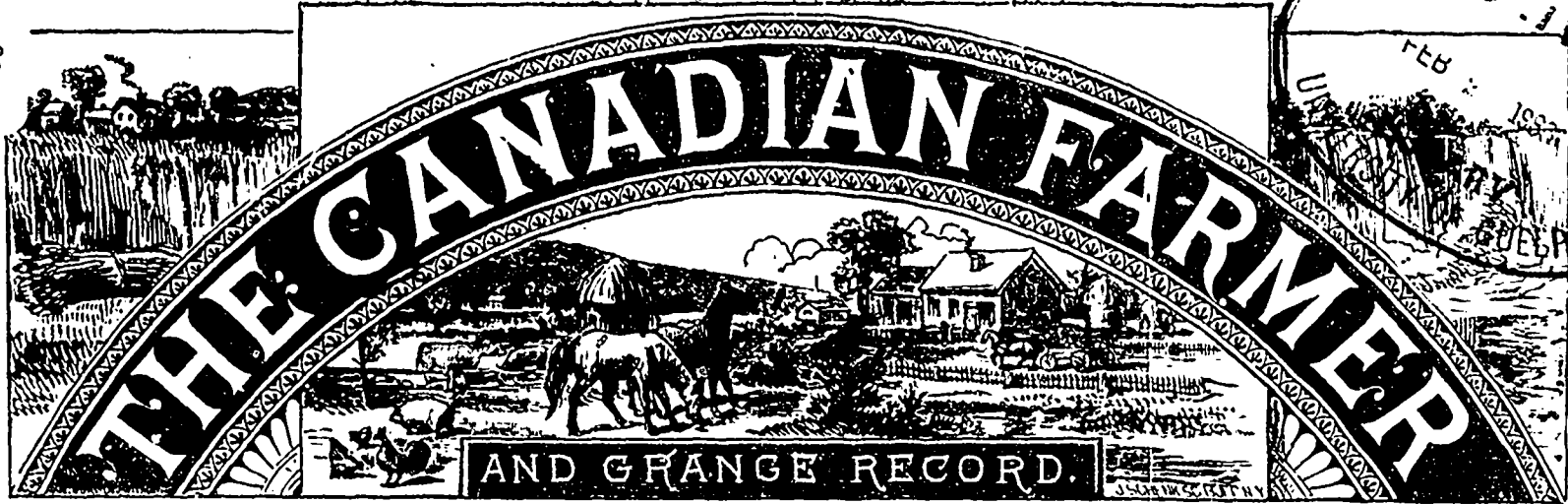


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**AND ORGAN OF THE ONTARIO BEE-KEEPERS' ASSOCIATION**

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WELLAND, ONT., WEDNESDAY, OCTOBER 25, 1882.

TERMS: } ONE DOLLAR  
For Annum,  
IN ADVANCE

*Horticulture.*

**BLACK CAPS.**

**SOUHEGAN.**—This is a berry that, it is to be hoped, will make as complete an overthrow of "Davidson's Thornless" and other early Blackcaps as the "Gregg" has made of the late ones. The "Tyler" is another early berry that makes the same claims, but on careful comparison, I conclude the "Souhegan" bears the most evidence of ability to fulfil its promises: hence I make a specialty of "Souhegan," and will test them both side by side and report. But my friends may order "Tyler" also at the same rate, if they wish; and I will take every precaution to see that they are supplied with genuine plants. The "Souhegan" is certainly a fine grower with me; but, as this is as far as my experience goes, I present the evidence of well-known authorities.

From J. T. Lovett, one of the introducers: "This new Blackcap is evidently a seedling of "Doolittle" and a variety of the most positive value. It is the most prodigious bearer of any I have ever seen; of excellent quality, jet shining black, without bloom, and large. Added to these valuable qualities it is iron-clad in hardness, and extremely early, being a week to ten days earlier than the "Doolittle." (The "Doolittle" is the common Blackcap—considerably earlier than "Mammoth Cluster" or "Gregg."—T. C. R.)

From Hale Bros., of Connecticut, the other firm who introduced it: "Originated in Hillsboro County, New Hampshire, about 1870, and claimed by the originator to be four times as productive as any variety in cultivation. Its hardness is beyond question, it being the only Blackcap on our place that was not killed to the snow line during the severe winter of 1880-81. Ripening as it does, at a time when strawberries are getting scarce and none of the other raspberries have begun to ripen, it sells for the highest price."

"Three cheers for 'Souhegan' Blackcap. It is safe to call it seven to ten days earlier than 'Doolittle.'

It is as large as 'Gregg,' as productive and vigorous, and of better quality, and much firmer than 'Mammoth Cluster.'"—Chas. A. Green, Editor Green's Fruit Grower.

From Rural New Yorker: "We regard Dr. Hexamer as one of the best judges of small fruits. In conversation with him the other day, speaking of 'Souhegan,' or 'Skowhegan,' he

liable testimony on which they rest. If it shall prove as large as "Gregg," I shall be surprised as well as delighted.—I only expect it to be as large as "Mammoth Cluster," and then it will be a great acquisition. 20 cents each, 5 plants for \$1, \$2 per dozen, free by mail.—Extract from Fall Catalogue of T. C. Robinson, Owen Sound.

surprised me, as none were ever kept there. On raising the curtain of the east window I saw that a branch of Dutch honeysuckle had found its way between the two sashes at one corner, while growing in the summer, and had extended itself quite across the window; and on the branch inside were three or four clusters of well developed flowers, with the usual accom-

paniment of leaves, while on the main bush outside there was not yet a leaf to be seen. The flowers inside were just as beautiful and fragrant as if they had waited until the natural time of blooming. Since then I have tried the experiment purposely, and always with the same result." A heavy covering of the ground over the roots of the plants with leaves, and sufficient protection of the stem outside, would allow this method to be practiced in quite severe climates.

**COAL ASHES.**—Common coal ashes, if well distributed about the roots of currant bushes, is one of their best promoters. This should be done by loosening the soil about their roots, and placing the ashes near them; cover firmly with earth above, and the bushes will bear such clusters as will speak the beneficial effects of the application of material too commonly thrown aside as of no use. Cherry trees also gratefully accept this renovator, and if carefully bedded about the roots with coal ashes in the fall, the yield of fruit the following year will surprise the cultivator. Especially is this effect produced in the black loam of Illinois. We have in our mind one fruit garden there where all the small fruit was treated in this way, and have never seen their yield excelled.—National Farmer.

Remember that the first in the field has a great advantage. Read our Clubbing and Premium List on page 121.

It is a grand comfort to feel that God is right, whatever and whoever else may be wrong.

If our troubles do not drive us from our duty to God, they should not drive us from our comfort in God



SOUHEGAN.

says he thinks it will take the place of 'Davidson's Thornless,' with which it ripens, being larger and more prolific. It will go between strawberries and the main crop of Blackcaps \* \*."

Much more of the same sort might be given, but enough has been said to show its claims, and the ground of re-

A RECENT English writer gives the following, which suggests the way in which hardy wood-climbers might be made available for window decoration in winter or in early spring: "Some years ago, as I was passing through a room used only occasionally, I perceived an odor of fresh flowers tha

## HORTICULTURE ON THE FARM.

Again, the practice of horticulture on the farm would lead to careful experimentations. While many cautious farmers are manifestly inclined to profit by the experiments of others in adopting their successful methods of cultivating crops and by securing new and approved varieties of seeds, yet they are disposed to undervalue or ignore the importance of experiments on the farm.

The fact is, the farming world does not appreciate the worth of the many improved varieties of potatoes, fruits, wheat and other seeds that careful experiments have developed and introduced during the last twenty five years. The benefits arising from this source would have been much increased and they would have come in more rapid succession, had the work been more cordially aided and encouraged by farmers. Our State government has wisely arranged to have this work carried on where the skill and proper appliances can be well supplied for its successful prosecution, but to secure the benefits that this new departure promises, farmers must promptly co-operate with it.

Again, another advantage gained by the practice of horticulture on the farm, would be a more general and constant supply of fruit. I do not urge the general cultivation of fruit as a profitable market crop so much as on account of the urgent demand there is for it in almost every country home. There is no product of the farm more healthful or highly appreciated for home use, and yet there is none that receives so little practical attention. On many farms its culture is one of the lost arts, if indeed any knowledge of it ever existed. I know that an opinion prevails among farmers, that fruit-growing offers little or no encouragement in our changeable climate; but notwithstanding this drawback and the widespread indifference and culpable neglect manifested in the culture and care of fruit, it constitutes no inconsiderable item in the farm products of our State. The situations are numerous where this can be made a profitable branch of farming, and they are rare indeed where it would not be feasible to cheaply grow several varieties of desirable fruits for home use. With this latter object in view, success depends more on care and prudence, on intelligent management, on doing the right thing at the right time, than it does on the weather; in short, fruit growing for home use is usually successful where horticulture receives its due share of attention on the farm.

Again, the tillage of the soil so as to produce the best results includes the subject of forestry, which is one of the economic and practical questions of the day. We have heard much said on this topic of late years. Its pressing importance has been urged time and again, and it is generally admitted that few subjects are of greater significance, and yet little or nothing has been done in the line of timber culture. Certainly as little need be expected in the direction of its preservation.

The decay of our native forest from natural causes as well as the ever-increasing demand for lumber and fuel render it certain that its destruction will go on, whatever may be said of the necessity of its preservation. The enhanced commercial value of lumber is constantly leading additional incentives to its spoliation, and while the demand for the products of our forests is augmenting, the source of supply is surely diminishing.

We do not err in using what Providence has placed at our disposal by appropriating our timber for our own and the wants of legitimate trade, but we do err in refusing to provide timber growth for future requirements. And if we are sordid or selfish as to

blatter ourselves that all the evil consequences of our negligence in this matter will be postponed to some remote generation, we are very much mistaken. Some of the evil effects are already upon us. Among others, I have only space to call your attention to the torrential floods of the past season which have caused so much permanent damage on many farms. These sudden and desolating wash-outs are directly traceable to the extended removal of the forest. Now, if we would avert similar and worse visitations in the future, we will reclothe the denuded landscape with growing timber, especially the sources of our swiftly flowing rivulets and larger streams. SIMON EMERTER, in *Ohio Farmer*.

Page 121 contains our Clubbing and Premium List. Study it.

At one of the wedding receptions in New York recently, the space between the folding-doors in the drawing-rooms was filled in by a curtain composed entirely of smilax, dotted with pink roses.

## THE CLEMATIS.

Now is a good time to see this vine in bloom in the nurseries. Some varieties that might be considered very desirable, judged by the flower alone, would be seen to be unworthy of culture when we come to see how unthrifty the vine is, and how meager the flowering. In a recent visit we noted four varieties that from their vigorous growth and free flowering would be desirable for climbing piazzas or trellises.

*Clematis Jackmanni*.—This is the best known of the large blooming kinds and is very desirable. The flower is large, four petaled, violet purple; blooms freely, and remains a long time in bloom.

*C. Viticella Rubra Grandiflora*.—This is described as a bright, claret red, but that does not convey an idea of the different shades from a dark velvet to a claret.

*C. Velutina Purpurea*.—This is described as a blackish mulberry color. It is very dark.

*C. Viticella Modesta*.—This is the loveliest flower of all; very large, six petaled, of a delicate violet lavender. These four growing together on a piazza would be very desirable.—*Ex.*

An experienced gardener writes "Some dislike using salt to destroy weeds on walks; they think it acts as a manure, and that it increases rather than diminishes the weeds, but I do not find it to do so. I have employed salt for years on long lengths of walks, and have found it not only effectually kill the weeds, but to give the gravel a bright, clean face, unobtainable in any other way. The great secret lies in putting it on in fine weather. When the barometer indicates a period of dry weather, that is the time to salt; there is then a prospect of its lying on the surface and dissolving gradually, and that is when it will do the most good. Thus applied, the result will be safe and sure, and the expense small compared with that of hand weeding.

\* "Wise men say nothing in dangerous times." Wise men do nothing in dangerous diseases but the best and most approved remedies. Thus Kidney-Wort is employed universally in cases of diseased liver, kidney and bowels. It will cost you but a trifle to buy it, and the result will be most delightful.

Dancing may improve your carriage somewhat, but it's no valuable accomplishment for the horse.—*Burdette*.

Are you troubled with rheumatism? Use Kendall's Spavin Cure. Read advt.

## Agriculture.

## CLOVER vs. CANADA THISTLES.

J. S. Woodward, of Lockport, N. Y., is a farmer of close observation and marked good sense. At our request he furnishes us with the following on this topic:

"Canada thistles have long underground stems or root-stocks, nearly devoid of roots. These root-stocks store up nourishment during the latter part of summer and fall for pushing the upright growth in the spring from the eye. The spring-growth is mostly fed from the root-stocks. If early plowing cuts off the upright stems, another set will follow, and so with several times plowing. If we let the plants go till near flowering, the root stocks will be nearly exhausted. I kill the thistles without the loss of a crop, as follows:

"Have the land rich, if possible; at least have it well seeded to clover, and by top-dressing with plaster, ashes, or by some means get as good growth to the clover as possible. As soon as the clover is in full bloom, and here and there a thistle shows a blossom, mow, and make the crop, thistles and all, into hay.

"Thistles make good hay at this time. After mowing, apply a little plaster to quickly start the growth of clover; you will find this to come much quicker than the thistles. As soon as the clover has a good start, from July 20 to Aug. 5, plow down, being careful to plow down all the land and to fully cover all growth. Then roll down and harrow at once, so as to cover every thistle entirely up. But few thistles will ever show themselves after this, and they will look poor and weak. When they do show, cultivate thoroughly with a cultivator having broad sharp teeth, so as to cut every one off under ground. In two days, go over with a sharp hoe and cut off any that may have escaped the cultivator. Watch and when you see any coming up again, follow the same plan with cultivator and hoe until freezing up. You will see them getting scarcer each time, and looking as though they had the consumption. Follow this plan faithfully and, my word for it, you will never see a thistle again unless it comes up from the seed.

"By plowing this field just before freezing up, you will have the land in the finest condition for a spring crop. This plan not only kills thistles, but I have found it most efficacious in clearing the lands of all noxious weeds, much better than any summer-fallow and without the loss of any crop."

## HOME-MADE FERTILIZERS.

The following excellent suggestions are from the Commissioner of Agriculture for Tennessee State, and are worthy of consideration in every farming community.

"A great many bones are wasted on every farm that make valuable manure, and are easily prepared for use. Let a barrel be devoted to the bones, and whenever a bone is thrown into it, cover it up with unleached ashes. Let the barrel stand in the weather, and in a few months the bones will be so friable that they may be easily broken and converted into an unadulterated bone-dust better than can be bought at any of the agricultural stores. Or, if he cannot wait for this slow process, they are easily burned and crushed.

"In making soap much fine phosphate of lime is thrown out in the shape of half-eaten bones, and in spent lye. Soap-suds are also a fine addition

to the manure or compost heaps. In these are found not only the alkalies of soda and potash, but also much nitrogenous matter in the shape of grease. All these assist in enriching our heap. No farm yard is without the best guano. It is true the guano of the shops is from sea-birds, whose food is fish, but the guano of the chicken house is exceedingly valuable and well worth saving. Mixing it with soil or ashes and sowing over a garden plot rather thinly—for it is very rich—its effects are seen to the row. However the dung of fowls and especially of pigeons, is best applied in the form of solution. It is not so apt to burn up the plant in this manner. One part of manure to ten parts of water will make a fine wash for vines, or for fruit trees; it is unexcelled. Another addition to the heap is skins, carrion either of animals or fowls, scales of fishes, hair, hoofs, and in fact every kind of animal substance that may come within reach that is worthless.

## VEGETABLE MATTER IN THE SOIL.

One of the leading substances that a hungry soil needs is vegetable matter, from which it can, through the chemistry of decay, derive the all-important compounds of nitrogen. The fallow yields none of this vegetable matter, for it is a fallow only when the soil is free from any plant growth. The green crop may be ploughed under, thus securing to the land the whole crop; or it may be fed to live stock, and the manure returned, in which case should there be no drainage from the manure, there would be only the loss of the small amount of ash and nitrogen constituents that are retained by the animal. In this case the land is kept in a profitable work, and no time is lost as in case of the fallow. It has been stated that a large amount of nitric acid is found in the fallow soil; also, that it runs many risks of being washed out by the autumn rains. These very soluble nitrates are formed most rapidly in the late months of summer, and if a growing crop is up by the plants and made insoluble by entering into the substance of the plant. A root crop sown in early summer will thus catch and hold the nitrates that might otherwise be washed away. They being fed to farm stock have these same nitrates returned to the soil in a form to furnish the succeeding crop with a continuous supply of nitrogen.

