Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.								L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.									
	Coloured co	· •	,									red pages, de couleu					
	Covers dam	-	gée						[-	damaged/ endomma					
	Covers restored and/or laminated/ Couverture restaurée et/ou pelliculée								Pages restored and/or laminated/ Pages restaurées et/ou pelliculées								
	Cover title missing/ Le titre de couverture manque								Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées								
	Coloured maps/ Cartes géographiques en couleur								Pages detached/ Pages détachées								
	Coloured in Encre de co	-				e)				/		hrough/ parence					
	Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur								Quality of print varies/ Qualité inégale de l'impression								
V	Bound with Relié avec c									201		nuous pagi tion conti		/			
/	Tight binding may cause shadows or distortion along interior margin/ La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure								Includes index(es)/ Comprend un (des) index Title on header taken from:/								
	Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/ Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.								Le titre de l'en-tête provient: Title page of issue/ Page de titre de la livraison Caption of issue/ Titre de départ de la livraison								
pas etc illilices.									Masthead/ Générique (périodiques) de la livraison								
1 1	Additional comments:/ Commentaires supplémentaires:																
	This item is filmed at the reduction ratio checked below/ Ce document est filmé au taux de réduction indiqué ci-dessous.																
10X	, ii. ii	14X			18X				22 X			263	Κ		30×	1	
											J						_
	12X		15	X			20X				24X			28X		32	٧X





THE

CANADIAN



BEEJOURNAL

"The Greatest Possible Good to the Greatest Possible Number."

Vol. IX, No. 6.

BEETON, ONT., JUNE 15, 1893.

WHOLE No. 339.

The Porter Spring Bee Escape



Was awarded THREE PRIZES at the Toronto Industrial Exposition in 1891. Wm. McEvoy, Fou! Brood Inspector, Woodburn, Ont., says of them on Jan'y 29th, '92:—"I know from experience it won't pay any beekeeper to do without them, as they are one of the best things ever brought into any apiary, and should be used in every bee yard in the

whole wide world."

F. A. Gemmill, Stratford, Ont.:—"I have used many kinds of escapes for years past, but like yours best of all."

Prof. Cook:—"No bee-keeper can afford to be without them."

Send for testimonials and read what others say about them.

Prices:—Each, by mail, post paid, with full directions, 20c. Per dozen, \$2.25. If not found satisfactory after trial return them, and we will retund your money.

R. & E. C. PORTER, LEWISTON, ILL. U.S. Mention this Journal.

THE DOMINION BEEKEEPER'S

PRINTING ESTABLISHMENT BEETON, ONT.

THE PUBLISHERS OF THE

CANADIAN BEE JOURNAL

ARE PREPARED TO

FURNISH EVERY DESCRIPTION OF PRINTING

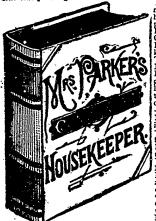
REQUIRED BY BEEKEEPERS, SUCH AS

CATALOGUES, CARDS, CIRCULARS, LABELS, ETC.

A GOOD BOOK.

· This is an entirely new work

Of nearly 500 Pages and a Large Number of Illustrations, beautifully bound in extraceleth with ink side stomp and gold back. It embodies the ripe experience of a veteran housekeeper, and its recipes (of



which there are great numbers on an branches of cookery) can be relied upon as accurate and trustworthy. BREAD.—It tells how to make Bread of all kinds, and gives numerous ways of preparing Yrast. Numerous recipes are given for making Rolls, Biscutts, Crumers, Sally Lonn, Bons, Crackers, Batter Cakes, Corn, Crumers, Sally Lonn, Bons, Crackers, Batter Cakes, Corn, Cakes, Mush, Grits, etc. SOUPS.—It tells how to make 6e different kinds of Sours, including Ox-Tail, Boutlinon, Mock Turtle, Terrarin, Consome, Stanish, French, Tonaro, Julienne, etc. MEATS.—Clear and concise rules are given for Boiling, Roasting, Baking, Broiling and French Meats of all kinds. It gives the best method of Cutting Urand Curing Pork, with anilustration and description of a Sonk House, Poulltry 3.—Chicken, Ham, Oyster, Fish, etc., and how to prepare. EGGS.—Numerous ways of ecoking the same aregiven, as wellas for Gay. SALADS.—Chicken, Ham, Oyster, Fish, etc., and how to prepare. EGGS.—Numerous ways of preparing Eggs are given, including Omellers. PICKLES.—How to make Cucumbers, Mushrooms, etc. Cake Making.—15 Recipes for making every conceivable kind of Cake, from the Plainest to Wedding, with full directions for icing are given. Publics of the same puddings, Dummings, etc., with numerous Sauces for the same puddings, Dummings, etc., with numerous Sauces for the same puddings, Dummings, etc., with numerous Sauces for the same created in the same conceivable recognition of the proposition of the same puddings, Dummings, etc., with numerous Sauces for the same created with said of Planes, Pacch, Aprie, Lemon, Custard, Cream and Water lors. Dyfering for peparing and making Ick Cream and Water lors. Dyfering of the same under this head, with full directions for preparing and making Ick Cream and Water lors. Dyfering Cleaming Solled Garments.

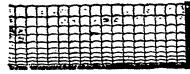
clothes successfully in a variety of colors and shades, with directions for Cleaning Solled Garments.

Handsomely bound in Extra Cloth; sent postpaid to any address on receipt of price,

The above Book may be had for ONLY SEVENTY-FIVE

CENTS by addressing The Canadian Poultry Journal

BEETON, ONT.



3 POSTS TO 100 FEET.

It will give and take, but never sag. It is a smooth fence. Will turn all kinds of stock. It is made of a coiled spring wire. Illustrated paper and price list sent free. PAGE WIRE FENCE CO. of Ont., Ltd., Walkerville, Ont.

