliable! Instructive!! Entertaining!! Original, Independent, Progressive. The latest, the freshest, the most entertaining topics are discussed by the foremost writers among American fanciers. Now attractions are constantly appearing.

If you take any paper of the sort you want the BULLETIN. If you keep poultry or pot stock of any kind, you want the BULLETIN. It costs but little.

\$1.25 Per Year, Post-Paid.

Remit by Post Office order or registered letter, and address POULTRY BULLETIN, 62 Courtland street, N. Y. City



For Washing Windows, Carriages, etc. Protects Buildings from Fire, and Trees and Vines &c. from Insects. Potato Bug, and Oanker Worms. Useful for every Horse Owner and Stock Owner, Bee-keeper, and every Farmer. No home or factory should be without the Fountain Pump. Sold for large illustrated circular. J. A. WHITMAN, Patent and Manufacturer, Providence, R. I.

BEE-KEEPERS Send your name and address on postal card for my descriptive circular and price list of Italian Bees, Dollar and tested Queens, Bee Smokers, Extractors, A B C Books, Comb Foundation, &c. J. O. FAOEY, New Hamburg P. O., Ont. 213

THEN AND NOW



Thorley's Improved Horse & Cattle Food

Was first introduced into this country some four years ago. At that time merchants would scarcely give it store-room. Officers of agricultural societies would admit it grudgingly within their grounds, while farmers feared to feed it even as a gift. Now, some merchants order by the TON. Officers of agricultural societies solicit our favors, while the most distinguished breeders and feeders in the Dominion use it freely in fitting their animals in competition for the highest prizes, a necessary result, we believe, of doing an honest business with an honest preparation.

For sale by dealers everywhere. Manufactory 48 John St. South, Hamilton, Ont.



Sarsaparilla.

Is a compound of the virtues of sarsaparilla, stillingia, mandrake, yellow dock, with the iodide of potash and iron, all powerful blood-making, blood-cleansing, and life-sustaining elements. It is the purest, safest, and most effectual alterative available to the public. The sciences of medicine and chemistry have never produced a remedy so potent to cure all diseases resulting from impure blood. It cures Scrofula and all scrofulous diseases, Erysipelas, Rose, or St. Anthony's Fire, Pimples and Face-grubs, Pustules, Blotches, Bolls, Tumors, Tetters, Humors, Salt Rheum, Scald-head, Ring-worm, Ulcers, Sores, Rheumatism, Mercurial Disease, Neuralgia, Female Weaknesses and Irregularities, Jaundice, Affections of the Liver, Dyspepsia, Emaciation, and General Debility.

By its searching and cleansing qualities it purges out the foul corruptions which contaminate the blood and cause derangement and decay. It stimulates the vital functions, restores and preserves health, and infuses new life and vigor throughout the whole system. No sufferer from any disease of the blood need despair who will give AYER'S SARSAPARILLA a fair trial.

It is folly to experiment with the numerous low-priced mixtures, without medicinal virtues, offered as blood-purifiers, while disease becomes more firmly seated. AYER'S SARSAPARILLA is a medicine of such concentrated curative power, that it is by far the best, cheapest, and most reliable blood-purifier known. Physicians know its composition, and prescribe it. It has been widely used for forty years, and has won the unqualified confidence of millions whom it has benefited.

PREPARED BY DR. J. C. AYER & CO., Lowell, Mass. SOLD BY ALL DRUGGISTS EVERYWHERE.