## DO NOT PASTURE CLOVER.

Clover should never be pastured. As there are exceptions to all rules, so there may be to this, but chiefly in those cases where the clover growth is thought of secondary importance. What we say is that young clover should never be pastured, and to this there is no exception. Young clover is so tender a plant that the tramping of hoofs, however light, will destroy or seriously injure it. At any period in its existence a man or child cannot put a foot on a clover plant without injuring it. Any kind of stock will trample down and injure twice or thrice as many clover plants as it eats. Why then should pasturing in any way or at any season be tolerated? After the entire growth is completed the damage is least; but usually this last growth is worth more to lie on the field as a mulch than for feed.

Egyptian war song—The Camels are coming.

Millions of packages of the Diamond Dyes have been sold without a single complaint. Everywhere they are the favorite Dyes.

## POULTRY.

## GENERAL.

Hundreds of dollars are and can be made annually by the farmers' wives and daughters in rearing geese, if there is plenty of room, and proper attention is given to the birds at the different stages of their growth. They are, under ordinarily favorable circumstances, very hardy and readily reared, and require less care and food than almost any other kind of poultry. They are great graziers, and must have plenty of grass to eat and roam over, and on this they will get the most of their living during the summer and early fall months. But little food is required for the goslings after they have a full dress of feathers, and before that time, from the time they are hatched until they lose their downy coats, they should be kept in an enclosure (a movable one) where there is short, young grass, and should be fed on stale bread, moistened in milk, and later on with corn meal, well scalded, with onion tops, chopped fine, mixed with it. An occasional seasoning of red (cayenne) pepper is relished, and goes far towards insuring healthfulness and vigor.

By getting the goose to sit early two broods can be gotten from each goose annually, and liberal feeding and good care will bring the late brood forward rapidly, making good weight by the time the birds—the surplus stock—are marketed during or just before the holidays. Poultry of all kinds grow more rapidly in the early fall months than at any other time, for the weather is then cool and the bird can be "pushed" forward quickly by plenty of good, strong food, given at regular intervals.

The feathers are no inconsiderable item of the profit, especially as good live geese feathers readily bring an average of fifty cents per pound. The nice warm beds and pillows with which farmers' wives can supply their household in this way are duly appreciated during the cold, wintry months by all who are fortunate enough to use them. The S. P. C. A. may entertain objections to plucking geese when alive, but the birds would otherwise lose and waste all the feathers during moulting time, and it is to prevent this loss and secure the resultant profit or comfort that the farmer annually (sometimes semi-annually) borrows rather unceremoniously some of the warm clothing owned by his flocks.—*Poultry Monthly*.

Page 121 contains our Clubbing and Premium List. Study it.

## EGGS AS FOOD.

Eggs, at average prices, are among the cheapest and most nutritious articles of diet. Like milk, an egg is a complete food in itself, containing everything necessary for the development of a perfect animal, as is manifest from the fact that a chick is formed from it. It seems a mystery how muscle, bones, feathers and everything that a chicken requires for its perfect development are made from the yolk and white of an egg; but such is the fact, and it shows how complete a food an egg is. It is also easily digested, if not damaged in cooking. Indeed, there is no more concentrated and nourishing food than eggs. The albumen, oil and saline matter are, as in milk, in the right proportions for sustaining animal life. Two or three boiled eggs, with the addition of a slice or two of toast, will make a breakfast sufficient for a man and good enough for a king.

According to Dr. Edward Smith, in his treatise on "Food," an egg weighing an ounce and three-quarters con-

tains 120 grains of carbon and 17 grains of nitrogen, or 15.25 per cent. of carbon and two per cent. of nitrogen. The value of one pound of eggs as food for sustaining the active forces of the body, is to the value of one pound of lean beef as 1,684 to 900. As a flesh producer, one pound of eggs is about equal to one pound of beef.

A hen may be calculated to consume one bushel of corn yearly, and to lay 10 dozen or 15 pounds of eggs. This is equivalent to saying that three one-tenth pounds of corn will produce, when fed to a hen, five-sixths of a pound of eggs; but to produce five-sixths of a pound of pork requires about five pounds of corn. Taking into account the nutriment in each and the comparative prices of the two on an average, the pork is about three times as costly a food as the eggs, while it is certainly less healthful.—*Boston Journal of Chemistry*

See our Premium List on page 121.

## MEAT DIET.

In winter and early spring, when fowls cannot procure insect food, they should have meat a few times a week, to stimulate and keep up egg production. Grain and green food in variety will do a large amount of work toward giving us a good share of eggs, but with the addition of animal food the number will be largely increased. The best way to supply fowls, if there is not enough of waste meat scraps from the table, is to get some waste and bloody pieces from the slaughter-house or butcher's shop, which are unsaleable and can be bought for a few cents or a cent a pound. To utilize, and render them more digestible and healthy, cut them into fine pieces, put them into a boiler with plenty of water, and boil them until the bones separate from the meat. Then stir corn meal into it until it makes a thick mush, and season with salt and pepper. Feed this when cold, and they will eat it with evident relish, and you have a most excellent food, which will keep during cold weather.—*Poultry Monthly*.

## DAIRY.

## HOW BUTTER MAY BE SPOILED.

Good butter may be spoiled in churning. Over-churning ruins the texture and changes the proper waxiness to a disagreeable, sticky greasiness. This is more easily done in a churn with dashes, which will press the butter against the sides of the churn and squeeze and rub it until it is spoiled. Too long churning spoils the quality by the oxidation of the butter and the premature formation of strong flavored acids in it, the full presence of which we call rancidity. It may be spoiled at too high a temperature, by which it is made soft and oily, and of a greasy texture and flavor. No subsequent treatment can remedy this error. It may be spoiled before the cream reaches the churn by keeping it too long, or what is practically the same by keeping it in too warm a place. Fifty degrees is about the right temperature if the cream is kept a week; if kept at 62 degrees three days is long enough. White specks are produced in butter by over-churning, or by having the cream too sour. Either of these faults produce curd in the milk, and the small flakes of this can not be washed out of the butter. Milk from the cow in ill health, and that is acid when drawn, will produce specky butter. So will the use of salt containing specks of lime, which unite with the butter and form insoluble lime soap. White

specks are covered up to a large extent by using good coloring, which is made of oil as the solvent. But this use of coloring being to disguise a fault, and to add to an undeserved virtue, is worthy of denunciation.—*Rural New Yorker*.

## WASHED AND UNWASHED BUTTER

The difference between washed and unwashed butter is analogous to the difference between clarified and unclarified sugar. The former consists of pure saccharine matter, which gives a flavor in addition to that of the sugar. Brown sugar, though less sweet, has more flavor than clarified sugar. When unwashed there is always a little buttermilk and sugar adhering to the butter that gives it a peculiar flavor in addition to that of pure butter, which many people like when it is new. Washing removes all this foreign matter, and leaves only the taste of the butter pure and simple. Those who prefer the taste of the butter to that of the foreign ingredients mixed with it like the washed butter best. The flavor of butter consists of fatty matters, which do not combine with water at all, and therefore cannot be washed away by it. The effect of washing upon the keeping qualities of butter depends upon the purity of the water used. If the water contains no foreign matter that will effect the butter, it keeps the butter from having the buttermilk washed out instead of worked out. Evidently the grain of the butter will be more perfectly preserved if the buttermilk be removed by careful washing. The grain is such an important factor in the make up of fine butter that it is necessary that we should be very particular not to injure it in any way if we would excel in the art of butter-making.—*American Dairyman*.

## MEASURE FOR CREAM ADOPTED IN IOWA

At the annual meeting of the Iowa Butter and Cheese Association, a committee was appointed to report on the size of milk-setting cans and the relative depth of cream necessary in said cans to produce a pound of butter, from milk set twenty-four hours, in order to secure as far as possible a uniform system in handling gathered cream. A circular just issued by the Secretary of the Association contains the resolution presented by this committee and adopted by the convention: "Resolved—That as it requires 113 cubic inches of cream on milk when set twenty-four hours and set in deep setting cans to make one pound of butter, the measurement of cream should be as follows: for cans 12 inches in diameter, one inch depth of cream; for cans 8 inches in diameter, 2½ inches depth of cream, and for cans 3½ inches in diameter, 2 inches depth of cream to make a pound of butter; 50° nor above 60° Fahrenheit, and not less than twenty-four hours before being skimmed. The standard of measurement shall be as here recited, and it is recommended that all cans be made to conform to these dimensions. This measure for cream does not in any way apply to the shallow-setting system."

## SKIMMED MILK CHEESE.

A great deal has been said and written against skimmed-milk cheese, and we doubt not but that there has been a great deal of cheese made and sold which would have been better had the milk from which it was manufactured been richer; neither have we any doubt that a great deal of cheese has been made and sold to consumers who were perfectly satisfied with its quality, but made of milk from which

a portion of the cream had been withheld.

Plenty of rich cream is not the sole requisition in cheese-making. Every good cheese-maker knows that a great deal of good cream has been wasted in the process of manufacture. It is not the surplus fat which has melted and run off in the whey, but that which the good cheese-maker knows how to retain in the curd, that makes the good cheese. If it can be shown that, by any improved process, as good a cheese can be made from partly skimmed milk as the average consumer usually buys, made from whole milk, then we are quite sure that, if we were a cheese-maker, we should endeavor to learn all we could concerning such improved process.

If we find a man who can, and does, make a cheese from partly skimmed milk, which suits us better than the cheese of another maker who uses only whole milk, it does not take very long to decide of whom we will buy, especially if the one that suits best is offered for the smaller sum. There are tastes which prefer pepper and vinegar to syrup and sugar, and there are those who seem to think that cheese is not cheese if it can be eaten without blistering the tongue; but there are others who prefer and buy only a mild cheese, even though the dealer may tell him that it was probably skimmed just a little. It is claimed by some that the milk of Jersey and Guernsey cows is too rich to feed to calves. If this is true and we have no reason to doubt that it is not also reasonable to believe it possible to have more fat in the milk than can be profitably used, or than is required for making the most desirable grade of cheese?

But we are not a practical cheese-maker, and will make no attempt at the discussion of the subject at this time; but we do advise farmers to make a free use of milk in the kitchens and dining rooms than they have done. It is one of the cheapest and most wholesome of foods, and cottage cheese, or Dutch cheese, as it is more commonly called in New England, made from thickened milk, and eaten while fresh, should be common on the table of every dairy farmer.—*Boston, New England, Farmer*.

See our Premium List on page 121.

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 satisfaction, or for which there was such a large sale, as there is for Mack's Magnetic Medicine, advertised in another column of your paper."

Onion is rank but hatred is rancor.

## "ROUEN ON RATS."

Cleats out rats, mice, roaches, flies, ants, bed-bugs, skunks, chipmunks, gophers. \$1. Druggists.

Britain's jewel just now is a Garnet.

THE only variation in quality which will ever be found in "Myrtle Navy" tobacco is in the degree of moisture which it contains. Tobacco is a very ready absorbent of moisture, and in unusual states of the weather it may become a little too moist or a little too dry to suit the taste of some. This is a minor matter, however, as the essential quality of the tobacco is not changed. Its combustion is a little slower or a little faster according to the degree of moisture, that is all. The darker the plug the greater the moisture, and many prefer the dark. In each caddy, however, the preference for either can be met.



## APIARY.

### OFFICERS OF THE ONTARIO BEE-KEEPERS' ASSOCIATION.

President, R. McKnight, Owen Sound. 1st Vice Pres., Dr. Shaver, Stratford. 2nd Vice Pres., W. C. Wells, Phillipstown. Sec'y-Treas., R. F. Holterman, Fisherville.

Executive Committee—Dr. Duncan, Embury; J. B. Hall, Woodstock; D. A. Jones, Beeton; D. Chalmers, Musselburg; Dr. Thom, Sacketsville; M. Rainer, Cedar Grove; and N. B. Colcock, Welland.

### "FOUL BROOD."

Foul brood among bees, as the name denotes, is a disease of the bee while in the larvæ state. It does not effect the bee after it has attained its growth. The disease originates, in this country, from infection only, and spreads rapidly because of its very insidious character. Brood may die in the hives from chilling, smothering, starving, or other cause, decay and create an unbearable stench at a time when colonies are too weak to remove the dead bodies. It will never create the disease "Foul Brood." We may hang these combs containing decaying larvæ in strong colonies, where they will be "cleared out" without the least bad result.

Among the hives of my country apiary I found, about the middle of last August, 2 colonies with fertile workers, which I broke up by removing the hives and giving the brood combs to a young swarm a short distance off. I went out to the farm again about 4 weeks afterward, accompanied by a bee-keeping friend. While I was otherwise engaged, my friend, who is a good bee-keeper, overhauled a number of colonies and found one with "foul brood." He had seen the disease at my home apiary, and knows chilled brood as well as any of us.

In this case, however, I doubted my friend's judgment. Not having salicylic acid at hand, we got brimstone ready and deferred looking at the colony until evening, after we had finished the balance of the bees. I was surprised at the sight; about 4 weeks previous I had put 6 combs full of drone and worker brood, from fertile colonies into the second story of this rather weak one, with all the bees adhering to the comb, and shaking all the bees of both hives in front of this one. The bees had all left to join their old hives; the brood was exposed thereby, and all had died.

It bore a striking resemblance to "foul brood," but the brood, although in an advanced state of decomposition, pulled out whole from every cell with the head of a pin. This is hardly ever the case with foul brood, where the skin appears to decay at the same time with the body, and the dead larvæ appears to be only a soft mass without any cohesion. In order to convince my doubting friend, I placed the combs in second stories of strong colonies and buried only the most offensive ones. I am certain I made no mistake in the matter, and mention the above in order to bring more light on the subject of "foul brood," and to

contradict and put on their guard those of our friends who still claim that chilling creates "foul brood," or that a good or bad season has something to do with it.

So many sample combs infected with the disease, sent me for examination last summer from different parts of the country, convinces me that the knowledge of foul brood is one of the most important subjects to bee-keepers. Many are aware that my home apiary has been troubled more or less with foul brood for a number of years. I never made it a secret, but showed the disease to every visiting friend for his own information, when ever it was in my power. Foul brood never made any headway with me, and, in no case, was it spread by me, although I sold hundreds of colonies of bees, and a large number of queens. My apiary was free from the disease sometimes, for a year or more, with no sign of foul brood anywhere until the following fall or spring. I would discover again a cell of foul brood, or a number of them in one or more hives. Whenever I noticed these diseased cells in time, before they had thrown out their infectious spores, I made them harmless by means of an atomizer, and succeeded in the majority of cases. The hives with which I failed kept me in "hot water" for months and sometimes for all summer, and then "when patience ceased to be a virtue," they were subject to the radical cure as given in my pamphlet, "Practical Hints to Bee Keepers."

It was a mystery to me what caused the occasional re-appearance of foul brood in my apiary. I know that spores of the disease may be hid for years in crevices in or about the hives, that a diseased larvæ pulled out and dropped anywhere, may infect a bee accidentally alighting on it, but I was so particular to remove all such causes, aided by the peculiar location of my apiary, that I could not believe a friend correct, when he claimed that I infected my bees by the use of salicylic acid.

Light was thrown on the subject last spring and summer. A party about a mile from my house (be here perhaps 2 miles) kept 12 colonies or more of bees for several years, and lost the last one last spring. I was well acquainted with him, but his black bees and old foggy style of keeping them had never excited my curiosity. He came to me about the latter part of May and related that he had kept bees now for 10 years, that he got less bees every year, and that the last colony had died this spring, that a lively robbing had taken place when his last colony fizzled out, and that the robbers were my yellow bees; "and now," he concluded, "can't you buy my hives and combs," etc. I went out and found him in possession of about 600 combs; every one of his colonies had died of foul brood. The combs showed it satisfactorily, and my bees, no doubt, had "saved the pieces," whenever any one of the colonies had given out.

Three of my colonies, apparently, had been participating in the last feast, during the beginning of that beautiful spell of pleasant weather in March. Two of them were put on foundation, and were cured in the same month, while the bees of the third were sold to a druggist (for medicine), and the combs burned. I did not know the source of my trouble until my neighbor saw me in the latter part of May.