MYERS BROS.,

The Leading Supply Manufacturers of the Dominion, are prepared to execute orders for all kinds of Hives, Supres, Foundation, Smokett, and Snow White Sections. One piece and your piece.

28-page Illustrated Circular of Supplies and Household Conveniences free.

Anguite Stove Mats each 25c., 3 for \$5c., 5 for \$1. Address,

MYERS BROS.

Stratford, Ont.

BEE JOURNAL.

"The Greatest Possible Good to the Greatest Possible Number."

Vol. IX, No. 6.

BEETON, ONT., JUNE 15, 1893.

WHOLE No. 339.

::: THE:::

Canadian Bee Journal,

ISSUED 1ST AND 15TH OF EACH MONTH
G. T. SOMERS - WANAGER.

DEVOTED EXCLUSIVELY TO THE INTERESTS OF THE HONEY PRODUCER

ONE DOLLAR PER ANNUM IN ADVANCE-

Advertising Rates.

Time.	1 Inch.		21n.		4 10		1 Col.		Page.	
	;					-				
1 month	\$ 2	00	\$ 3	00	\$ 4	50	3 6	50 8	10 00	
2 months					6	50	31	00	17 00	
3 months				50			15		25 00	
6 months		00		00		00'		00,	40 00	
12 months	10	001	15	CΟ,	25	00;	40	00	75 00	

MR. H. L. Jones, of Goodna, Queensland, is our agent for Australia and adjacent British colonies and will receive subscriptions at the rate of five shillings per annum postoaid.

THE CANADIAN BEE JOURNAL.

BEETON, ONTARIO, JUNE 15, 1893.

INTERDEPENDENCE OF APICUL-TURE AND HORTICULTURE.

There is an old proverb which says, "If ignorance is bliss 'tis folly to be wise." Unfortunately, in all the realm of worldly economy ignorance is the rule and wisdom the exception. There is no royal road to wisdom, and in order to acquire it one has generally to wade through the sloughs and quagmires of a sometimes bitter experience.

And it generally takes some time to bridge the gulf between the two conditions—a life-time too frequently; so that with acquisition of the treasure opportunity is lost for enriching one's neighbors.

In no particular branch of human industry have we any better illustration of the truth of our proposition than in the relations which have been permitted to exist between the two occupations referred to-apiculture and horticulture. These two industries, each of them essential to the actual existence of the other. have assumed the most hostile attitudes, and instead of pulling together for mutual profit and general advantage, a spirit of antipathy and antagonism has been cultivated between those who raised fruits and flowers and those who raised honey, the effect of which has been very materially injurious to the best interests of both.

We think, however, and we are happy to admit, that time which is the consumer of all things has pretty nearly disposed of this perplexity as well as many others, and that the time has gone by when the keeping of bees within certain limits was regarded as a statutory offence, and the ostracism of their keepers a salutary dispensation.

So long as ignorance of substantial facts prevailed it is possible that a shadow of excuse may have been found for a reasonable amount of

intolerance. But now, with the riper experience which has been established by practical and scientific research, the continuance of hostilities of this kind may be safely regarded as somewhat unpardon. Science has taught us able. that the vegetable kingdom has the same sexual distinction that marks the animal kingdom, and that the function of reproduction is impossible without conjunction of the seminal forces by wnich alone fertilization can be effected. To accomplish this in a vast number of species mechanical means are absolutely essential; in many instances, as in pethaps most of the bisexuals, nature has endowed the plant with conditions for selffertilization; in the unisexuals however the process of moculation must be accomplished by the intervention of other forces through which the pollen of both pistil and stamen is brought into conjunction when properly ripened. The wind does much toward effecting this, and in some countries plants of the same species, but of opposite sexes, are planted in rows apart, and in such position in relation to each other as that the prevailing wind about blossem time may distribute the pollen of one plant ever that of the other; the fig is a notable instance of this Research and observation, however, have shown that in all cases, whatever the sexual characteristics of the plant may be, the conjunction depends for the most part on the activity of insect life, and that nature has made wise provision for accomplishing the work just at the proper time. practical writer in the Review says: - "For Grower's years it was an unsolved problem as to how the horticulturist could secure the perfect fertilization of his choicest fruits. He tried the fine pencil brush in distributing and mixing the pollen. This he

found expensive and unsatisfactory as he could not always do the work at just the proper time. On the other hand, when the pollen is ripe, ready for proper fertilization, nature places a tiny drop of nectar just at the base of the petals, on which the pollen or father dust is grown. reach this the honey bee in its eagerness, brushes against the petals and knocks off this pollen dust, which is scattered all over the bee; then to the next flower it goes and the process is repeated; and in doing so leaves some of its own dusty coat. The back and body of the bee is peculiarly coated with short hair, which holds the pollen as it goes from one flower to another. Still another peculiarity of the honey bee is, that, it is said, it never visits flowers of a different species on the same trip from thehive.`

It is thus easy to conceive that there is no other creature of the insect world so perfectly adapted to do the work of horticultural fructification as the honey bee. The bee is dormant during a period of the year when vegetation is also torpid. She recommences active work the moment vegetation is awakened in the spring. She is not only endowed by nature with the instinct necessary to aid her in the fructification of flower and fruitbloom, but without the accomplishment of it she cannot exist. Under these circumstances, it is safe to say that without her aid the occuration of the horticulturist would be as completely gone as that of Othello. The bee may possibly exist without the aid of the horticulturist by confining herself to such food as may be secreted by the grasses, clovers, flowers and other species of vegetation. But without the bee it is safe to surmise that the area of our truit production would be very much shortened up, if not eventually altogether destroyed.

The alliance between apiculture and horticulture is thus so clearly defined that it seems to us that in order to be successful in fruit-raising it is first necessary to be a good beekeeper; and to be a good beekeeper means to have a good level head and to be a pretty handy all-round sort of man. We trust that this little lecture will not be without its effect on such of our readers as may be engaged in the delightful and profitable occupation of horticulture,—fructiculture would be the more correct term to employ, —and that instead of spraying their trees during bloom, whilst the bees are busy at work in aiding the process of fertilization, they will put the spray pumps, the Paris green, and other like poisonous devices to one side until the bees have finished their perfect work, and until the curculio and other destructive creatures have commenced theirs.

We observe that the Michigan Legislature has made provision for an experimental apiary to be managed under the auspices of the State Experimental Station, with Hon. R. L. Taylor, of Lapeer, as apiarist. We regard this movement as one of the wisest that could have been devised in the interest of an extensive and rapidle increasing industry. The gentleman in charge is probably about the best that could have been selected for the position, and deliberate opportunity will thus be afforded for the solution and determination of questions in regard to which the most expert apiarists are at odds and ends. Mr. Taylor is represented as one of the most competent men that could have been selected, experienced, careful methodical and conscientious, and the result of his work will be given in a department of the Review especially appropriated for that purpose, under the caption of "Work in the Michigan Experimental Apiary."

ORIGINAL CORRESPONDENCE.

FOR THE CANADIAN BRE JOURNAL.

NOTES AND COMMENTS.

BY QUILL.

I notice that Dr. Mason takes the C.B.J. to task for suggesting that bee stings are a care for rheumatism. The Doctor evidently has no affection for recipes which are not formulated in accordance with the strictest principles laid down by medical experts, and nothing that a layman or a non-professional can suggest or advise has the slightest value in that worthy gentleman's opinions. The Doctor does not appear to like the idea that "like diseases cure similar ones," or as it is more tersely expressed—similia similibus curantur. But they do, all the same, the Doctor to the contrary notwithstanding.

0 0 0

For example, what is the process of inoculation, or vaccination for smallpox, but the practical application of the well recognized doctrine of setting up by introduction of the special virus of the disease itself, of a condition of the system which renders it impervious to attacks of like character so long as the inoculating virus retains its active force. I suppose if I were as well acquainted with medicine as the learned doctor evidently is, I could pile up such a host of evidences in favor of my heory as would astonish him. I dare say I can furnish him with a few.

0 0 0

Let me ask him why hot applications, as hot an they can be borne—the hotter the better—are applied in cases of peritoritis, and in inflammatory conditions of the abdominal region, if it is not by setting up an external condition of like character so that the internal difficulty may be modified or checked. What is the value of a mustard poultice over the region of the lungs or thorax if it is not intended to reduce the internal irritation by the exhibition of

a more active external agency? What is the value of a seton if the purpose of its application is not the same. There are lots of such conditions recognized, I dare say, by the faculty with which the doctor is better acquainted than I can possibly be. I am afraid the doctor will have to admit that you are not so far astray as he would apparently like to have you.

0 0 0

I remember a case which I have heard of, and which might be assumed to have some amusing characteristics about it. if it were not associated in other respects with a rather lamentable exhibition of deprayed taste for alcoholic stimulants. It was the case of an individual who not only occasionally but diurnally consumed such a quantity of whiskey, or something of that sort, as to reduce himself to a condition of daily nervous debility. Strange to say. that although that unfortunate gentleman was wholly incompetent for any useful purpose upon a morning subsequent to one of these festivities, an ante-prandial glassin other words-"a hair of the dog that bit him," had the effect of instantly "setting him up" and making him competent or any duty or service that might be required of him

000

Let me close this series of notes on this subject with a morsel of confirmatory evidence which I happened to come across in the course of some desultory readings a few days ago, I think in a paper called the Fruit Grower, published in Rochester, New York. It was there stated that some two years ago an Austrian physician advanced the remarkable theory that persons who have been stung by bees enjoy an immunity from the effects of the bee stings for varying periods, and that, moreover, the virus of the bee stirg is an infallible remedy for acute rheumatism. The latter part of the theory, according to the Mediterranean Naturalist, has received most unquestionable confirmation from a custom of the the country people in Malta. Bees are plenty in the islands, and bee stings are in such repute as a cure for rheumatism that resort to this primitive method of inoculation has been a common practice in severe cases for generations, the results having been most satisfactory to the patients.



MR. WILLIAM M'EVOY,

FOUL BROOD INSPECTOR OF ONTARIO.

BY PROF. THOS. SHAW, ONTARIO AGRICULTURAL COLLEGE.

The country is a grand place in which to commence life. If our young people could be made to see this truth in its true light, fewer of them would ever leave it for the more or less precarious existence of the towns and cities. Nearly all of those who make their mark in life have been cradied in country homes, and the subject of the present sketch is no exception.

William McEvoy was born in the County of Halton, in the Province of Ontario, in the year 1844. Some years previously his parents had emigrated from Ireland, and while William was still quite young, they took up, their abode in Woodburn, a beautiful little country village in the County of Wentworth, where his father fell a victim to the cholera scourge in 1854. Mr.McEvoy, who has lived in Woodburn ever since, was

thus thrown at an early age upon his own resources, and, to use his own expression, has virtually had "to paddle his own cance" ever since. His early education was therefore of the most rudimentary kind. The chasing of butterflies through the happy live long summer days, with the writer and other village lads, and the daily summer visits to the "Twisses" big raspberry patch, had to give place all too soon to laboring for the farmers in the neighborhood. It was fortunate for Mr. McEvoy that, while yet a lad, he engaged for two or three seasons in succession with Mr. McWaters, one of the neatest and most successful farmers of that part of Ontario. The example of neatness and painstaking shown by Mr. McWaters left a life impression upon Mr. McEvoy, who from that time to the present, has allowed no work to pass through his hands which was not done in the best form. He scon became expert in handling the plough, and other farm tools. But it was in connection with bee industry that Mr. McEvoy was to make the great discovery which was to bring him fame in bee circles wherever the Anglo-Saxon tongue is spoken-I refer to his discovery of the cause and cure of foul brood. For this discovery, and for the success which has attended his efforts in destroying it in the Province, Mr. McEvoy is deserving of the gratitude of his countrymen, and has rendered magnificent service to the beekeeping industry for all time.