If I here give my experience in detail, it is done because I think that in this manner it is more likely to "stick" with the majority of bee-keepers. I purchased the hives referred to above, with the proviso that they be scraped off nicely, and the combs and frames burned before the hives were delivered. This was done. The hives were placed against a dark wall in my

stable, until I should have time to disinfect them. No flowers were then (about June 1) yielding honey, and bees went anywhere to find sweets, in this neighborhood. A lot of honey was lying in the stable, and several barrels were leaking, and when I came into the stable one day, I was surprised at the number of bees rising from the floor, alighting and resting on those bee hives and then making for some small windows under the ceiling. The thought struck me at once that the bees alighting on those hives would take home with them the spores of foul brood. I proceeded at once to disinfect those hives by cleaning them out and moistening every part thereof with the medicine by the means of paint brushes. It was, however, too late. Of my 80 colonies of Italian bees, only 5 or 6 were not infected, and these now remain uninfected. The mischief just being done and finding only a few, say from 1 to about 10 or 12 infected cells in a hive, I expected to cure the most, if not all, by a few good attempts of atomizing, and I succeeded with 7 or 8 colonies. I examined all the hives at least once or twice a week thoroughly, and when September commenced, and I still found from 1 to 4 cells diseased in every one of the balance, my patience was exhausted, and I immediately proceeded to the radical cure I shall describe further on, what should have been adopted at once, and which is the only complete cure for foul brood known to me.

It was no small job, and I had accomplished but little; about 4 gallons of water was mixed with 10 gallons of honey and a lot of quart Mason's jars filled therewith; to every jar was added an ounce of foul brood medicine, thoroughly mixed and a perforated cover put on. I use the Langstroth 10-frame hive. The first infected hive was put to one side and replaced by the lower story of another clean hive, provided with 10 sheets of foundation, covered, and a jar of medicated honey, inverted over a hole above it; a platform was now placed against the alighting board, and the bees of every comb of the infected hive were brushed on the same and made to enter together with all the rest. It will not take them long to empty these jars, which should be replaced by full ones as soon as empty until all the foundations are built out, and the bees have honey enough to winter on. The old combs can be extracted and rendered into wax, but great care should be taken that no bee alights on them nor on anything else pertaining to an infected hive.

It is stated by good authority that the spores of foul brood are made harmless through the boiling process, but I bury the remnants of combs and render wax at night, so that bees are excluded entirely. The hives and frames are disinfected thoroughly by means of a good atomizer, or the medicine is applied by a paint brush, not a part must be missed. After the first hive is disinfected, as described, it answers the purpose of a new one, and can be used for the next infected colony which is subjected to the same treatment as the first, and so on. My atomizer is a ways ready, filled with the medicine, and my fingers and knife are disinfected at intervals, and when I leave an infected colony. This cure is complete and has been tried by me, perhaps, a hundred times or more. No combs from an infected colony should be used again in a healthy one, because one of those spores smaller than a speck of dust, invisible to the naked eye, attached to the comb, is sure to breed mischief.

My foul brood medicine is the same as given at our last meeting and in "Practical Hints." It will do no harm to repeat it. The following is the formula: 16 grains salicylic acid, 16 grains soda borax, and 1 ounce of water. It is cheap, can be put up by

every druggist, and every bee keeper should have a bottle of it ready for an emergency.

As time is money in this country of ours, it may be best and cheapest for us to apply brimstone to every colony affected with foul brood. This, however, should be done at night, when all the bees are at home. The hive should be closed below, at the entrance, with a pan of brimstone ignited, on the top of the frames, and a tight cover placed over the whole. The fumes of sulphur being heavier than the air, descend, and kill most effectually all life inside of the bee hive. Bury or burn all its contents, and be sure to disinfect the hive before you leave it.—C. F. MURR, before National Bee-Keepers' Association.

IT IS SO PLEASANT.—It is so certain and easy in its action. It invigorates the nerve, brain, and muscle. ZOPESA does these things simply by giving active Digestion, and regulating the Stomach and Liver.

See our Premium List on page 127.

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There are a number of persons out of employment in every county,—yet energetic men, willing to work, do not need to be. Those willing to work can make from \$100 to \$500 a month clear, working for us in a pleasant and permanent business. The amount our agents make varies,—some making as high as \$500 a month while others as low as \$100, all depending on the energy of the agent. We have an article of great merit. It should be sold to every house-owner, and pays over 100 per cent profit. Each sale is from \$3.50 to \$10.00. One agent in Pennsylvania, sold 32 in two days, and cleared \$64. An agent in New York made \$45 in one day. Any man with energy enough to work a full day, and will do this during the year can make from \$2,000 to \$5,000 a year. We only want one man in each county, and to him will give the exclusive sale as long as he continues to work faithfully for us. There is no competition, and nothing like our invention made. Parties having from \$200 to \$1,000 to invest, can obtain a General Agency for ten counties or a state. Any one can make an investment of from \$25 to \$1,000 without the least risk of loss, as our Circulars will show that those investing \$25 can after a 30 days trial return the goods unsold to us and get their money back, if they do not clear at least \$100. They show that a General Agent who will take ten counties and invest \$216 can after a trial of 90 days return all goods unsold to us, and have money returned to them if they fail to clear at least \$750.00 in that time. We are not paying salaries, but want men willing to work and obtain as their pay the profits of their energy. Men not willing to work on our terms will not work on any. Those meaning business will receive our large descriptive circular, and extraordinary offer by enclosing a three-cent stamp, with their address. The first to comply with our terms will secure the county or counties they may wish to work.

Address,

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In the present month of October Dr. Carson's Stomach and Constipation Bitters should be taken to purify the blood and fortify the system against the severe changes of our Canadian winter. It improves the circulation and cures Dyspepsia, Biliousness, and Sick Headache. In large bottles at 50 cents. Sold by all druggists

## Our Young Folks.

Our young friends have a chance to make some pocket money. The fall work is now pretty well over, and a few days spent will bring a handsome return. See our Clubbing and Premium List, page 121.

### Answers to Puzzles in October 4th.

NO. 1.

1—Maple-leaf.

NO. 2.

1—Horse-shoe.

### Answers to Words Transposed in October 4th.

1—Martha, 2—Alice, 3—Elgin, 4—Langton, 5—Simcoe, 6—Ontario, 7—Rabbit, 8—Tinkle.

### THE MAN WHO WOULD SING.

Phil. tells a story because he cannot sing a song.

(The following is contributed to the Young Folks Column, by Squire Early.)

Not long since, at a convivial gathering, after the cloth had been removed and cigars lighted, the intellectual exercises came in order, and it was almost unanimously voted that they would tell a story and sing a song in regular order. The President was to begin and he told a story. Then the next man must sing, the next tell another story, then the next sing, and so on in alternate sequence. By and by it came to Phil Plympton, and he must sing, there could be no let off. But, said Phil, "let me tell you a bit of a story first, and after that I'll sing if you say so. There was no objection to that, so Phil. arose and told his story, said he: When I was fifteen years old, my folks sent me to a singing school. We had a good teacher, and plenty of pretty girls, and I rather enjoyed it. I wanted to be a singer and I tried to learn, though the teacher, at the end of the first month, told me I was only wasting my time. But I was not to be put down in that fashion. Others learned to sing. Why should not I? Well, I stuck to it for a year, and during all that time I never once opened my mouth to sing a note in the house at home. Once, at the end of six months, I tried it in the barn, I took a good look to see that nobody was near, then I went out into the back part, where the tie up was, with the cows and oxen hitched up, and I opened on old Coronation:

All hail the power of Jesus' name,  
Let angels prostrate fall.

I'd got as far as there when I heard a rumpus—the tie up, the Whittaker! such another set of frightened animals I never saw. They were glaring at me with eyes of fire. But I ripped away:

Bring forth the royal diadem  
And crown Him—

At this point I had to stop. An old brindle cow broke her stanchion short off, and got clear and was making for the door. One of the oxen had driven his head through the side of the barn and was suffocating. Naturally enough, I suspended my singing and tried to quiet the animals, but I could not get near them. And yet I will just say here—it was night on two weeks before I could convince those cows and oxen that I was a safe man to be around. Well, I didn't practice singing any more in the barn; but about a month after that, I thought I had a chance for it up in our great garret. The town had gone away to an afternoon meeting on the other side of the river—it was on a Sunday—and I was in the garret, at a gable window, reading, when the thought struck me, now will be a grand time to try old Northfield. And at it I

went. That was one of my favorite tunes. It's got vim in it:

Lo! What a glorious light appears  
To our believing eyes.

Excuse me for reciting the words, I don't exactly catch the tune now.

The earth and sea are passed away  
And the old rolling skies.

I'd just got out the last of that first verse, when I heard a human voice at the foot of the stairs. It was my father. The folks had got home and I hadn't heard 'em. Yes, it was dad himself. Mercy! how he yelled at me. Phillip! said he, what in the world are you doin' up thar on a holy Sabbath day? And by that time he got into the garret and stood facing me. Oh! poor, wretched boy! he went on, fit to cry, feeling so badly. How have I labored to bring you up as a Christian boy! And now what do I find? No sooner am I out of the house and you think the coast clear, than you begin to raise Cain. Oh! what did you want to make such a unearthly howlin' for? Your poor mother is down in her room e'enmost skeered out of her wits. Phillip, in the name of all that's wonderful, tell me what you are trying to do. Says I, as soon as I could muster up courage to speak: "Dad, what did you think it was when you first heard it?" "What did I think?" said he. "Why, I thought the never-endin' Jerusalem had broke loose; and that all the bars and horns in creation was havin' a set to in our garret, and the bars was gettin' the worst of it." Well, said I, after a little spell of thinking. "I'll tell you what it was dad, I was trying my voice at singing, I was just trying to sing old Northfield." With that he looked at me, looked perhaps two minutes, then he put his hand on my shoulder, and with a sympathetic moisture in his kindly eyes, he said to me, and his voice was quivering as he spoke, said he: "My son, I have an affection for you in spite of your failings, and I don't want you to end badly, which you certainly will do if you keep on in that awful way. So, my boy, I want you to promise me here and now that you won't, never any more—never, never, never open that mouth of yours for the purpose of trying to sing. Will you promise me?" Well, gentlemen, I promised as he asked. And now, can you with clear conscience, ask me to break that promise. Phil. was unanimously excused.

Let no one now omit to buy  
The Fragrant "TEABERRY," and try  
Upon the Teeth its cleansing powers,  
And gain a Breath like scent of flowers.

### A \$20.00 BIBLICAL REWARD.

The publishers of *Rutledge's Monthly* offer twelve valuable rewards in their *Monthly* for November, among which is the following:

We will give \$20.00 in gold to the person telling us which verse in the New Testament Scriptures (not the New Version) contains the greatest number of words, by November 10th, 1882. Should two or more correct answers be received, the reward will be divided. The money will be forwarded to the winner November 15th, 1882. Persons trying for the reward must send 20 cents in silver (no postage stamps taken) with their answer, for which they will receive the December *Monthly*, in which the name and address of the winner of the reward and the correct answer will be published. This may be worth \$20.00 to you; cut it out. Address **RUTLEDGE PUBLISHING COMPANY, Easton, Penna.**

See our Premium List on page 121.

In religion, talk is brass, action is gold. The old darkey said, "Pears like I could say more in five minutes than I could live in five years."

The best thing to take before singing—breath.

### A VERY MEAN TRICK.

On Monday morning last an E. & T. H. passenger train was shooting along at a rattling pace between Haubstadt and Fort Branch, the metallic clckety click of the wheels echoing adown the lonesome gullies and reverberating wierdly amid the fleecy-fest corners of the humble mansion of the rural pig. In one of the seats, half sitting and half lying, reposed an Evansville roadster perusing a morning paper in a happy, dreamy manner, and wearing upon his handsome face a look of four sixes that-lets-me-out contented. Shortly after he had entered the car at the depot, a stylish, handsomely dressed lady took possession of the seat behind him, but so absorbed was he in the contents of the paper that he did not notice her. She regarded him, however, with the deepest interest, and the lookers-on would have sworn from the indications that the handsome tourist had made a most marked impression upon the lady—in short, that she had almost fallen in love with his careless posture and graceful form. Several times she leaned forward as though she would speak to him, and as often drew timidly back. At last her courage overcame her fears, and placing her mouth as close to his ear as she could without attracting attention, she said in a low, musical voice:

"Oh! sir, do not turn around and look back or we will be observed by the other passengers, and oh! I do beg you to pardon my unmaidenly boldness. The female heart is sometimes too susceptible, and I must confess that something draws me toward you. In short, I am smitten with your charms of person—so deeply smitten that I cannot resist the impulse to know you that so persistently urges me on!"

A look of surprise crept over his face when she began to speak, but as she proceeded it gave place to an expression of calm admiration for a boss-order gratification. Throwing his mouth around in a lopsided attitude and speaking through one side of it, replied:

"Ah! yes, Miss, I assure you I feel highly flattered at your very complimentary words. I cannot censure you my friend—for I know that there are times when extraordinary influences seize upon the heart despite the most earnest efforts of the possessor to resist those influences. Been there myself, often. Pardon me, but may I ask your age?"

"I am just nineteen, sir, and I live at Vincennes. Oh! it seems so unmaidenly to thus acknowledge a passion for a stranger, but my swelling heart would have burst had I not spoken to you. I hope, sir, you are not a married man."

"Married? Ha! Ha! Ha! No indeed. If I were I should at once repel your advance and go and seek safety in the baggage car. My heart is yet free and unscarred from Cupid's darts. It yet flops in my buzzum as free and careless as flops the merry tail of the innocent rural calf."

"Oh! sir, you are so delightfully funny! Your pure and keen humor is as refreshing to my smitten heart as is the rippling waters of a living spring to the weary, thirsty traveller. Do you ever stop at Vincennes?"

"Do I? One of my best towns. You see I am a commercial traveller and work the towns on this road. Now wouldn't it be nice if we could meet there on my regular trips and enjoy each other's society? I'll be there tomorrow—got to go up to Terre Haute to fix up some business and then I'll jump the first train and come back."

"Oh! that will be just splendid. It seems awful, but I cannot help loving you! You would capture the heart of any woman."

"Thanks. And do you know, Miss, that although I have not seen your lovely face—for I know it is lovely—

I feel my whole heart going out to you. Where can I find you in Vincennes?"

"Let me see, What house do you stop at?"

"The Union Depot Hotel."

"I'll tell you, then. To-morrow evening at seven o'clock I'll walk by there, and you can come out and join me. We'll have a delightful walk, and get better acquainted."

The conversation run on in this strain until the train drew near the covered bridge over White river. As they approached.

"My da-darling—may I use that term?—we will soon cross White river and it is real thick in the bridge. Will you not give me one sweet kiss as we pass through it?"

"Oh, dear! Do you think that would be right?"

"Of course. What could be wrong in two persons who love each other indulging in this intoxicating delight? Promise me."

She hesitated, but finally said she would comply. When the train drew into the bridge he threw his arms about her neck, and glued his lips to hers in a maddening kiss. He heeded not the flight of time in his heavenly bliss, but kept his lips to hers while the fires of love darted from his eyes, and his whole being trembled with rapture, before he was aware of it the train shot out into the glad sunlight and he sat gazing into the eyes of his darling.

It was his wife.

She had suspected him of these little indiscretions and had followed him from home to verify her suspicions. It was a mean trick, and the woman cannot be too harshly condemned for her tricky action.

### BUCKLEN'S ARNICA SALVE.

The Best Salve in the world for Cuts, Bruises, Sores, Ulcers, Salt Rheum, Fever Sores, Tetter, Chapped Hands, Chillsblains, Corns, and all Skin Eruptions, and Positively cures Piles. It is guaranteed to give perfect satisfaction, or money refunded. Price 25 cents per box. For sale by all druggists.

That which is bitter to be endured may be sweet to be remembered.

It is better to make penitents by gentleness than hypocrites by severity.

It is only a difference of one letter between nobby and snobby young men.

The reward of doing one duty is the power to perform another.—Ben Azai.

Next to an effeminate man there is nothing so disagreeable as a mannish woman.

If you would not have an affliction visit you twice, listen at once to what it teaches.

Nature has sometimes made a fool, but a coxcomb is always a man's own making.

These are odd examples of inconduity of the "imperfection of the dreaming memory," which is most strongly illustrated when we dream of those who are dead. We believe them still to be living, simply because we have forgotten that they are dead. A friend of Dr. Symonds dreamed that he was dead and that he carried his own body in a coach to bury it. When he reached the place of burial, a stranger said, "I would not advise you, sir, to bury your body in this place, for they are about to build so near it, that I have no doubt the body will be disturbed by the builders." "That," replied the dreamer, "is very true. I thank you for the information, and will bury it in another place." Upon which he awoke.