These great results, as is frequently the case, have grown out of very small beginnings. In 1864 Mr. McEvoy bought two old box hives with the tees in them from a farmer in the neighborhood. In payment thereof, he cut twenty cords of wood, beech and maple, on a piece of land which has since come into the possession of the writer. Soon after, he tried frame hives of various kinds, but with the result in the end that they were finally used for kindling wood. The indomitable perseverance of Mr. McEvoy is well brought out by the following incident. The use of the extractor had been employed some time before he had

even come in contact with it. The writer informed Mr. McEvoy of one that he had seeu in use at Kilbride, a village thirty miles distant. He at once perceived the advantage it would be to him in his business, and promptly set off to see it working. He came back exultant over the knowledge he had gained, after a journey of sixty miles on foot. The two box hives have long since multiplied to a number beyond which Mr. McEvoy does not care to go. He has laboured to prevent increase rather than to encourage it, as his present duties will only allow him to give personal attention to but a limited number of colonies, of which he has about ninety at the present time.

Mr. McEvoy commenced exhibiting honey and wax at the exhibitions in 1868. He was a prominent exhibitor at the leading Fairs of the Province until 1886. During those eigh/een years he had the greatest success as an exhibitor ever known in this country or perhaps any other. He was successful on every occasion except one, viz., at one of the Provincial Exhibitions where he lost the award through incapable judges, who had been hurriedly chosen in the absence of the regularly appointed judges.

In 1875 the dreaded scourge foul brocd originated in Mr. McEvov's apiary at Woodburn. He at once set to work to discover the cause and cure, and in both was triumphantly successful. This is unquestionably the most valuable discovery of modern times in reference to the apiary. The ablest scientists in the beekeeping world had been laboring earnestly to get at the root of this great bee scourge, but in vain; and when Mr. McEvoy first gave his discovery to the world it was received with cold scorn by those well versed in bee lore. Mr. McEvoy was not a writer nor a speaker. and he had always lived in Woodburn, an obscure country village of about one hundred souls. It was incredible that so valuable a discovery could emanate from such a source. But in the wonderful success that has

attended Mr. McEvoy's efforts to stamp out foul brood in Ontario, we find the most fitting answer to the uncharitable criticisms of those selfish days. In 1881 he gave the essentials of his discovery to Gleanings, but the article never appeared. In 1884 his methods of dealing with the plague appeared in the January number of the Canadian Live Stock and Farm Journal, then under the editorial management of the writer. This was the first time that Mr. McEvov's opinions on this question appeared in print. It was announced beforehand that the February number of the Beekeepers' Review of 1890 would contain only articles on "Foul Brood." Mr. McEvoy, with great pains and labor, forwarded a summary of his methods; but, on the principle I suppose that no good could come out of Woodburn, the article was suppressed. In 1890 he was appointed Inspector of Foul Brood for Ontario, and has held the appointment since that time. The wisdom shown in the appointment has been more than justified in the grand results that have been realized The fell discase, though not exterminated, has been smitten hip and thigh wherever Mr. McEvoy has gone. He justly feels proud of the fact, that in the wholesale cures that have been effected under his supervision, the work has been done in the hives in which the diseased colonies were found; and never, in his seventeen years' experience with the scourge, has he had to scald, boil, or otherwise disinfect a hive from which foul brood had been dislodged. At the Beekeepers' Convention held in London, Ont., in January, 1892, Mr. McEvoy drew attention to the fact that bees were being destroyed wholesale by Le needless spraying of fruit trees with poison. ous liquids when in bloom. He succeeded in getting a committee appointed to lay the matter before the Ontario Legislature. The result was that an Act was passed the same year, prohibiting the senseless and exceedingly injurious practice of spraying trees with poisonous liquids when in blocm.

It is not surprising therefore that Mr. McEvoy should be regarded on all hands as standing in the first rank amongst living authorities on all practical questions relating to the beekeeping industry. The great discovery which he has made is another instance of the success which is sure to follow patient investigation in any line, combined with untiring industry.

MISCELLANEOUS.

Building up Colonies for the Honey Flow.

R. F. HOLTERMANN IN THE American Bee Journal.

The late meeting of our county beekeepers' association and an address upon the above subject by the able President of our Ontario Beekeepers' Association, Mr. F. A. Gemmill, of Straiford, Ontario, has brought several questions before me. Being in the chair upon that occasion, I was unable to express my views; the snt ject being seasonable, permit me to say a few words.

There is nothing like natural eteres for bees during the spring of the year—plenty of honey given the previous autumn is the best way of feeding a colony in the spring; but if there is not an abundance of honey in the hive, and sealed combs of honey cannot be given, I should say, give the weak colonies sealed stores out of the strong, and feed the strong colonies a syrup made of equal parts of sugar and water, win the slight addition of honey. The honey fed should first be well boiled, particularly is this advisable if the honey is not your own, but even if it is, you may have foul brood in the apiery without knowing it, and when with a little care risk may be avoided, do so.

To feed from the top by means of a Hill or Gem feeder, is probably the better way. Mr. Gemmill outs a hole in the quilt, and upon this places a pièce of wire cloth nailed on, and a rim upon this; the feeder is inverted, and the bees can take the food through the wire cloth, but cannot fly up when the feeder is removed for the purpose of refilling.

No colony can be too strong for the honey flow, or too early. If the bees cannot remain contentedly in the body of the hive. I put on a super, allowing the queen full swing in it, and if this is not sufficient, I add supers. At the beginning of the honey flow the queen can, by changing a few combs, be confined below the queen-excluder in the body of the hive. Any surplus from spring blossoms is better consumed in brood rearing than to extract it and throw it upon the market at a low figure.