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Quick, complete cure, all annoying Kidney, Bladder and Urinary Diseases. \$1. Druggists.

Page 121 contains our Clubbing and Premium List. Study it.

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**RHEUMATISM**  
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Parties living or visiting in Toronto, will find it convenient in advertising, etc., to address our editor, Mr. W. Pemberton Page. His office is at No. 87, King St. West, Toronto.

W. P. PAGE | Editors.  
 S. W. HILL |

WEDNESDAY, OCT. 25, 1882.

EDITORIAL.

CANADIAN MUTUAL AID ASSOCIATION.

The above Association which, as its name implies, has for its object assistance to the families of members, who may be removed by death from the care and support of those whose duty it is to love and cherish. This system of assurance, or mutual aid, is comparatively new, but gaining a deservedly popular reputation among the people.

While we are each one, to a certain extent dependent upon others, they in turn have claims upon us, and neither can be ignored with safety. By careful and persevering toil, we can provide for the present, but men and women are continually passing away, and those dependent upon them are left to continue the battle of life alone. But few accumulate sufficient to place those dependent upon them out of the reach of want, if they are taken away. How then shall they be provided for? This is an important question. We require some systematic means to divide our burdens and share our good and ill fortunes. Co-operative Insurance, Mutual Aid Societies, afford this opportunity. You may be hale and hearty now, but you have no lease of life; what then, is your duty? Certainly to make some provision whereby you can secure to your families reliable assistance when most needed, when you are not here to care for them. Connect yourself with some reliable Mutual Aid Society, and this end is secured. True, it will cost you something to become a member, and the assessment of one dollar in case of death among the membership will have to be met. When this is called for, respond promptly in the goodness of your heart to aid a distressed family, and get your pay as you go, in the good feeling a generous act produces, and you will feel the assessment only a pleasure, and by and by when the same terrible experience overtakes you a few hundred or thousand dollars will come to the dear ones left behind, at the very time when it is most needed. This is Mutual Aid, and all there is of it. No high salaries, no costly offices,

no large dividends to stockholders; all is fair and above board; everything honest and equal, and spread out so as to be easily borne, and sure in its results.

The Canadian Mutual Aid Association has been so successful in the short time it has been in operation that the Company has been compelled to secure new and more commodious offices, where they have a good fire proof vault, and other conveniences. They will be happy to welcome any friends of the Association that may call upon them, or any wishing information about its system of work, &c.

At the request of many, it is proposed at an early date to add an accident branch, in which members injured by accident will secure to themselves a certain weekly payment, which, in many cases will be of very great assistance for payment of doctor bills, &c., and in case of those dependent upon their daily toil for the support of their families be highly appreciated. This will be entirely distinct from the present branch.

The new offices of the Company are at No. 87 King St. West, Toronto, where all correspondence hereafter should be addressed.

FARMERS IN THE LEGISLATURE.

We are pleased to see our old friend, Mr. Charles Drury, elected to the Ontario Legislature. Not because he belongs to a certain party, for we support principle rather than party, but because we consider him a good, honorable man, and one who will look carefully into the agricultural interests of the country. Mr. Drury has held honorable positions in his own county in municipal matters, also in the Grange, and as President of the "Agricultural and Arts Association," besides many other positions of trust and the one opinion expressed is that he has filled these with credit to himself and the cause. We hope to see him foremost in advocacy of farmers' rights in the Legislature, and a supporter of measures, and not men.

*The Rural Californian* is the name of a new aspirant for favor among agriculturists, horticulturists and others. It is a handsome 20 page monthly, published in Los Angeles, one of the "gardens" of the Pacific coast. The initial number is handsomely gotten up, and is an indication that in the *Rural Californian* a journal is started which will be a valuable addition to the publications of that fine State, California. We wish it success.

We call attention to paper read by Prof. Brown, of the Agricultural College, Guelph, before the annual meeting of the "Agricultural and Arts Association" at Kingston. This paper complete will be found in another part of this week's issue, and is well worthy perusal and study by our readers. It is practical and coming from

the source it does, is valuable, the information being reliable. Prof. Brown is doing a good work in connection with the College, and his efforts are every day becoming better appreciated.

Page 121 contains our Clubbing and Premium List. Study it.

SCIENCE AND PRACTICE IN THE PRODUCTION OF BEEF AND MUTTON.

BY PROF. BROWN, OF THE AGRICULTURAL COLLEGE, GUELPH.

It is not a new subject to the civilized world, and not a common one at such a meeting as this to speak about Science and Practice in the Production of Beef and Mutton. It is to be regretted that a branch of science so intimately related to the more prominent necessities of human life has not received some attention at the hands of bodies of men associated for the purpose of advancing science at large. It has been left to individuals, and while some have almost revolutionized the profession of live stock, as for example, Sir J. B. Lawes of England, it is no excuse for its non-recognition elsewhere. Have farmers been invited to co-operate, or to be taught in the more difficult lines of this study by our leaders of agricultural thought? I think not.

It is not known to all that the enterprising farmer of these days is not satisfied with a knowledge of the principles of the sciences that are intimately related to his profession, he desires to have the helps of the pure scientist to guide him in all the daily and yearly history of every field and animal of his farm, in order to obtain the greatest amount of the most valuable produce in the shortest time, and at the least cost.

Permit me then to submit to this eminent body of practical men, what, in my opinion, is the present position and requirements, scientifically and practically, of our work as producers of beef and mutton.

The primary, most simple, and most natural, and probably the cheapest view, under the most of conditions of these products, is by grazing. Of course when early maturing and heavy weight are properly valued, pastures, natural and artificial, may not always take this position, and the circumstances of class of animals and physical conditions of a country come in to affect the whole question.

Nature does usually provide all needed by her own animals, as in the case of the Buffalo in this country, and wild sheep in several parts of Europe, but when man tries to obtain equal results, so to speak comparatively, by the introduction of entirely different animals, without due regard to the scientific bearings both of moveable and immoveable matter he invariably retires disappointed. Very few consider that the present aspects of the great grazing lands of America must change, and that that change will be a deterioration unless some men are wise from the beginning. Science in the past tells of rich grazings that became almost valueless by unskilled depasturing, as well as of those yet healthy by reason of associating with their practice the able teachings of science.

So then, my subject is not alone concerned with our beef and mutton supply as obtained through the more cultivated forms of husbandry; at the same time, the plough and its associations mark that phase of it which is most interesting to most men, and affords the greatest field for scientific

help, and to it I shall therefore direct your attention.

We said, the greatest amount of the most valuable beef and mutton in the shortest time, and at the least cost. These are the aims of the modern agriculturist, and accordingly it is with him practically a question of how much flesh can be produced per acre under the conditions of his special subject. The maximum realization of this implies a very great deal of skill, even when backed with plenty of capital, because it is not only the selection of the best kind of animals, a knowledge of their capabilities, and what foods would most surely contribute towards the result, but the being able to produce, *within his own command*, all these foods in such abundance, of such quality and so cheaply as must support the other end of the story.

Who shall declare that this is not more difficult than the deepest mathematical problem, or less so than some other unfledged point in science?

As a business problem, it is desired to produce quantity and quality at a certain price within a given time. It is now allowed that 3 years for cattle and 1½ year for sheep should be the limit of the maturing, or it may be, the pre-maturing periods commercially. Experience is gradually confirming this, and yet science has not said whether such comparatively young flesh is as good for human food as the older products. It is likely that no chemical differences exist between two animals of precisely similar character, with the exception that one has by "pushing" been made up to 1500 lb. at two years, and the other just the same weight at three years? This is not a question of appearance, or palatableness, it is one of much higher significance—the nutritiousness and healthfulness of food for man's daily wants.

In this relation it is evident that two elements are concerned—the class of animal that by its kind will give the weight and quality, and the foods that in kind and quantity will enable the cattle, beast or sheep, to do so.

But the cost of production is, of itself, a subject of keen interest between science and practice; where it begins, and where it ends is not yet so very clear; nor do we all agree as to what it amounts to; or what, or what should not go to make it up. When the subject is one only from nature's upbuilding, as in the case of pasture, the debiting and crediting are much more simple.

In all my experience I have never seen two men agree on this uneven field called, cost of production. We could employ much discussion on the many items from birth to the time when, in Canadian practice, it is usual to put up the animal for finishing; when as we know, store cattle and sheep are considered to be worth only so much per pound live weight. My purpose will however, be better served by noting the relation of the finishing process in the stall to the cost of production.

As the result of my farm cropping, I am in possession on 1st Oct. of so much wheat, hay, straw, mangolds, turnips, peas, oats, and corn. These are required for two purposes: the maintenance of my household, and the maintenance of my farm and their connections; the one is the primary necessity, the other is but secondary in the sense of being essential to human existence. I could dispose of every particle of these products and live well, as many now do who cultivate virgin soil, who indeed cannot do better, because nature's virtues need no upbuilding; but I am cultivating old land, which like all such subjects, is now more of an agent to convey

food to plants than being in possession of food naturally for the purpose. I am therefore obliged to arrange for the return of so much of the same or other materials to the soil, in such form as experience has proved to be the most suitable for every requirement; these I need not detail here, except to note that farm yard manure of the very best character is absolutely essential to the best production of crops of all kinds; *nothing else can take its place.*

In making this fertilizer, I am concerned in three things; the kind of crop, the class of animals, and the mode of treating what the animals give me after eating the crops. It is possible I might make a mistake in the view of many good men, were I to grind and feed the wheat to cattle. Are you aware that we can produce it as cheap and purchase it in the common market at no greater cost than other things that we do feed to cattle? Linseed cake costs as much, and other grains little less. Why then do we not give this staff of life to our fattening cattle and sheep? Just because it is, comparatively, for example, one-third less valuable as fattening food, and more than one-half less valuable in giving farm-yard manure. Why, the sunflower is just as good for food, and meadow hay as good for manure-making as the grain of wheat.

In making my winter arrangements I am also concerned, I said, in the class of animals through which to invest these field products. I may want milk and growth of bone in addition to the manure. In this case experience says that the manure will come off third-rate, it is simply impossible to get milk, grow young animals, and at the same time secure first class manure. On the other hand I don't want aged animals because they would cost too much per pound, are slower at flesh-making, and practically I cannot get them in these days of high pressure.

Under all the circumstances of the case then, I make choice of yearling steers—one-year old on 1st March last—that have been well done to since birth, and that from the last five months' run upon permanent pasture come to stall weighing 1050 lb. per head on 1st Oct. Such animals of the proper beefing stamp are already well built in bone and muscle, and require eight months science and practice to finish for market—the object being to make them 1500 lb. for shipping on 1st June next, and secure at the same time 8 to 10 tons of the requisite manure.

The financial story now begins; the 1054 lbs. cost me \$47.25 at 4½c. per lb. or 1½c. more than it cost the producer. That it cost the producer this sum is easily ascertained by following the history of the calf up to the time we bought it. The first item of debit is certainly the services of the sire, which on an average cannot be put at less than \$2; the calf gets, or should get, half the mother's milk, which for five months—not less—is worth at least \$9.50; and to make the right kind of calf it should also receive extra food during milk, thus adding \$2.50 more to the cost. After weaning and until 12 months old, the animal is treated to regular diets of green fodder, or hay, with roots, bran, and grain: these calculated at cost of production will make \$7; then as a yearling, partly in the stall or shed in winter, and partly on pasture for the next seven months, up to 1st Oct. will equal at least \$12; so that food alone costs \$33, as it ought to be, as it must be, under the simplest matters of business. But there are other items: the bedding, attendance, and risks are, on an average, not less than \$4.50, so that we have

a sum of \$37.50 as the gross cost of a 19 months old store steer that weighs 1050 lbs. But gross cost is not net cost in the building up of these 1050 lbs. of flesh; towards which everything we can think of has been properly charged; all the materials were not made use of by the animal; the refuse called farm yard manure belongs to it, and certainly not to the farmer after the way the account has been made up. Valuing, for the kind and quantities of food consumed, upon both a scientific and practical basis, now fairly well established by experience and experiment, this refuse is worth \$7, thus reducing the net cost to \$29.90, or 3c. per lb. In addition to the manure profit the producer expects, and is fairly entitled to a real cash profit on the whole transaction, say twice the manure value, or 1½ cents per pound. Remember, that in changing the foods it was at actual cost, and not the value of them in the market, which would have been a profit. Altogether, then, we think the \$47.25, or 4½ cents per pound paid for the stall steer is reasonable for both parties.

By what now then am I to be guided in the finishing of this animal? What shall the food be? What shall the surroundings be—what the management, in all their important details? What do science and practice say?

Unquestionably, Ontario conditions call for housing of a very superior character, and this is always the first consideration in any mode of farming; but particularly the fattening of live stock. Much money is not implied, any more than other things. We desire to obtain warmth with thorough ventilation, and this ventilation must exist without currents. It is more dangerous to stand an animal in a draught than it is to subject it to extreme cold, and I feel assured that the cause of the somewhat prevalent animal consumption, or tuberculosis among cattle, and lung disease among sheep, is due largely to sudden variations of temperature in winter—brought about particularly by the over anxiety of many men in regard to the cowfoot, so called, of their animals—who believe in having the thermometer at 70° inside, when it stands at 10° outside. I think it is a clear mistake under any circumstances to shut the door on sheep—ewes just lambed excepted, and no science can convince me that an average temperature of 65° is better than one of 45° in winter. A damp, cold temperature, causes animals to consume more food without corresponding results in growth, because very much of it is used as fuel to keep up warmth,—so not only ventilation, but drainage and proper light are necessary towards the best results. Whether the cattle beast should be tied or have a loose box, cannot for a moment be doubted, when economical handling of a large number is so important. Health in its fullest sense may not be always a part of stall management, but in the case of beef management, the kind of health implied by science of muscle is not a matter of much account. No doubt, the growing animal intended for beef, requires a little exercise daily to promote strength; but when ripening, the same animal only needs to be able to walk to market.

Thus far satisfactory with our fattening steer put up on 1st October, proper housing being simply so much food. But now as to the food itself. If I follow nature closely, I shall preserve nature's offerings in the shape of grasses, which, in variety, as is well known by properly managed permanent pasture, gives all that any cattle beast or sheep requires, both for fat-

tening or growth of youth. But good as our fodders are in any form, whether timothy and clover, meadow hay or corn fodder, they are found to be too slow for the present purpose—they would fatten just as well as anything else, but not fast enough. True! the best pastures of the world under the best of conditions, will give a greater daily increase than any other form of food, but we are in Ontario, and the time is winter.

I know, at the same time, that my fattening subjects are ruminating animals, and must have bulk of the rougher materials wherewith to chew the cud. The stomach must be filled with fodder, and not alone with sufficient nutritive value in small quantities, as can easily be done with other foods, such as grain. Here the theorist might easily commit a grave error, just as much as some chemists have done in assuming that certain concentrated fertilizers will grow certain crops, because they contain all the requisite foods for their complete maturing. The proper proportions and kinds of food are then points of great value in this study. We cannot set aside science in this work. Practically, foods give results according to their chemical analysis, when combined or mixed to suit the particular animal system. We have many examples of this one, thus: The great grain of the American continent called corn, is chemically higher than a mixture of peas and oats with that corn, yet the result in feeding is decidedly in favor of the mixture, as against the corn alone. Most foods are better in combination than alone, and the combination should be so arranged as to leave little or no waste. These are facts from the experience of many. The kinds and proportions of food to suit each individual animal exactly, so that it shall just receive the best nutritive ratio, are not so easily struck as may appear to some. If we take the corn, peas, oats, hay, turnips, mangolds, bran, with linseed cake or cottonseed cake, and look at them by their chemical standing, it becomes a nice mathematical lesson to hit the life or beat forming materia's that should accompany the flesh forming materials, so as to secure this nutritive ratio. All the foods named must be chemically balanced, and an agreement made with practice, for, no amount of scientific knowledge can square-off any animal's meals without a copartnership with the practical feeder. Grain, in all instances, regulates the feeding value of a diet, so that one or two pounds more or less per day, has a greater effect than larger quantities of other forms of food. It is interesting to make the memorandum here, that experimental work with live stock all over the world differs materially in special lines of inquiry, such as feeding with one kind of crop, but when taken generally, such as feeding a large variety as we are now discussing, the results are remarkably uniform.

We are often asked, how do you prepare your cattle food? Do you cut or steam, or feed rough, that is, uncut fodder and roots?