Unless one colony is queenless, it is perhaps not well to unite—sooner build up weak colonies, and near the honey flow unite them, or the brood. To build up weak colonies at the expense of the strong should never be dreamed of.

I would like to have all colonies packed above during the spring, and until all danger from cold nights has passed away; but it is quite a trouble and expense; and I cannot always do as I would like to do. This spring I have used on top, first the sealed cover, then one or two thicknesses of paper, finally a cushion filled with absorbents or mineral wool. I have an idea, if the cost is not too great, and I think not. that this article has a great future before it. for the purpose of winter and spring packing of bees. The above protection, with f properly regulated entrance, is all I give a strong colony.

The weaker ones I try to pack in winter cases, and in this way help them to make the best use of the warmth they produce. Some would argue that when a colony is weak in the spring, the indications are that the queen is a poor one. There can surely be no reason why this should be the case. There is no necessity for destroying such a queen—she may be good and she may not, and the question should be tested before

coming to a conclusion.

Many, very many, have failed to make a success of spreading brood. No novice should attempt such until settled warm weather, and even then it should be undertake n with caution. As a rule, the colony will enlarge the brood chamber quickly enough, but there is a time when, to a certain extent. spreading brood can be practised with success. The best method is to turn the combs on the outer side of the cluster; about that is the sides towards the centre of the hive turned towards the outer side. By so spreading it is done gradually, and no great harm can result.

Brantford, Ont.

Farmers as Beekeepers.

Should we encourage farmers to keep bees? is a question we have frequently discussed at conventions, and as a general rule most beekeepers say no, because that would increase the supply of honey and consequently reduce the price. Again, others say it is not worth while, as they will not give it the attention necessary to success, and will only fail and then condemn the bees and fault us for getting them into it.

Well, now in some cases this might be true, but will it justify us in sclfishly withholding our influence and knowledge of the profession from them, and thus prevent them from enjoying this rich luxury? Now let us see what there is in the matter of reducing prices. In the first place, farmers have not time enough to spare as a rule, to keep more bees than would supply honey for their own use. In fact this is about all they care for, consequently they would have no honey to put on the market, and as very few farmers will indulge in the luxury of honey if they have: buy it, we find that our honey market is no controlled to any noticeable extent by the common farmer.

We are frequently asked by farmers and others if we would advise them to keep bees, when many others are making nothing but failures out of it; and we invariably answer yes. If you will give them your attention, and inform yourself on the subject so that you will be able to make a proper start, and then take care of your bees as you would of your cowe and horses, they will surely pay you as good a dividend on the investment as anything you can keep on the farm.

In beginning it always pays to get the best. Go to your nearest practical be-keeper, and get one or two good colonies of Italian bees, and if they are not already in a good movable comb hive, get some of the modern make from your nearest supply dealer, and transfer into them. It will never pay you to fool with the old fashioned box hive as we frequently see demonstrated by those old fogies who don't kno w a good thing when they see it.

It is astonishing to see how ignorant the mass of people are about the little honey bee. Some time ago, a man who was a painter by trade and who was raised on a farm where bees were kept, came to my place, and seeing my bees, asked if they were the Italian bees. When I told him they were, he said that whe, the Italians were first introduced into Missouri his father sent off and bought a king and a queen bee, for which he paid \$25 each. Now of course he was simply lying about it, but you see he had not yet learned that there were no king bees. Many other similar remarks we hear, such as-How many eggs does the queen lay at one time ?-- How long does it take her to hatch them ?- and how many queens does one colony have at one time? etc. In conclusion, I would say, let us ever be ready to teach those who desire to learn, giving them the advantage of our experience, and showing them as best we can, the way to success, that they, too, may enjoy the product of the blessed boney bee. -A. A. Weaver in the Progressive Beekeeper.

Subscribe for the Canadian Bee Journal One dollar per year.

The Kabyle Bae.

The April Revue contains a description of the Algerian bee by M. Feuillebois, of Beni-Amram. In some English American papers a correspondent claims to have found in Tunis a special race, which he calls Punic, or Apis Niger. We know nothing of such a race, and only know of one race which is found along the whole of the North of Africa (Egypt excepted), and which we call the Kabyle bee, or black race of Kabylia. Why has this name of Kabyle been given to this race? Because it is in Kabylia that the beekeeners on a large scale are found (I know one who has one thousand two hundred hives), and it is from Kabylia that the merchants obtain the bulk of their honey and wax. The inhabitants, who are without doubt the descendants of the Vandal emigrants in Africa, have maintained themselves in these mountains of Kabylia for centuries since their invasion. I the -- fore think it is to them that the honor of the name of beekeepers should be given and not to the Arabs, who are only nomads. The Kabyle lives in a stone house, whereas the Arab has nothing but his gourbi, which he changes from place to place nearly every year. The kanyle is very intelligent, and he even practises migratory beekeeping; when he has made a first harvest of honey on the low grounds, he transports his hives to the mountains on the backs of mules, and does not bring them down again until the second harvest has been gathered in, for the purpose of wintering them in the plains. It is the Kabyle who has cultivated bees for centuries.

In the month of April we had the very agreeable visit of Mr. and Miss Cowan; we shall always remember this visit and sak them to come again. We heartily invite them, and will be doubly pleased if Mr. Bertrand would honor us also with a visit. The editor of the British Bee Journal wanted to ascertain for himself on the spot if there was any difference between our bees and that of Tunis; he found none. Our bees received him very badly, and ho was compelled to say they were vicious.

This is the third year that we have cultivated Kabyle bees here, always having more than 100 hives. I think this is sufficient to know a race thoroughly. Very well! our bee is a good worker; does not fear heat or cold: although the snow in 1890 91 covered our hives for three days, I did not lose a colony. But whether this would be the same in the cold countries of Europe I could not say. They are very prolific, often too much so. If they get the swarming fever, they continue to swarm

persistently, and the last swarms consist of a few hundred bees surrounding a queen. These swarms are not worth anything, and no more is the stock in the end. I have often remarked that in an apiary there are some hives that occupy themselves principally with swarming. Others on the contrary, busy themselves ".th collecting honey. But as a rule our beas have a mania for swarming. It has hapvened to me that I have found hives with twenty-six frames of brood. I correct thom of this fault by removing half the brood, and use it for strengthening recent swarms, or to make others. If the prood combs contain sufficient honey, part of it may be extracted. then, the hive containing half the combs empty, the colony will busy itself in hunting for honey, and probably in a few days these industrious workers will supply us with combs fit for extracting.

If the Kabyle bees are inveterate at swarming, they are equally so at propolizing. We frequently require an iron implement to detach the frames. In winter they, of their own accord, reduce the entrance with propolis, and the quilt is firmly fixed to the frames with the same material.

As to robbing, they rival in this respect their sisters of Palestine. In the sutumn nct more than eight to ten hives can be examined at one operation. Then the work must be suspended, and not resumed for at least half an hour, and it is only in this way that the robbers leave you at peace. In Palestine we wished to continue our work notwithstanding the robbers, with the result that two hives were pillaged and the populations massacred, but we also acquired experience. Very frequently, if there is any robbing going on, it is the beekeeper who is at fault. Moreover, we are in a land of thieves, and people as well as animals try to appropriate what does not belong to them, and what has been acquired by so much labor and fatigue.

The Kabyle bees are vicious, but not worse than those of Palestine, which fly at a man and at once begin to stine, whereas ours commence by biting, and it has sometimes happened to me that, owing to my not moving, they have gradually retired.

I will for a long time remember an attack in Palestine, a short time after my release from military cervice, when I was terribly ill-treated. A year later two of my brothers were similarly attacked, as were also a camel-driver with his two camels, and two donkeys, who were killed by the stinging.

Let us, however, return to our bees, which are extraordinarily vicious this year. Gentle and docile at times, and easy of management, they become dreadfully savage when honey begins to flow, or

THE RESIDENCE OF THE PARTY OF T

during stimulative feeding in spring. Also on days when the south wind blows, thirst makes them exceedingly vicious. One evening, when this wind was blowing hard. May 25th, I was near one of my apiaries when a small and unimportant flight of locusts passed over the hives. The bees became furious and attacked them in the air, each locust being attacked by five or six bees. This fight lasted for half an hour, until darkness caused the combatants to retire, the bees to their hives and the locusts to the neighboring vineyards.

I stated that the bees are extraordinarily vicious this year. Here are a few incidents that have occurred this spring :- A donkey, belonging to my brother, who was near his apiary (probably in the bee-line), was so terribly pierced with stings that in twentyfour hours she expired. My horse, which was passing at a distance of sixty metres from the apiary was for ten minutes attacked by the bees going to the water; fortunately we noticed it in time. My man found it rolling on the ground and cut the cord by which it was fastened, and the poor beast went off at a gallop and took shelter in a thicket of fig-trees. We rubbed it all over with rum and sedative water, all that we could find in the small village of Belle Fontaine. Lastly, we covered the animal with a layer of well-moistened clay, and in two days it got better, but since this adventure it is no longer worth what it was.

Two jackals, rather curious to know what the boxes contained, approached them for the purpose of poking their noses in, but the Kabyle bees are not fond of hairy animals. In a few seconds the bautiful fur of our two quadrupeds was plentifully supplied with bees. Stung in all directions, the jackalls became bewildered, and threw themselves to the right and to the left against the hives, which made their occupants more furious. They at last managed to get out of this disagreeable neighborhood, but were followed by thousands of bees and took to flight, reminding us of the foxez with the firebrands let loose by Samson into the standing corn of the Philistines. The next day their bodies were found in the brushwood, 200 metres further on.

From time to time we have orders for Kabyle queens. An Austrian beekeeper tells me he is satisfied with one I sent him. Our bees will find an amateur here and there just as in their time have done Philistines, Cyprians, and Carniolan bees. I hope French beekeepers will try and study the race which lives in our beautiful colony, and it is for them to judge what can be done with it in France.

The honey harvest has not been so bad

with us during the two previous seasons, and we have obtained good results by migratory beekeeping. At Beni-Amram and at Staoueli the harvest was very poor.

At the agricultural show at Mostaganem, I received the highest award for beekeeping, consisting of a silver medal.—J. Baldinsenger, Corso Almo.—Revue Internationale

CONSER'S PATENT NON-SWARMER.



New idea in producing comb honey that will revolutionize beekeeping. On exhibition at the World's Fair. Write for circular to

JOHN CONSER, m 110 East Main St., Sedalia, Mo.

ONE CENT

is all it costs to receive a copy of the best Agricultural Monthly in Canada. Send your name on a post card to the RURAL CANADIAN, Toronto, when a sample will be sent free.



cice, Only \$80 a Mile.

Land-Owners save one-half the cost and avoid dangerous

Accepte make \$200 per month and expanses Cash. The best local and travelling agents wanted everywhere. Write at once for circulars and choice tortitory Address A. Hulbert, Patentoe, care of Hulbert Feace and Wire Co... 90; Olive Street, St. Louis, Mo. Factory Catalogue with 200 engraved designs and prices, sent free to any who want lancy iron and wire work for city, cemetery and farm fences, etc.

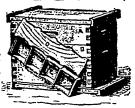
b. 1.197

IF YOU WANT

DOVETAILED HIVES

Good Sections, the very best grade of Foundation Excellent Smokers, 8 sizes, special, Guage's Wire Nails, Swarming devices, Perforated Metal at fine cut prices, or all other kinds of use'ul supplies at low figures, and good quality. Send at once to

W. A. CHRYSLER, Box 450. Chatham Ont. 24 tf

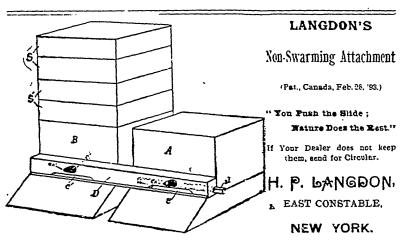


Beekeepers.