With reference to these three forms of presenting food to cattle and sheep, I think there is little dispute about the following:—

First: That uncut hay or other fodder, and roots unbroken are most healthy, though less economical—leaving more refuse.

Second: That cut fodder and pulped roots mixed a-heap, and allowed to ferment slightly, so as to draw out sugary properties, are much more economical than any other form, and well adapted to both milking and beefing.

Third: That the boiling or steaming of food for animals that chew the cud is the most unnatural, the least healthy, and does not give corresponding results in accordance with expense, unless upon the large scale.

The proposal to preserve corn as green fodder for winter, by ensilaging, carries common sense with it at any rate, whatever the feeding effects may be, and I trust to be able to talk experimentally about it next spring. When asked in what way you would prepare show animals so as to maintain health, acquire rapid weights, and uphold the manure pile, we say that loose box management winter and summer with prepared raw food cannot be surpassed by any other plan. Management, however, cannot be thus hurriedly dealt with.

I have never seen any ill effects from allowing animals to have all the water and salt they can take at all times, and nothing is more rational than to feed at least five times a day, giving proportionally little at a time. Because man himself feeds thrice daily it does not follow that it must be best for all other animals. The little and the often is nature's lesson. Some are often in doubt as to what is called a *sofe* quantity of grain per day, when pushing cattle and sheep for market. A good guide is one pound to every one hundred pounds that the cattle or sheep weighs. This is sound scientifically, because most animals eat in proportion to their weight, under, of course, average conditions of age, temperature, and fatness. It is also as true in practice as it is given by lessons from nature, that change of food often is good, and yet dangerous to do so rapidly. To those who believe in a liberal allowance of turnips and mangolds, it should never be forgotten that our winter conditions call for more cautious work than British experience, and the rule with us should be, just so much of these fleshy green fodders, along with other things, as that the animal will drink but very little water. The grooming of cattle can be easily overdone. When anxiety overruns common sense to the extent of disturbing the animals three times a day with the curry comb and brush, more harm than good ensues; to a tied-up animal the brush is indispensable, but never rouse them up for this purpose, nor in any form but one thorough grooming daily. Judiciously done, however, this practice alone means \$4 per head more when market day comes.

And now, having advanced some things already well known and believed, others known and doubted, as well as some not known and possibly disbelieved, allow me to answer the important question: Does it pay to fatten cattle and sheep under Ontario conditions?

How very common to hear the statement. "I bought six grade steers last fall for \$35 a head, and sold them in May for \$75, so I have cleared \$40 a piece. Doesn't that pay well?"

What pays well; the added weight of flesh, or the increased value per pound of the whole animal, that was bought at \$3, and sold at 6 cents; or shall we say that a more advanced view was taken of the transaction, and the conversion of crops into manure, duly weighed?

I am not a whit disposed to hold out our own ignorance as farmers any more than that of other countries, and when I say that it was but yesterday, so to speak, that British farmers were taught the true commercial position of a fattening animal, we need not be ashamed of being obliged to enquire into the same question, in a new land.

It is a fact then, that no animal whatever, under any conditions, will pay for the direct increase to its weight from the consumption of any kind or quantity of food. The first view of this, to those who have not made the enquiry, appears to be a perfect absurdity, and they respond at once, and naturally so, with the exclamation: "It is impossible. What is the use of feeding at all if that is the case?"

We have already touched upon this phase of the subject, in estimating the cost of a store cattle beast, but no details were submitted, and besides, it is in the finishing of beef that profit and loss ensue.

Take up the stall steer of 1050 lbs. that cost us \$47.25. By this gradual introduction to heavy feeding from 1st October to 1st June, the average daily kinds and quantities will be about:—Hay, 7 lbs.; straw, 3 lbs.; Roots, 40 lbs. (mangolds and turnips); grain, 10 lbs. (corn, oats and peas); bran, 2 lbs.; cake, 3 lbs. (six weeks.)

This is liberal feeding, but not extravagant, when rapid results are required—"premature" call it if you will. Charge these at the ordinary market rates, and the total cost of food consumed amounts to \$56 for 243 days. Add to this five dollars for bedding, attendance and risks, and we have \$61 to place to the original cost of \$47.25—thus making \$108.25 as the total cost of producing a finished bullock.

What is our position now? We have a steer that weighs 1475 lbs. and manure weighing about nine tons.

This manure, we said, belongs to the animal meantime. Its value is not what most of farmers put upon it, nor what the scientist puts upon it; but what practical experience has proved to be its value, along with the check which the chemist gives, and which always agrees with practical experience. Its value is not necessarily by weight, but largely by the foods that have been used, and so, taking all things into consideration, this manure is actually worth to the farmer, the sum of \$31.50, or \$3.50 per ton.

Cases vary in rate of increase, food consumed, and price realized; but this example may be taken as a fair average.

Now mark this with a loss of \$5, without taking manure into account, we had, as it were, sold the various crops of the field to the fattening animal at market prices, and thus, of course realizing a profit upon that transaction by itself. The difference between cost price and market price, on an average of things, is just about one-half, so in place of charging the animal with \$46, it might have been only \$30.50 (allowing of course for the bran and cake which we had to purchase,) or the exact cost of production. Here we hold a sum of \$25.50 (\$56, \$30.50) which placed opposite the \$5, gives \$20.50 of real cash profit, and this again added to manure, shows a total profit of \$52.

The whole question of fattening, therefore, depends upon how you put the case, and value the manure.

The faster the fattening, the greater the profit, the less cost of food, earlier returns, and better flesh. Get rid of every fattening cattle beast before two and one-half years, and every fattening sheep before it is fifteen months old.

It does not pay to hold them longer. Take the case of the four two-year-old steers now in your exhibitions from our experimental farm, as specimens for exportation. Had I sold them on the first of June last, when they averaged 1600 lbs. per head, and were worth \$112 at 7½ cents, we would

have stood well financially; but since then, through summer heat, less daily increase, about as much food, and no greater price per pound for exportation, we can get but \$9 more per head for three months' feed and expenses. I say exportation, because for special Christmas purpose we can get much more, but the demand is limited.

I have talked more about cattle than sheep on this occasion, but not because I consider the one more important than the other.

There is no time at present to enter fully into all the bearings of wool and mutton, yet something must be said.

There are good reasons why, as yet, we are more beef than mutton and wool producers. A forest country, an arable country, a grain-growing one, excel for working, cows for milk, the greater suitability of beef for human food, and for winter keep. These, and others have marked our past live stock history, as against Australia, for example. But mutton is now mutton amongst us, if not so much for our consumption, it is clearly so for exportation, and though wool at the present moment is not wool per pound as we like it, it is more our own fault than that of the markets.

I do not think I would have any difficulty in proving to this meeting, that, to one well up in his profession, thoroughly practical and able to guide himself by the light of science—there is even in Ontario conditions more value per acre in the raising of wool and mutton, than there can possibly be in beef. I do not refer to thoroughbreds in either case, but simply to the growth of these products by the use of pure bred males with the commoners of the country. Take a one hundred acre farm, with soil of average texture, under ordinary rotation of crops, and the best management. Choose the best stamp of grade ewes, that by their wool, roundness, and health, bespeak good mothers. Use the kind of Down ram, be it South, Shropshire, Hampshire, or Oxford, as experience has shown, to be most suitable to the special physical conditions of the farm and district, and that will give just the sort of wool and mutton wanted by the present markets of the world. Feed liberally for both crops, wool and mutton annually, lamb early, never tempted to sell lambs to the butcher unless at a pound, and sell all your produce after the first shearing, so that you have heavy weights and best quality of everything, and thus it is safe to say that your revenue will be one-fourth more per acre than by any other branch of farming.

In conclusion, I must do myself the pleasure of laying before you something quite new—never before known to anyone.

When your Council did me the honor to name me as their reporter on live stock I felt that something else was desirable besides the examination and criticism upon herds and flocks at Kingston, and while I could have made use of some statistics already gathered by our young, but vigorous Bureau of Industries, I judged it best to have something reliable through personal correspondence. I refer to the actual history, numbers, individual characteristics, and the whole stamp and standing of the herds and flocks of our Province. Accordingly, having secured through the kindness of Mr. Wade, the names of over 1,800 breeders—said to be of pure bred cattle and sheep—I issued a circular to each, and have already received returns from about 400 of them, setting forth the kind, date of establishment, from whom established, present bull and ram in use, and the number of males and females.

I find a very considerable proportion of the 1,800 are not breeders of the thoroughbreds; that some have retired from the special line of breeding; that others cannot be found, and quite a number have not complied with my circular as yet.

However I am already in possession of such a mass of information in regard to the herds and flocks of this Province, as makes me view rather seriously how it should be presented for thorough and profitable digestion. Shall it be purely statistical?—which is the easiest for the writer—or should it be from a practical farmer's stand point, or would it be preferable to handle the material as a political economist?

Meantime take these important facts:—

There is only one thoroughbred bull of all ages to every one hundred farmers of the Province. Were they distributed equally every 15,000 acres would possess one bull, but they are very distinctly localized, as I hope to show you by a special map in my formal report. There are only about four pure bred cows to every pure bred bull on an average of kinds and herds, so the males are proportionately much more plentiful than the females. There are about one 1,000 herd of pure bred calves dropped every year, and this being the case the natural question is—What becomes of them all? As there are 50,000 farmers able to keep, and who should keep a thoroughbred bull for their own use, it follows, allowing one-half of the calves to be males, that at the present rate of breeding and distribution among ourselves, fifty years will yet be required to complete the bill, and this allows for no increase of farming. But a very large proportion of our thoroughbred cattle are removed from the country, and consequently, unless some great change takes place, the boy born this year may live for the next three score and ten and not see Ontario up as she ought to be in live stock matters. It is a sad reflection on our enterprise that for every 3,000 head of grade cattle, we only hold one thoroughbred!

Matters are no better in regard to sheep. For every one thousand head of grades, the Province possesses but one pure bred ram, of all ages, and consequently but one to every twenty-five capable farmers.

Were our farmers less independent than they are, were Ontario conditions less favorable than they are to the production of grain, if it were hard to make a living amongst us—the change from much grain to more flesh would be very much more rapid than it is. Men are doing well in the old track, and as average human nature is highly conservative in that line, our live stock interest will drag until science and practice make things more clear.

Will some of our subscribers send us a copy of the FARMER for Oct. 11th, 1882, to complete our file.

Send in your list at once, before the rush. Read our Premium and Clubbing List carefully. Page 121.

#### Some One Said

"One should not know they have a stomach," so far as feeding is concerned; but once the Liver becomes deranged "disasters come not singly." Everybody has Dyspepsia in some form, seven-tenths of all sickness is caused by too much bile—not enough bile—too much bile in the blood, not enough activity of the Liver, etc.

Regulate all this internal trouble. Regain pure, enjoyable, jubilant health with that grand prescription, ZEPHRA. At least try a 10c sample.



WILFORD'S Microcosm for October is to hand and is more than usually interesting number. The Microcosm is a religio-scientific monthly, published by Hall & Co., 23 Park Row, New York, devoted to the Discoveries of Theories and Investigations of Modern Science, in their bearing upon the "Religious Thought of the Age, with other matters of general interest."

TRIPLET MAXIMS.

- Three things to do—think, live and act.
Three things to govern—your temper, tongue and conduct.
Three things to cherish—virtue, goodness and wisdom.
Three things to love—courage, gentleness and affection.
Three things to contend for—honor, country and friends.
Three things to hate—cruelty, arrogance and ingratitude.
Three things to teach—truth, industry and contentment.
Three things to admire—intellect, dignity and gracefulness.
Three things to like—cordiality, goodness and cheerfulness.

Preachers err egregiously who trust to the excellences of discourses to weigh down minute defects.

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 very lasting, making it the most economical, and at the same time the most beneficial and elegant of toilet preparations.

COMMERCIAL.

Toronto, Oct. 23, 1882.

There has been no change of importance in the wheat market since our last report. British markets are fairly firm. New York and Western markets were quiet and steady. In Montreal matters are quiet. White wheat is at about \$1.05, and red at from \$1.07 to \$1.08. Flour is quiet but steady. Superior is at \$5.10 to \$5.20; spring extra, \$4.95 to \$5.00; strong bakers, \$5.00 to \$5.50, and fine, \$3.75 to \$4.00. The dairy market is steady with indications of larger prices.

A Montreal exchange says:—A very remarkable feature in the butter market is the continued advance in prices in the United States markets for finest creamery and dairy makes, a further advance of one cent per pound having taken place in New York to-day. The recent advance in the American markets has induced shipments to Boston and Providence, R. I., and yesterday a carload was shipped from here to Boston, which is something very unusual at this early stage of the season. Prices here are quoted steadily all round, with better bids for both Western Townships and Western dairy. The English markets are firmer. The following were the shipments of dairy produce from Montreal for the week ending October 21st with comparison:—

Table showing dairy produce shipments from Montreal for the week ending October 21st with comparison.

The shipments from New York are 2,000 boxes. The cheese market was firmer under stronger advices and freer orders from England and a gradually hardening market in the country.

The public cable advanced further today to 88 60, and the feeling is decidedly firmer.

Table of Butter—Wholesale prices for various grades like Creamery choice, Fair grades, Townships, etc.

Table of Cheese prices for September and October, August, July, and Common grades.

Here matters on the Produce market are steady. Wheat is practically unchanged in price since our last report. No. 2 fall is quoted at 96c to \$1.01. Spring is at \$1.02 for No. 2 and 1.04 for No. 1.

On the street grain has come in fairly well. Fall wheat brought from 98c. to \$1.03 and spring \$1.02 to \$1.04. Oats are at 42 to 44c, and barley 50 to 60c. Butter is at 22 to 25c. for lb. rolls, and 18 to 21c. for tub dairy.

PRICES AT FARMERS' WAGGONS.

Table listing prices for various agricultural products like Wheat, Barley, Oats, Potatoes, etc.

THE APPLE MARKET.

(Montreal "Gazette.")

Cable advices have just been received from Liverpool and Glasgow reporting a severe break in those markets, sales being reported in Glasgow at 10s to 16s per bushel for fall stock. For choice colored winter stock, however, there is a good demand. In Liverpool prices are lower, the apples having arrived in such bad condition that buyers decline purchasing except in small quantities. A cable from Manchester reported a sale at 16s. Winter apples are arriving in this market, and sales have been made of 190 bushels winter assortments at \$3.47; 200 do. at \$4.00 and 25 do. at \$4.25. In fall fruit, sales have taken place of 100 bushels damaged at \$1.00; 40 bushels good at \$2.50 and 50 bushels do. at \$2.25. Montreal Fameuse are badly speckled this year, which will interfere with their keeping qualities.

THE HOP MARKET.

(Montreal "Gazette.")

The hop market remains steady at full prices, the sale being reported of about 100 bales at 70c per lb., which, it is said, notes the seller the handsome profit of over \$4,000. We notice an inclination in some quarters to talk the market quieter, but whenever actual transactions occur, they show a pretty full basis of cost. Cablegrams from Liverpool report business at 30s advance on last week's prices, with bids of £18 for common and £21 for choice American. English crop nearly all out of growers' hands. Arrivals of Americans and Canadians selling freely, German market strong.

OLD COUNTRY CATTLE MARKET.

John Swan & Sons' weekly report says:—The supplies of fat cattle in Edinburgh and Glasgow markets this week have been large; in the former market there was a fairly good selection of home-fed cattle; in Glasgow, though the numbers were large, yet first-class quality was extremely scarce, neither home, Irish nor Canadian being as good as usual. The demand throughout has been quieter; the really finished classes maintained high prices, but the general tendency has been in favor of buyers. The English markets, with scarcely any exception, are slightly weaker, and quotations being nearly uniform there is no margin for speculation. The sheep markets are quite as good, the abundance of keep causing a

competition between the consumer and the feeder, the prices therefore keep firm for all descriptions. Lambs are now virtually out of season; still anything prime is readily found well sold.

Foreign supplies, entirely Canadian, have been larger, nearly 1,150 cattle of middling quality; a great many of these have been bought to turnip; such as were adapted for this purpose made fair prices; but a bad finish was made with the worse descriptions. In store stock, the demand for all classes of sheep and lambs available for keep is unlimited; prices, as such market occurs harden and an easy clearance made; high prices slightly checked for store cattle, still everything well bred is exceptionally dear. This scarce and very dear; calves also in better demand. About 1,000 fairly good Iceland sheep were placed between Edinburgh and Glasgow. Best Scotch cattle, 10s 6d; Irish, 10s 10d; Canadian, 9s 6d to 10s; secondary sorts, 10s 6d per stone loss, according to quality. Best beef, 10s 10d per lb.; secondary, 9d per lb.; inferior, 7d 1/2 per lb. Lambs from 10s downwards.

BY TELEGRAPH.

Montreal.

Oct. 21—Flour—Receipts, 1,400 bushels; sales reported, 100 bushels. superior extra, \$5.15 extra, \$5.05. Market quiet and steady at unchanged rates. Stocks in store and in millers' hands this morning—Wheat 136,312 bush; corn, 13,379 bush; peas, 22,710 bush; oats, 7,027 bush; barley, 1,000 bush; flour, 46,819 bush; oatmeal, 108 bush; cornmeal, 0 bush. Quotations—Flour—Superior—\$5.15-\$5.20, extra, \$5.00 to \$5.05; spring extra, \$4.90 to \$5.00; superfine, \$4.50 to \$4.75; strong bakers, \$5.75 to \$7.50; fine, \$5.75 to \$4.00; middlings, \$3.35 to \$3.70. Pollards, \$3.35 to \$3.50; Ontario, 10s 2d to 12s 6d; city bags, \$3.35. Grain—Wheat—White winter \$1.05; new red winter, \$1.15; spring, \$1.09 to \$1.10. Corn—80c. Pans—21 to 22c. Oats 25 to 37. Barley—65 to 70c. Rye—43 to 60c. Oatmeal—\$5.90 to \$6.00. Cornmeal—\$4.25 to \$4.35. Provisions—Butter—Western, 15 to 16c.; Brockville and Morrisburg, 18 to 20c.; Eastern Townships, 20 to 21c. Creamery, 21 to 26c. Cheese—10s to 12c. Pork—\$27.50 lard—15 to 17c. Bacon—1 to 15c. Hams—15 to 17c.

New York.

Oct. 21—Wheat—Steady; No. 1 white, \$1.10 asked for October; \$1.09 to \$1.10 for November; No. 2 red, \$1.11 to \$1.12 for cash; \$1.14 to \$1.15 for January; 4,000 bush. at \$1.11 to \$1.12 for October; 8,000 bush. at \$1.12 for November; \$1.13 to \$1.14 for December. Corn—Quiet. Receipts—Flour, 20,100 bush; wheat, 108,000 bush; corn, 625,175 bush; oats, 17,000 bush; rye, 15,000 bush; barley, 17,000 bush; pork, 25 bush; lard, 49c.

Toledo.

Oct. 21—Wheat—No. 2 red, \$1.01 for cash, or for October; \$1.01 for November; \$1.02 for December; \$1.01 for year; \$1.03 for January; \$1.03 bid for February; \$1.07 bid for May. Corn—76c for cash; 77c for October; 79c for November; 81c for year; 82c bid for May.

Oswego.

Oct. 21—Barley—Dull; sales, 10,000 bush. No. 2 bright Canada at 62c; 4,000 bush. Canada, by sample at 64c; 6,500 bush, by sample, at 65c; 3,000 bush., by sample, at 81c. Canal freights—Barley, 5c to New York; 4 to 4 1/2c to Albany; receipts, 17,000 bush.

Milwaukee.

Oct. 21—Wheat, 97c for November; 98c for December. Barley—Weak, at 80c. Receipts—Flour, 11,325 bush; wheat, 28,000 bush; corn, 7,000 bush; oats, 10,000 bush; rye, 1,000 bush; barley, 33,000 bush. Shipments—Flour, 11,975 bush; wheat, 2,000 bush; corn, 200; oats, 5,000 bush; rye, 2,000 bush; barley, 19,000 bush.

Detroit.

Oct. 21—Wheat—No. 1 white, 97c. bid for cash; \$1 for October; 99c to 99 1/2c asked for November; 99c for December; 99c for year; \$1.00 for January.

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, R. Wt., White, Club, Corn, Oats, Barley, Pork, Lard, Bacon, Tallow, Cheese.

OUR OFFER

—FOR—

1883.

The Most Liberal Yet.

1st.—Every RENEWAL and every NEW subscriber for 1883, whether coming singly to the office or in CLUBS will receive a copy of the large NIAGARA FALLS CHROMO, 22x28. Those getting up clubs will please bear this in mind.

2nd.—Any old subscriber sending us a new name and \$2, will receive in addition to his Chromo of Niagara Falls a copy of KENDALL'S TREATISE on the Horse and his Disease (which book is described below), also his choice of either of the following (GUARANTEED TRUE TO NAME):

- Ten Strawberry Plants (of the Celebrated Bidwell Variety).
Five Strawberry Plants (of the Celebrated Seueca Queen).
Two Strawberry Plants (of the New and Valuable Manchester).
Five Raspberry Plants (of Cutbert variety).
One Pound White Elephant Potato.
One of either of the following Varieties of Grapes: Concord, Delaware, Eumolpi, Champion, Hartford or Lady.

3rd.—Any old subscriber sending in more than one new name, and up to FIVE, can retain Ten Cents for every such name.

4th.—All new names over FIVE and under TEN retain Fifteen Cents per name.

5th.—All new names over TEN retain Twenty Cents for each such name.

NOTICE.—All remittances sent by registered letter or Post Office order will be at our risk. Names and addresses must be very plainly written to ensure papers being received.

All Chromos, Books and Plants, will be carefully packed and delivered by us pre-paid to any post office desired. The Plants, however, cannot be delivered till spring, the season for fall planting being about over.

In all cases the balance of this year will be given free to new subscribers for 1883. Any old subscriber whose time expires between now and Jan. 1st, 1883, by renewing now will get his receipt to 1st of Jan'y, 1881.

DESCRIPTIONS.

Kendall's Treatise on the Horse and his Disease, is a book of 100 pages, containing nearly one hundred engravings; an Index of Diseases, which gives the Symptoms, Cause, and best Treatment of each; a table giving all the principal drugs used for a horse, with the ordinary dose, effects, and antidote when a poison; a table with an engraving of the Horse's Teeth at different ages; with rules for telling the age of the horse; a valuable collection of Receipts, and much other information. In fact no one owning a horse should be without it.

The Colored Lithograph of Niagara Falls is admitted by all who have seen that Wonderful Work of Nature, as the most correct view of the Mighty Cataract ever taken. It is handsomely gotten up, and mounted on heavy paper, all ready for framing.

The "Country Gentleman" (price \$2.00 per year), and the CANADIAN FARMER, (price \$1 per year) ..... \$3 00

# The Canadian Farmer

WEDNESDAY, OCT. 25, 1892.

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Single Copies \$1.00 per year in advance sent 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.

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Published by the Welland Printing and Publishing Co., Incorporated October, 1891. N. H. Colcock, General Manager.

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## 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 businesses entirely separate as above.

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

BRO. JABEL ROBINSON, Master of Ontario Provincial Grange, will deliver a lecture at Stevensville Village on the C. S. R. in the County of Welland, on Thursday evening, the 2nd of Nov. Subject: "Necessity of Farmers' Co-operation." Bro. Robinson is a clear and forcible speaker, and throws his whole soul into his subject. All the farmers in the district should turn out to hear him.

## CALIFORNIA STATE GRANGE.

We quote the following extracts from the address of the Master of the California State Grange, before their annual meeting held October 3rd:

For the future, as in the past, we propose to advocate filling up the ranks of the Grange, already established, with the very best material among the farmers of the State, and by inducing back into the Order those who have already enjoyed some of its benefits, but who, from various causes, have strayed away from the fold.

When we succeed in this matter, as we are at present in a fair way of doing, the reaction, we hope, will so work in our favor that it will be compara-

tively an easy matter to re-establish them on a stronger basis than before. Let us inculcate, by precept and example, that we fully appreciate the teachings of our Order, and stand as living monuments to show that farmers are susceptible to the benefits of education and progression.

There is no question in my mind but that the Grange is stronger today, in all that appertains to stability of purpose, richer in experience, and possessed of more hope for the future, than it ever has been since its first advent on the coast.

## NON-PARTISAN

should be a familiar word in every farmer's and Granger's household. Just so long as the farmers allow themselves to be led by the partisans of either party, just so long will they be kept in the background, and instead of doing the thinking and acting for themselves, it will be done by those that have more cheek and assurance, and be done for selfish motives instead of the greatest good of the greatest number. Assert your manliness, bravery and independence, and allow no party whip to crack its silken threads about your ears and taunt you with being a renegade.

If you are not able to have your influence felt at primaries and conventions, yet, take a ticket from each party and make a judicious selection, regardless of party names, and you will soon teach the nominating machinery to put up none but good names, if they expect your support.

In conclusion, Patrons, as our objects, aims and final results, which we are seeking are mutual, let this be one of the most harmonious, the most social, elevating and refined meetings ever held under the auspices of the State Grange.

While I would scorn to detract anything from the high moral tone, social and educational standard that any former Grange, its officers and members have attained, I believe we are living in a progressive age, and the stupid, dull, clod-hopping farmer is susceptible of being electrified by the constant sparks thrown toward him in the Grange which is known as the pre-eminent organization of the Patrons of Husbandry.

There never was a time when the farmers should take more courage than now. His calling is being recognized more than ever, and in the pursuit of his industry, a larger field is acknowledged for the employment of brains, education and experience. Our industry must have greater representation in the county, State, and National Governments. Just so long as we remain quiet, and contented with our condition, just so long may we be allowed to remain. It is only by exertions on our part that we will be ever able to attain our rights and hold positions that our calling is entitled to.

Page 121 contains our Clubbing and Premium List. Study it.

Now, fellow-farmers and you ladies, to whom I have not as yet alluded, though your importance to every place of our earthly pilgrimage places you to the front rank of all virtuous undertakings. Though prone to forget our better halves, it is an evanescent vagary and we come back and exclaim: Who ever knew a well-regulated and comfortable home without the presence of woman. Our unequal toil as farmers is sustained by your kind and loving presence. It is the office which the ladies of the world perform, that gilds the acion and makes bright the pathway of life.—COL. PROLETT.

## "THE PUBLIC BE DAMNED."

Few men possess sufficient temerity to give expression to such a wish as is embodied in the sentiment above quoted. William H. Vanderbilt, who is now making a trip in the west, is not to be classed as amongst those who look upon the public as possessing rights which wealth and monopoly are bound to respect. In the course of an interview with a correspondent of the New York Times, at Chicago, the other day, in relation to the rich man's railway interests, the scribe innocently asked if certain trains were run for the public benefit. "The public be damned," said the millionaire in reply. "What does the public care for the railroads, except to get as much out of them for as small a consideration as possible? I don't take any stock in this silly nonsense about working for anybody's good but our own, because we are not." In view of this candid acknowledgment of his contempt for the public, is it not about time the public began to assert some claim to consideration at the hands of the railway millionaire? All that Vanderbilt possesses to-day he owes to the leniency of the public. It was the public who established the railways which he now controls. He should not feel himself superior to the public. The public created him, and it is an anomaly to suppose that the public cannot undo its work. Great wealth in the hands of some is the means of accomplishing great good to the public; but great wealth in the hands of such a man as W. H. Vanderbilt is like a curse to the possessor and to the public. It has made him selfish, arrogant and mean. It is no secret that his father, the old commodore, hesitated a long time before he decided to give his wealth to his son, the present railway autocrat. No doubt the commodore knew the man as well as the public know him.—*St. Catharines Journal.*

Young, middle aged, or old men, suffering from nervous debility and kindred weaknesses, should send two stamps for large treatise, giving successful treatment. WORLD'S DISPENSARY MEDICAL ASSOCIATION, Buffalo, N. Y.

The modern pie-rate—ten cents a piece.

## VISIT TO MRS. PINKHAM'S LABORATORY.

One day last week, in company with Dr. S. B. Brittan and Mr. Chas. McArthur, of New York, we visited the residence and laboratory of Mrs. LYDIA E. PINKHAM, of Lynn, and there witnessed the proofs of the wonderful development of the great business now conducted by this lady. We were prepared to be favorably impressed by the woman who has achieved such unequalled distinction within the short period of five years, as perhaps renders her more widely and generally known than any individual of her sex in this country. We have repeatedly heard it intimated that Mrs. Pinkham is an imaginary personage, but this is a great mistake. We were introduced to a lady of comely presence, but possessing a far more delicate and spiritual organization than we had expected, to find in the person of a woman who has accomplished so much on the material plane of life. The pictures of herself—which may be seen in the papers all over the continent—bear a strong resemblance of the original, in the general outline of the head and the benign expression of the countenance. Her conversation reveals her natural refinement and general intelligence, while her voice is modulated by the supremacy of those gentle attributes

which appropriately belong to the higher types of womanhood.

The rapid extension of the business of supplying the large and constantly increasing demand for Mrs. Pinkham's Remedies—more especially those which are specifically adapted to the renovation of the impaired constitutions of women—is sometimes quite extraordinary and cannot fail to excite astonishment wherever the facts are known. Her principal laboratory is admirably arranged and supplied with all necessary and improved apparatus for extracting the medicinal and curative properties of the plants, herbs, roots, barks, berries, etc., which she employs for the healing of suffering humanity.

Mrs. Pinkham and her worthy husband have sustained a great loss and been deeply afflicted in the recent death of two noble sons. They were young men of uncommon character and great promise. Fired by the ambition to benefit others, and at the same time to build up the fortunes of the family, they unfortunately overtaxed and exhausted their physical energies by a too constant and intense application to business, which sad event has placed in the hands of a surviving brother the mercantile department of the business. This gentleman is evidently equal to the heavy responsibility now imposed upon him, and under his judicious management the business is prospering in a degree that has more than realized the most sanguine expectations.

The sales of Mrs. Pinkham's medicines for the current year are likely to reach the round sum of \$400,000, and the indications warrant the conclusion that the receipts of next year may exceed half a million of dollars. To avoid paying the heavy duties imposed by the Canadian government on proprietary medicines, Mr. Pinkham has just erected a laboratory for the manufacture and sale of the remedies in British America.

We are always glad when intelligent enterprise is crowned with success and the sceptre of influence placed in the hands of honest industry; more especially do we rejoice when the enterprise—as is the case in the present instance—aims at the accomplishment of beneficent ends. Mrs. Pinkham and her noble family have fairly earned the great success they have won.

Let our readers remember that Mrs. Pinkham does not relieve human suffering after the manner so prevalent among the doctors of the allopathic school. To relieve pain she does not destroy sensation by the use of powerful narcotics—which is the evil device of professional ignorance of the healing art—but her remedies assist nature to throw off the disease by imparting a new energy to all the organic functions of human life. May the time soon come when we shall witness the end of the allopathic method of killing people to terminate their sufferings.—*Editorial from Banner of Light, Boston, Sept. 16, '92.*

BRO. JABEL ROBINSON, Master of Provincial Grange, will deliver a public lecture in the Town Hall, Stonebridge, on Friday, November 3rd, at 2 p. m. Everybody invited.

## MILLIONS GIVEN AWAY.

Millions of bottles of Dr. King's New Discovery for Consumption, Coughs and Colds, have been given away as Trial Bottles of the large size. This enormous outlay would be disastrous to the proprietors, were it not for the rare merits possessed by the wonderful medicine. Call at any drug store and get a trial bottle free, and try for yourself. It never fails to cure.

LADIES' DEPT.

AUTUMN STYLES.

For little girls the Mother Hubbard style of dress and cloak seems to be yet the most popular. For chubby little "tots," those made with deep yokes, the skirts shirred on, are most becoming. Slender children wear shirred yokes, that is, the breadths are measured from the neck to the bottom of the skirt, and the fullness all shirred in on the shoulders to the depth of a yoke. In both cases a small puff is added at the shoulder. One edge of this is sewed on where the sleeve joins the yoke, the other about an inch further up the shoulder. If the goods is soft this puff should be lined with crinoline so that it will set up from the shoulder.

For a brunette the scarlet cloaks are becoming, and milliners show us various shapes of scarlet plush and felt hats to wear with them. Blondes are lovely in pale brown, lined with a delicate shade of blue or pink, the lining showing at the neck and sleeves, and the edges of the puffs on the shoulder. Through the summer the little ones have worn muslin caps with a broad flapping ruffle around the face. The same style is made now in velvet. Economical mothers can make these caps quite easily. First take a strip of foundation lace about two inches wide and fit it to the head, taking up pleats where necessary, so that it will fit closely to the nape of the neck. The crown is mob cap shape, that is a trifle longer than round, and gathered on to the strip of foundation lace so that it will fit the back of the head closely. The front is a bias piece of velvet, lined with a pretty color in silk or satin and pleated on to the front edge of the foundation lace. It should be about four inches deep at the center, narrowing down to an inch at the ears. Understand, that this frill projects quite far over the forehead, and must be full enough to stand quite away from the face. A strip of velvet lined like the front is pleated up and forms a cape at the back of the neck. Where the front joins the crown may be covered with another pleating, or trimmed with ribbon matching the fringe.