Send us a Trial Order; Ask our Prices; All are New Goods; Everything the Apiarist requires kept on hand. New Machinery, New Management. Our customers are all well pleased with our goods. Beeswax wanted, for Cash or Supplies.

FRENCH, CHEFFEY & CO.,

BEETON, ONT. SUCCESSORS TO D. A. JONES CO.



EXCHANGE AND MART.

CEND us fifty cents and get Hutchinson's "Advanced Bee Culture." C B | Beeton.

40 OR 50 SWARMS OF BEES for sale cheap, or exchange for a set of double harness, sulky rake, or seed arill. THOS. CHRISTIAN, Lorraine, Ont.

A QUANTITY of Porter & Hastings Bee Escates on hand I will sell them cheap. Would clear the lot out at a low price to a dealer G. T. SOMERS, Beeton, Ont. 1 tf

WE have several bound volumes of Clark's "Birds Eye View" of Beekeeping. Will mail on receipt of 10c. Canadian Bee Journal, Beeton, Ont.

FOR SALE.—20 colonies bees, at a sacrifice, in good hives, will weigh from 75 to 100 lbs. Must be sold at once Wil give ag od bargain. R. I. GRACEY, Wellandport, Ont.

1893. WRITE now and see how low I can sized Hives and Fra nes. Also get p. ices on sections. foundation, Honey Extractors, Knives, emokers, and anyt ing you may need to the apiary for 1893. W. A. CHRYSLER, Box 450 Chatham, Ont.

12 CO 23 in each colony, Jones' blve, strong, satisfaction guaranteed. References if required Write immediately if you want to buy bees cheap. Address, ALPINE McGREGOR, Inclewood. Ont.

NOTICE.—M. J. H. Still, of St. Thomas has placed in my hands for sale 200 bbs. of Brood Foundation at 42 cents per lb, and 200 lbs. of Section Foundation at 52 cents per lb, made this spring and extra the. Also a number of Fivebanded Queens at 90 cents each H J. LEACH, Tilbury Centre, Ont Reference, J. H. Still, St. Thomas.

GOOD READING

FOR A

SMALL PRICE.

If you want some good stories that are not continued, send us ten cents, and we will, for the purpose of introducing the Waverley Magazine to you, mail two copies, containing from twenty-five to thirty clean and complete Stories, or, for \$1 we will send twenty-five back numbers, all complete, which will make over 400 Stories, 25 Pages of Music and 75 Pages of Short Items of Interest, besides other matter. Address:

WAVERLEY MAGAZINE, Box 172, Boston, Mass. 7-2in 3

-- GOLDEN ITALIAN OUEENS.

Bred from Select Mothers for the coming season at a grade of prices to suit the times. Orders booked now. Untested Queens. June, S: Untested Queens, Juny and after, 75 cents; Tested Queens, May, \$1.50; Tested Queens, June, \$1.25; Tested Queens, May and June, \$2.50; Select Tested Queens, July and after, \$1.50; Er large quantities write for prices. All Untested queens w.rranted purely mated. A. E. SHERRINGTON, Box 270, Walkerton, Ont.

Attention, Beekeepers!

Tested Italian Queen in May, \$1.50 each. Snow white sections \$2.50 per thousand. Hoffman frames and a full line of Beekeepers' Supplies. Twenty page price list free. J. M. KINZIE, Rochester, Oakland Co., Mich. b4 ly.

BARNES'

FOOT

AND

HAND

Power

MACHINERY

This cut represents our Combined Circular and Scroll Saw, which is the best machine made for berkeepers' use in the construction of their hives, sections, boxes, etc. Machines sent on trial. For catalogues, price lists, etc., address W. F. & JNO. BARNES CO., 574 Ruby street, Rockford, lil

We Want Agents

To get up Club Lists of New Subscribers for the

Canadian Bee Journal.

New Subscriptions date from time of receiving same. Sample copies furnished free to agents. For particulars address:

BEETON PUB. CO. BEETON, - ONT.

EXPERIMENTS

Michigan is to have an experimental apiary managed under the auspices of the State Experiment Station. The Hon. R. L. Taylor, of Lapeer, is to be the apiarist. Probably no more competent man could have been secured. He is experienced, careful, methodical and consciontious. He will conduct a department in the REVIEW headed. "Work in the Michigan Experimental Apiary," in which will be given monthly reports regarding the experiments being conducted. Work has already been commenced Subscribe for the REVIEW at once and keep track of the experiments fr. m the beginning. The REVIEW for balance of the year, and the 50 ct. book, "Advanced Bee Culture," for only 75 cts. Stamps taken. If not acquainted with the REVIEW, send 10 cts. for three late but different issues.

W. Z. HUTCHINSON, Flint, Mich.

WE HAVE ALSO IN STOCK

A BIRD'S EYE VIEW

OF

${f BEEKEEPING}$

By PROF. T 1. F. CLARKE,

A lively, entertaining, and practical text-book on the art of beekeeping. Poultrymen may find it profitable to associate this business with their poultry work. They go well together, and no part of farm work is more profitable than this simple addition to the ordinary farm labours.

PRICE TEN CENTS.

To be had at the office of THE CANADI-AN POLTRY JOURNAL.

Enclose 10 cents in stamps and try one.

FIVE BANDED GOLDEN ITALIANS.

My Five Banded Golden Italians are not excelled by any bees in existence. A fair trial will convince. Queens, after June 1st, \$1 each; 6 for \$5. Special prices on large orders. Safe arrival guaranteed. Send for descriptive circular giving full particulars.

CHARLES D. DUVALL.