A simple and pretty way to make a slip for a child of three or four years, to be worn with a shirt waist, is to run together two breadths of white muslin or pretty plaid gingham for the skirt, measuring from the armpits to the bottom of the skirt. A strip of handsome open-work Hamburg embroidery about four inches deep is cut long enough to pass loosely around the bust under the arm, buttoning at the back. The skirt is sewed on the plain edge of this, so that the scallop or worked edge stands up. It is held on by a shoulder strap of embroidery, placed where it will stay on the shoulder and not slip down over the arm. The skirt may be trimmed or not, as you choose. These slips are very pretty made of pale shades of cashmere and Hamburg embroidery.

To make a polonaise fashionable it can not be cut open from the lower edge to the waist line; cut off the middle part of the back pieces so as to form square coat lappets, and either loop up the sides into paniers, or arrange them into wide panels, square, pointed or rounded, which fall over the skirt. If you prefer simply draping the polonaise, slanting it off at the side, you can turn up the corners in the same way as soldiers turn up the flaps of their coats while marching. These corners may be lined with plain or striped silk, either black or colored. This last combination give greater ele-

gance to to the toilet, more especially if you use silk to match for the facings of the bodice and sleeves, or else for a plastron. The neck may be refreshed by a small standing-up collar trimmed with a very small ruching; the lower edge should be trimmed soberly, and the paniers not at all. If the outline should appear too bare-looking it may be edged with narrow lace or jet embroidery, braiding or passementerie patterns.—Farmers' Review.

CROCHET STITCHES.

Chain stitch is drawing a thread through a loop. Single crochet is inserting the needle in a loop and a stitch (already on the needle) at once. Then drawing the thread through the loop. Double crochet is to draw the thread through the loop; then through the two stitches on the needle. Treble crochet is to put the thread over the needle before it is inserted in a loop, then draw the thread through the loop, then through two stitches, and again through the last two stitches. Long treble is just like the treble, except that the thread is thrown over the needle twice; or, if desired, three times, which makes the very long crochet. Tricoter is to pick up each stitch, pulling the thread

through as in knitting, and keeping all the stitches on the needle. Returning, pull the thread through one stitch, then through two, until you reach the end. Backward and forward make one row. Elastic crochet is worked backward and forward, taking first one then the other loop of the chain. To raise, is to pick up a stitch; increase, is to work a second stitch; decrease is to drop or miss a stitch. What is called afghan stitch is here given as tricoter.

Moss or seed stitch is a very thick, pretty stitch for afghans or sofa pillows, also serviceable to cover a foot-stool. Two coarse steel or ivory needles and single zephyr or Germantown wool or common yarn. Cast on any even number of stitches. Take off the first stitch, pass the yarn forward and seam one stitch, and go on sewing and knitting plain every alternate stitch. In knitting back care must be taken to knit plain the seamed stitch on the right side and seam the plain one.

Imitation coral—two steel needles—No. 14 are required—a piece of coral red, narrow-worsted braid. Cast on three stitches, take off the first without knitting and knit plain the other two. Every row is exactly the same. This

makes a bright, pretty trimming for various things.

Instruction.—Cast on nine stitches; take off the first without knitting; knit two, cast the thread over and knit two together, seam one. Every row the same. The width can be increased by nines to any size. This is handsome for tidies.

Leviathan stitch.—Work four chain; pick them all up as for tricoter; draw the thread through all four at once; repeat; when long enough turn back thus: Miss two, work a single crochet between the two and three; then four chain, one single into the stitch between the next two, and so on; repeat from the beginning; do one treble between each picot, then a single on top of the next picot; this makes the work even.

Scarf stitches.—Two wooden needles and fine red or white yarn; cast on the number of stitches required; knit the first stitch; put the yarn forward and knit two together, repeating to the end; knit across plain, then repeat first row until finished; always knit the first and last stitches on the needle plain. This is a strong pretty stitch for many things.—The Household.

See our Premium List on page 121.



No. 188.—Lady's Mantle. The pattern of this garment is cut in three sizes, 34, 36 and 38 inches bust measure. 4 1/2 yards material, 24 inches wide, 7 yards fringe and 16 buttons for medium size. Price 25 cents, any size.



No. 187.—Lady's Polonaise. The pattern of this garment is cut in five sizes, 32, 34, 36, 38 and 40 inches bust measure. 6 1/2 yards material, 24 inches wide, and 15 yards lace for medium size. Price 25 cents, any size.



No. 208.—Lady's Sacque. The pattern of this garment is cut in five sizes, 32, 34, 36, 38 and 40 inches bust measure. 3 1/2 yards material, 24 inches wide, and 15 yards lace for medium size. Price 25 cents, any size.

LITERARY.

HOW THE WAGER WAS WON.

Written for the CANADIAN FARMER by NORA SPARKS.

'Twas on a hot sultry day in August, 1882, that I strolled along the mossy banks of the noble Niagara, note book in hand, in order to jot down a few pages undisturbed by ought save the twittering of the feathered race, and the babbling of the brook. Scarcely had I seated myself in that shady, secluded nook, which I flattered myself never knew any other occupant, when by the rustling of the bushes I knew some one was approaching. Cautiously parting the thick branches of the wide-spreading shrub I observed two young gentlemen, engaged in earnest conversation, slowly approach and seat themselves not more than six feet from me. To move was to betray my place of concealment, although to be an eavesdropper was highly repugnant to me; however as their conversation suddenly turned upon a lady acquaintance my scruples all vanished and I was all attention. I also felt justified in taking down occasional notes of their conversation. One of these gentlemen was Frank Vane, a man I had always considered my enemy, not because he had ever done anything against me—but because (must I tell it?) he would not be my attendant, and would persist in following in the train of my rival. He was a clever little blonde gentleman, just my beau ideal, *mon petit cavalier*; but since it was my misfortune to be discarded I did not die of a broken heart. No indeed! nor did I pine or waste away in the least on his account. I just set to work to help Jack Lyle or anyone else who would do any plotting against the aforesaid gentleman. Jack Lyle was the companion of Frank Vane in the following discourse, which I, most unfortunately for the latter, overheard:

"Well, Lyle, old fellow, without doubt, Clare Weston is a great flirt, but I doubt if she would accompany you to the festival to-night, after promising to accept my escort. Yes, I very much doubt, and I'll give her the benefit of that doubt."

"Nonsense!" replies Lyle, "Don't flatter yourself. Clare'll go with me, I'll wager a ten dollar hat, if I ask her, and leave you t-----"

"Done! who'll hold the stakes?" exclaimed Vane.

"As there's no one here, comrade, to do so, I give my word of honor."

"I give my parole too—Lyle."

"Then I suppose, Vane, you expect a companion at the festival to-night?"

"Most certainly I do. Have I not her promise to that effect?"

"So much for her promise," exclaimed Jack Lyle, as he snaps his fingers in the air, then rises and leisurely walks away.

Frank Vane remains a few minutes longer, then departs saying to himself:

"Well, I'm sure of winning, so I'll go regale myself, then return and spend an hour in yonder hammock."

After they had both departed I left my hiding place and was soon at the side of the hammock. Ha! ha! Mr. Vane, I'll engage this for you—you shall have a fall—hope you won't get your neck broken; but of course I want you to be a little bruised. In less time than it takes me to tell it I climbed the tree (hardest thing I ever did), loosened the hammock and replaced the strong, thick rope by a small cord. This reclining couch was suspended about 10 feet from the ground,

but as the soil was rather soft there was no danger of a person breaking bones from such a fall. Having arranged that the next thing was to find Jack Lyle and put him on his guard, for I did not want that individual to spoil all by making use of the hammock. For this purpose I ran swiftly along the path—running nearly over the gentleman I was in quest of.

"Hallo! O! O! Miss Sparks, don't run over a fellow entirely. What are you after? Some mischief, I'll be bound. Here, my lady, is a seat. I insist on your taking it. Now why that merriment that sparkles in your eye?"

After seating myself on the indicated seat I venture to query: "Have you constituted yourself my father-confessor, Mr. Lyle?"

"Yes, for the time being I have."

"Well at any other time I might dispute your authority, but at present you are the very one I am in search of. I heard your conversation with Mr. Vane, and I offer you my assistance. No, on second thought, I won't offer it—for you will be compelled to take it—or fail in your game. Clare Weston is not foolish enough to throw away the gifted and handsome Frank Vane, for the polite and heartless Jack Lyle. No, not so long as there is the slightest chance of going with Vane will she accept your escort. However I am equally certain that you are second best in her estimation, and hence I bid you take this for your motto, '*Nihil Desperandum.*' Have you a sample of Vane's writing? An old envelope, or in fact almost anything will do for I am an excellent hand at imitation."

"Yes, Miss Nora, I have here an old envelope that Frank addressed to me a few weeks ago. If it will be of any service to you take it, and welcome."

Of course I take possession of it and warn him not to venture near the hammock this evening. And as he promises there is a wonderful quizzical look in his deep blue eyes, but I pay no attention to that and proceed with my directions:

"Be sure and be round at Weston's, Jack, precisely at seven, and I am quite certain Clare'll go with you. Vane said he would be there about that time but I'll try and prevent him—sprain my ankle and require him to take me home or something else."

"Why Nora, you are a regular schemer! Who would have thought those hazel orbs of yours could hide such revenge as this? 'Tis passion strange, indeed."

Being averse to flattery of any kind I bid my companion good-bye, and proceed towards home. On my arrival there I spend as little time as possible over the evening meal, and then engage in a little writing, which, if my readers could have seen, they would not be surprised that I had spent nearly an hour over it. Or perhaps, if they had seen me sitting by my table with the crumpled envelope spread out in view, they would have understood it all. In less than two hours from the time of leaving the hammock I am again by its side, but expecting the arrival of Mr. Vane every minute, I conceal myself a little way from it. Then as I have nothing I can do I soliloquize on the probable success of my plan:

No doubt all will turn out right if I can manage Mr. Vane; possibly he may prove refractory, but then I shall bear in mind that old saying, which I am sure you have heard from your earliest day, namely—"Nothing venture, nothing have." At all events I worked hard enough getting that note

written. Vane's handwriting is not at all common. Let me see; think I'll read it over, lucky I kept a copy:

DEAR MISS WESTON:—I shall not be alone to-night, business having unavoidably called me away. In order that you should not be debarred from the pleasure, I have requested J. Lyle to call for you. Accompany him and enjoy yourself. Yours, &c., F. VANE.

"I know it is real mean to do that, but I suppose all is fair in 'love and war.' I do wonder what she thinks of the note. She must have it by this time." My meditation is cut short by the appearance of the Honorable Frank Vane, who is walking majestically along, as if he had all the country under his control, or at least as if he felt like an Edgar of Ravenswood. He grasps a branch of the nearest tree and gracefully lifts himself into the hammock. My heart almost stops beating at this period—but a crack and a thud recalls me to realities. I slip from my place of concealment, and gain his side in a second, looking as sober as a bishop—though ready to die for laughter.

"Are you much hurt, Mr. Vane?"

"Not at all—thanks—slightly, I do believe, Miss Sparks. I'll be over it directly," he manages to stammer.

I bring him some water in his new silk hat ere he has time to prevent me, and he looks somewhat relieved when he sees that it is not entirely soiled.

"I declare, Miss Sparks, I feel dreadfully stiff; I have an engagement with Miss Weston to-night, or I believe I'd go home."

"Give it up by all means, Mr. Vane. You are not at all able to go, and I, as your physician, forbid it."

"Does it not strike you as peculiar, Miss Sparks, that that rope should have broken loose?"

"Not at all. See, here is the thick rope; it has not been properly fastened to the tree (I had while examining it dexterously loosened the cord and slipped in my pocket).

"Many thanks, for your kindness, I must now, indeed, leave you."

"Then Mr. Vane, I'm to understand that you ignore my commands. So be it, I'm going your way."

We walk along very slowly, for I must hinder him at least half an hour longer or the game is lost. When we are about half way across a boggy strip of land I slip to the ground and Vane exclaims:

"Why, how thoughtless of me! I should have offered you my arm—Have you hurt yourself?"

"I—I—think, Mr. Vane, I've sprained my ankle but as you are in haste, I won't trouble you to remain."

"Have you, then, such a detestable opinion of me as that. Think you I would leave a lady unable to walk in such a place as this? Let me carry you."

As he says this I burst out laughing, for I am not very light (260 lbs). Sobering down, however, in an instant I tell him how impossible such a procedure would be, for I can't bear the least movement of the injured member.

"But I'll be very careful."

"O, dear, no, Mr. Vane, I'll be able to go by-and-by. I would not for worlds detain you. Go! I will follow presently."

My companion seats himself on the grass beside me and opens a volume of Spencer and says:

"Shall I read to you?"

"Thank you, yes," I reply, and for fully three-quarters of an hour his deep, mellow tones break the stillness of the air. At the expiration of that time he closes the book and asks me if I am able to proceed; of course I signify my ability, and in a short time we reach my own door, where, after

bidding Mr. Vane adieu, I remain, waiting to hear the result of my afternoon's work. It is long in forthcoming, for the very next day Jack Lyle drops in with the fattest hat on I had seen in some time, and exclaims:

"I've won the wager, thanks to your ingenuity, Nora."

An additional inducement to new subscribers, is that each one, even at the reduced Club Rates, will get our Niagara Falls Chromo, 22 x 28 in. See page 121.

SKINNY MEN.

"Wells' Health Renewer" restores health and vigor, cures Dyspepsia, Impotence, Sexual Debility. \$1.

A little fellow asked his mother if silks grew. He had probably heard of the gros grain silk.—*Philadelphia Bulletin.*

DR. R. V. PIERCE, Buffalo, N. Y.: Dear Sir—I have advised many ladies to try your "Favorite Prescription" and never saw it fail to do more than you advertise. Yours truly, Mrs. A. M. Rankin, 141 Bates St., Indianapolis, Ind.

A Kentucky editor is in a dilemma. It is not how to dispose of his edition, but whether the profits on the sale of his old exchanges will pay for the next issue.

Mrs. A. NELSON, Brantford, writes: "I was a sufferer from Chronic Dyspepsia for eleven years. Always after eating, an intense burning sensation in the stomach, at times very distressing, causing a drooping and languid feeling, which would last for several hours after eating. I was recommended by Mr. Popplewell, Chemist, of our city, to try No. 1 Arop & Lyman's Vegetable Discovery and Dyspeptic Cure, and I am thankful to say that I have not been better for years; that burning sensation and languid feeling has all gone, and food does not lie heavy on my stomach. Others of my family have used it with best results."

Why ought wicked people to go carriage driving often? Because it fre-adamonishes them to keep to the right.—*Philadelphia Item.*

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."

Four brothers named Burnett recently married four sisters named Berry. This happened in Tennessee, where the berry crop is usually choice and plentiful.

A WELL "CURED" EDITOR.

At No. 80 King Street East, Toronto, Ont., are the editorial rooms of the *Sunday School Manual*, edited by Mr. Withrow, of 240 Jarvis street, in the same city. Conversing recently with several gentlemen, one of them the representative of the largest advertisers in the world, Mr. Withrow remarked: "As to advertising, I consider St. Jacobs Oil the best advertised article by far. It is a splendid remedy too. Besides the many cases of rheumatism it has cured right amongst us, it has rendered me most efficient service in curing a severe soreness of the chest and an obstinate headache. It does its work satisfactorily."

VULGAR HABITS.

Asking questions private and personal is a vulgar habit; and telling your own business, which no one wants to hear, is another. Asking the cost of a present that has been made to you, loud talking in public, hard staring at table, insolent disrespect to husband, wife, sister or brother, showing temper in trifles, and making scenes in public, showing an embarrassing amount of fondness or making love in public, covert sneers of which people can see the animus if they do not always understand the drift; persistent egotism which talks forever of itself and cannot even feign the most passing interest in another, detraction of friends and it may be of relatives, a husband telling of his unpleasantness, a wife complaining of her husband's faults, the bold assumptions of superiority and the servile confession of infinite unworthiness—all these are signs and evidences of vulgarity—vulgarity of a far worse type than that which eats its fish with a steel knife, and says "You was," and "Each of the men were."

"O, I say!" exclaimed a man who walked up to the grocery counter with a limp that indicated that one side of him had gone fishing, "just pass your tongue over that and tell me what you call it."

The grocery man did so and replied: "Some people would call it mustard, but it is a powerful weak imitation; where did you get it?" "Got it here in this store this very morning, and my wife said it didn't amount to nothing."

The other day we read some wise fool's saying like this: "You should never pull down an anchor until you have something to put in its place." In other words, if your friend is out for a boat ride just above Niagara Falls don't disturb him until you have found some smooth water for his boat. This is all nonsense. When a man is in the wrong get him away from it as soon as possible. He will himself find something to take its place when it is needed. An error can do him no good, and the sooner he gets rid of it the better. It may not be all that is required, but it is a long step towards it.

A WOUNDED VETERAN.—The average Washington claim-agent is not a man to be disturbed by any scruples of conscience. "You say you were wounded during the late war?" "That's what I said," returned the applicant for a pension. "Do you remember what year it was?" "In 1864, I think." "Where were you wounded?" "In the wrist." "Was it a minnie ball?" "Not exactly. Her name was Minnie, but it was a corset bone that wounded me." "All right," exclaimed the agent, "we'll call it a bayonet stab." And to-day the corset scarred veteran is occupying a lucrative place on Uncle Sam's pension roll.

Page 121 contains our Clubbing and Premium List. Study it.

PERLS OF PAPER BAG BUSTLES.

There is a woman in the West End who has learned a lesson that will last her a lifetime. She has for years been wearing these paper bags, such as the grocers use, for bustles. The paper is stiff and sticks out splendidly, and makes the dress look well. Last Sunday morning, while she was dressing, her young son got into the room and blew the paper bag full of wind and tied a string around the mouth of it, and left it in the chair. The good lady took it and tied it on, and dressed herself for church. She bribed her husband to go with her, though he is

sort of Bob Ingersoll Christian. As they went up the aisle the minister was reading a hymn about "Sounding the loud Hosanna," and the lady went into the pew first, and sat down while her husband was putting his hat on the floor. There was a report like distant thunder. You have heard how those confounded paper bags explode when boys blow them up and crush them between their hands. Well, it was worse than that, and everybody looked at the innocent husband, who was standing there a picture of perfect astonishment. He looked at his wife as much as to say, "Now, this is the last time you will ever catch me in a Church if you are going to play any more of your tricks on me. You think you are going to scare me into getting religion."

The minister stopped reading the hymn and looked over his spectacles at the newcomers, as though it would not surprise him if that bad man should blow the Church up. The poor lady looked around as much as to say, "I didn't know it was loaded," and she looked the hymn book through for the hymn, and as the choir rose to sing she offered one side of the book to her husband, but he looked mad and pious, and stood at the other end of the pew and looked out of the stained glass window. After the services they started home together. He didn't know what made that noise until they got home, but after a little skirmishing around his wife held up a bursted paper bag and asked the boy if he blew that up. He said he did. The boy and his mother and a press board paid a visit to the kitchen, and there was a "sound of revelry." Boys will be boys.—Washington Capitol.

Mr. Charles V. Dutcher, of Milford, New Brunswick, Can., has patented an improved potato digger, in which the potatoes and soil are raised by a scoop from the hills and carried by means of paddles, operated by a chain belt from the axle of the digger, over a slotted frame, back to the shaker frame, which is vibrated by means of a zigzag projection on the inside of the drive wheel of the digger, and the potatoes are separated from the soil.

MORSEFORD'S ACID PHOSPHATE is useful in dyspepsia. It gives the stomach tone and imparts vigor to the whole system.

See our Premium List on page 121.

VERBAL ERRORS TO BE GUARDED AGAINST.

The following examples of the more common errors in the use of words are taken from "The Verbalist":

- Accord, for give; as, "the information was accorded him."
- Aggravate, for irritate; aggravate is to make worse.
- Allude to, for refer to or mention.
- As, for that; "not as I know," for "not that I know."
- Avocation, for vocation; a man's vocation is his business; avocations are things that occupy him incidentally.
- Illy, for ill.
- Imaugurate, for begin.
- Kids, for kid gloves.
- Learn, for teach.
- Liable, for likely or apt.
- Lend, for lend.
- Pants, for Pantaloons, or, better still, trousers.
- Partake, for eat.
- Plenty as an adjective, when plentiful is meant.
- Balance, for rest or remainder.
- Character, for reputation; one may have a good reputation, but a bad character, and the two words should never be confounded.
- Dangerous, for in danger; a sick man is sometimes most absurdly said to be dangerous, when it is only meant that the poor fellow is in danger himself—a very different thing.

Demean, for debase, disgrace or humble. To demean one's self is merely to behave one's self, whether ill or well.

- Dirt, for earth or loam.
- Donate, for give.
- Real, for very. as "real nice," "real pretty."
- Reside, for live; residence for house.
- Retire, for go to bed.
- Seldom or ever for seldom if ever, or seldom or never.
- Some, for somewhat; "she is some better to day."
- Stop, for stay; "where are you stopping?" This is one of the vilest witticisms.
- Summons (noun), for summon (the verb).
- Those kind of apples, for that kind.
- Transpire, for occur.
- Vulgar, for immodest or indecent.
- Without, for unless.
- Execute, for hang, as applied to the criminal. It is the sentence, not the man, that is executed.
- Healthy, for wholesome; an onion plant may be healthy, but when you pick an onion, there is no more healthiness or unhealthiness to that, although it may or may not be whole some as an article of food.

CHEAP FARMS NEAR MARKETS.

The State of Michigan has more than 4,000 miles of railroad, and 1,000 miles of lake transportation, schools and churches in every county, public buildings all paid for, and no debt. Its soil and climate combine to produce large crops, and it is the best fruit state in the northwest. Several millions of acres of an enriched and fertile lands are yet in the market at low prices. The State has issued a PAMPHLET containing a map and descriptions of its soil, crops and general resources, which may be had free of charge by writing to the COMMISSIONER OF IMMIGRATION, Detroit, Mich.

1891 THE CULTIVATOR 1892 Country Gentleman

THE BEST OF THE Agricultural Weeklies!

The COUNTRY GENTLEMAN is the leading Journal of American Agriculture. In amount and practical value of contents, in extent and ability of correspondence, in quality of paper and style of publication, it occupies the FIRST RANK. It is believed to have no superior in either of the three chief divisions of

Farm Crops and Processes, Horticulture & Fruit Growing, Live Stock and Dairying, while it also includes all minor departments of rural interest, such as the Poultry Yard, Entomology, Bee-keeping, Greenhouse and Grapes, Veterinary Receipts, Farm Questions and Answers, Fertilizer Readings, Domestic Economy, and a summary of the News of the Week. Its Market Reports are unique in their complete, and much attention is paid to the Prospects of the Crops, as throwing light upon one of the most important of all questions—When to buy and when to sell. It is liberally illustrated, and is intended to supply, in a continually increasing degree, and in the best sense of the term, a

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Ayer's Hair Vigor

FOR RESTORING GRAY HAIR TO ITS NATURAL VITALITY AND COLOR.

It is a most agreeable dressing, which is at once harmless and effectual, for preserving the hair. It restores, with the gloss and freshness of youth, faded or gray, light, and red hair, to a rich brown, or deep black, as may be desired. By its use thin hair is thickened, and baldness often though not always cured. It checks falling of the hair immediately, and causes a new growth in all cases where the glands are not decayed while to brashy, weak, or otherwise diseased hair, it imparts vitality and strength, and renders it pliable.

The Vigor cleanses the scalp, cures and prevents the formation of dandruff and, by its cooling, stimulating, and soothing properties, it heals most if not all of the humors and diseases peculiar to the scalp, keeping it cool, clean, and soft, under which conditions diseases of the scalp and hair are impossible.

As a Dressing for Ladies' Hair The Vigor is incomparable. It is colorless, contains neither oil nor dye, and will not soil white cambric. It imparts an agreeable and lasting perfume, and as an article for the toilet it is economical and unsurpassed in its excellence.

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



SILVER MEDAL

Thorley's Improved Horse and Cattle Food

Was awarded this present season a SILVER MEDAL, at the

Industrial Exhibition, Toronto

The only Medal ever awarded to any Food at the above Fair. Also a DIPLOMA at the

Provincial Exhibition,

Kingston, and at each of the Great Central Fairs at Hamilton and Guelph, the only Food ever awarded a Diploma at these Fairs, and was also awarded a Diploma at the Western Fair, London.

For sale by dealers everywhere.

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CONSUMPTION CURED.

An old physician, retired from active practice having had placed in his hands by an East Indian Missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma, and all Throat and Lung affections, also a positive and radical cure for General Debility and all nervous complaints, after having thoroughly tested its wonderful curative powers in thousands of cases, feels it is his duty to make it known to his fellows. The recipe, with full particulars, directions for preparation and use, and all necessary advice and instructions for successful treatment at your own home, will be received by you by return mail, free of charge, by addressing with stamp or stamped envelope to Dr. J. C. Ryan md, 146 Washington Street, Brooklyn, N. Y.

The love of glory can only create a hero; the contempt of it creates a wise man.—Folleyrand.

MR. PARPES BOILEAU, 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.

The only true religion is personal religion. "Make yourself a good man," said Carlyle, "and then you'll be sure there's one saved in the world."

MISS MARY CAMPBELL, Elm, writes: "After taking four bottles of Northrop & Lyman's Vegetable Discovery and Dyspeptic Cure, I feel as if I was a new person. I had been troubled with Dyspepsia for a number of years, and tried many remedies, but of no avail, until I used this celebrated Dyspeptic Cure." For all impurities of the Blood, Sick Headache, Liver and Kidney Complaints, &c., it is the best medicine known.

A nation does wisely, if not well, in starving her men of genius. Fatten them and they are done for.—Charles Buxton.

NEVER GIVE UP.

If you are suffering with low and depressed spirits, loss of appetite, general debility, disordered blood, weak constitution, headache, or any disease of a bilious nature, by all means procure a bottle of Electric Bitters. You will be surprised to see the rapid improvement that will follow; you will be inspired with new life; strength and activity will return; pain and misery will cease, and henceforth you will rejoice in the joys of Electric Bitters. Sold at fifty cents a bottle by all druggists.

If religion does not make a man heartsome and pleasant at home, it is of no particular benefit to a family.

If you are bilious, take Dr. Pierce's "Pleasant Purgative Pellets," the original "Little Liver Pills." Of all druggists.

A popular writer, speaking of the ocean to-graph, wonders whether the news transmitted through the salt water will be fresh.

What is the great cry from ocean to ocean? Kendall's Spavin Cure. Read their advt.

ST. JACORS OIL



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.

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HALL'S CATARRH CURE

\$100 Reward for any case of Catarrh that it will not cure.

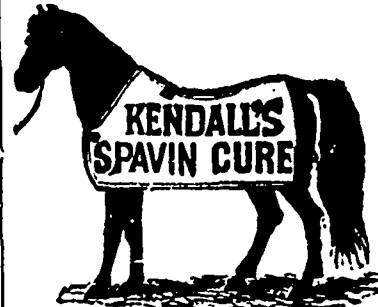
Wolland, March 6, 1882. My little daughter was troubled with Catarrh for two years, and was very much benefited by the use of "Hall's Catarrh Cure." She is now about cured.

W. T. HOUSE.

Toledo, O., Aug 23, 1880. Messrs. F. J. Cheney & Co., Proprietors Hall's Catarrh Cure, Gentlemen: Our little girl was cured of Catarrh by using Hall's Catarrh Cure, and we would most gladly recommend it to our friends. J. M. KELLY. J. D. Weatherford, of the house of A. T. Stewart & Co., Chicago, Ill., writes Gentlemen: I take the pleasure of informing you that I have used Hall's Catarrh Cure. It has cured me - I was very bad and don't hesitate to say that it will cure any case of Catarrh. J. D. WEATHERFORD

Sold by all wholesale and retail Druggists in the United States and Canada. Bottled for Ontario by H. W. Hobson, Wolland, Ont., who will furnish the trade at manufacturers price. F. J. CHENEY & CO., Toledo, O., U.S.A.

KIDNEY-WORT HAS BEEN PROVED THE SUREST CURE FOR KIDNEY DISEASES. Does a lame back or a disordered urine indicate that you are a victim? THEN DO NOT HESITATE; use KIDNEY-WORT at once (Druggists recommend it) and it will speedily overcome the disease and restore healthy action to all the organs. Ladies - For complaints peculiar to your sex, such as pain and weakness, KIDNEY-WORT is unsurpassed, as it will act promptly and safely. Either Sex. Incontinence, retention of urine, brick dust or rosy deposits, and dull dragging pains, all speedily yield to its curative power. SOLD BY ALL DRUGGISTS. Price \$1.



The most successful remedy ever discovered as it is certain in its effects and does not blister. READ PROOF BELOW.

Saved him \$1,800.

ADAMS, N. Y., JAN. 30, 1882. DR. B. J. KENDALL & Co. Gentl.—Having used a good deal of your Kendall's Spavin Cure, with great success, I thought I would let you know what it has done for me. Two years ago I had a speedy colt as was ever raised in Jefferson County. When I was breaking him, he kicked over the cross bar and got fast and tore one of his hind legs all to pieces. I employed the best farriers, but they all said he was spoiled. He had a very large thorough-pin, and I used two bottles of your Kendall's Spavin Cure, and it took the bunch entirely off, and he sold afterwards for 1800 dollars. I have used it for bone spavins and wind galls, and it has always cured completely and left the leg smooth. It is a splendid medicine for rheumatism. I have recommended it to a good many, and they all say it does the work. I was in Witherington & Knoeland's drug store, in Adams, the other day, and saw a very fine picture you sent them. I tried to buy it, but could not; they said if I would write to you that you would send me one, I wish you would, and I will do you all the good I can. Very respectfully, E. S. LYMAN.

Kendall's Spavin Cure.

NEW HAMBURG, Ont. Dec. 18, 1881. MR. F. H. McCARTHY, Dear Sir:—The bottle of Dr. Kendall's Spavin Cure bought of you last summer gave me the utmost satisfaction, and performed a wonderful cure upon a mare fifteen years old belonging to me, which was badly spavined for ten years. She was so lame that I could hardly go her to move. The lameness is entirely gone after using half a bottle of the cure, and she is like a young horse again. Yours truly, J. F. MITT.

KENDALL'S SPAVIN CURE.

ON HUMAN FLESH.

VENAY, Ind. Aug. 12, 1881. DR. B. J. KENDALL & Co. Gentl.—Sample of circulars received to day. Please send me some with my imprint, printed on one side only. The Kendall's Spavin Cure is in excellent demand with us, and not only for animals but for human ailments also. Mr. Jos. Voris, one of the leading farmers in our county, sprained an ankle badly, and knowing the value of the remedy for horses, tried it on himself, and it did far better than he had expected. Cured the sprain in very short order. Yours respectfully, C O THREHAND.

Price, \$1 per bottle, or 6 bottles for \$5. All druggists have it or can get it for you, or it will be sent to any address on receipt of price by the proprietors, Dr. B. J. Kendall & Co., Escanaba Falls, Vt. Send for illustrated circulars.

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For sale at this office. Applications for Membership, per 100, \$0 50 (with District, \$1 00)
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New cards will be received for the coming year, and envelopes for 1882-83.
Blank Quarterly Reports for Subscribers (Grange) furnished to Div. Granges at the rate of, per 100 1 00
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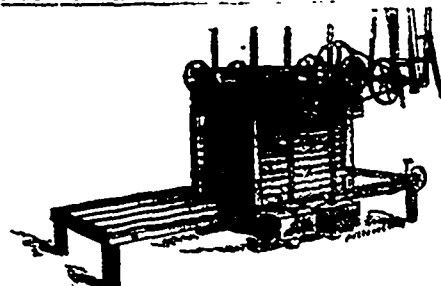
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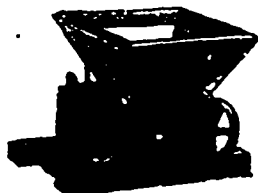
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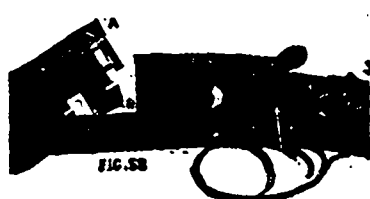
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