SPENCERVILLE MONTG. CO. MD

SEND IN YOUR ORDERS

AND GET

Manufacturer's Prices

ON ALL KINDS OF

BEEKEEPER'S

SUPPLIES.

The best Sections and Comb-Foundation.

I HAVE FOR SALE

75 Swarms of Bees

In 8 Framed Hives, Langstroth, all in excellent condition. Will sell reasonably if disposed of at once.

C. A. OUELETTE,

TILBURY CENTRE, ONT.

Beeswax Wanted

IN EXCHANGE FOR

SUPPLIES OR CASH,

FRENCH, CHEFFEY & CO.

BEETON, ONT.

CIRCULAR FOR 1893

Now ready, in which we offer

GRAY CARNIOLAN AND GOLDEN ITALIAN
QUEENS

In their time bred from pure mothers, and by the best method known. Send for Circular.

For Carniolans to | For Italians to

JOHN ANDREWS, L. E. BURNHAM,

Patten's Mills, N.Y.

Vaughns, N.Y.

DR. J. W. CRENSHAW, VERS ILLES, KENTUCKY, U.S.

offers for sale Untested Queens. May and June, \$1; After, 75c. Imported or Doolittle mother, t preferred. Contracts solicited. Root's goods for sale; also Celery plants, July to Sept., at \$2 per thousand. b4 1y



Carniolan and Italian

bred from pure mothers for thecoming season, at a grade of prices to compare with that of honey production; and the utmost care should be taken to have them as good as any man can breed. Carniolans or Italians, untested, each, 75 cts.; 3 untested queens, \$2; 6 untested queens, 3.60; tested queens from either yards, after the 20th of June, each, \$1. All queens that are known to be mismated will be sold at 50 cents each, including all 'Yellow Carniolans.'

For further particulars send for circular to JOHN ANDREWS, Pattens Mills,

Wash. Co., N. Y.

Amorican Rooka

A 24 page illustrated monthly for beginners.

FIFTY CENTS A YEAR.

Sample copy free. Published by

The W. T FLCONER Mfg Co'y

Largest Manufacturers In America

BEE HIVES, SECTIONS, AND ALL BEEKEEPERS' SUPPLIES.

Large Illustrated Catalogue & Price List Free.
B, 1 Y.

THE

ISLAND HOME

Is the only Queen and Drone Rearing Establishment in America, where mating is under perfect control, where all queens are mated on an island five miles from mainland to

HAND-PICKED DRONES

They are acknowledged by all to be the finest in the world. Our queens are reared and mated with as much precision as you can breed sheep: therefore we have no such thing as tested and untested queens—ours are

Thoroughbred Queens.

One queen of our criginal stock, G. M. Doolittle valued at \$50.

We warrant every queen to produce Five Banded Bees, equal to sample, which we send free by mail to all who apply. (Ask other breeders for such a guarantee.) Safe arrival and satisfaction in all cases. Drop us a card, and have a look at the finest bees in the world.

A. W. BROWN, POPT ROWAN, ONT.

HONEY CANS.

SPECIAL —PRICES

	10
2 lb. and 2½ lb., slip top \$ 4	50
3 lb. and 5 lb., slip top 5	50
5 lb., sore.v top 6	50
10 lb., screet top, with bail 11	00
60 lb. round, 1 screw top-in lots	••
of 10, 23c each.	
60 lb., lots of 10, round, encased	
in wood, 33c.	
60 lb. square, encased in wood 48c.	
5 lb. Tin Honey Pails, straight	
aiden with hail; names fits sight.	

sides with bail; cover fits tight; the cheapest in the market.. \$ 6 00 10 lb. Tin Honey Pail, same as

Send for our 1893 Illustrated Catalogue of Beekeepers' Supplies. Prices lower than ever.

b16-6t T. PHILLIPS & Co., Orillia.

READ, MARK, LEARN.

A Few Recent Testimonials Unsolicited

The queen you sent me last summer is a very nice one, and worth twenty times what I gave for her.—Oscab Thistle, Victoria Corners, N.B. March 30, 1893.

Of all the metals, I like yours the best.—(Rev.) E. GREUTZNER, New Dundee.

Lour form has given me complete satisfaction in the past.—Jas. Shannon, Wolverton. April 12, 1893

The comb foundation is very nice and the adjustable extractor is all that could be desired.—Tmos. Patton, Westover, Ont. April 19, 1893

I this day got foundation as manufactured by you, and am very much pleased with it. It is of superior quality. D. Williams, Owen Sound. May 2, 1893.

Goods to hand all right. Foundation and sections are particularly nice. R. W. Farley, Hull, Que. May 17, 1893

Your broad foundation, though 5 cents a pound dearer than some I got from another firm, is fully that much better in make and appearance. It is lovely.—J. Helme, Smith's Fall's, Ont. May 17, 1893.

My first swarm came off 31st of May. It was hived in your self-hiver with perfect success.—Frank Robinson, Hatchley, Ont. June 3, 1893.

Bees came to hand last evening in splendid order. I am well pleased with the investment. The queen is a perfect beauty.—(Rev.) R. B. Cook, Acton, Out. May 3, 1893.

The foundation brought home some days ago. I believe I never saw nicer section foundation, and the brood works fine.—S. T. Perrit, Belmont, Ont.

Your foundation to hand. It is very nice and well packed. W. H. Hodeson, Hudson, Que. May 31, 1893.

Sorry I did not order more smokersfrom you.—M. J. HENRY, Vancouver, B.C.

Received my bee supplies from you May 24th. For good quality of material and superior workmanship they far exceed anything I have heretofore had. Poor workmanship is dear at any price.—J. J. Hall, Shelburne, Ont. May 29, 1893.

The above speak for themselves. You want queens to improve your apiary.

Try our Italian Queens. Address

GOOLD, SHAPLEY & MUIR CO. (LTD.)

Brantford, Ont.

TESTED

Queens are usually sold for \$2. I will explain why I wish to sell a few at less than that. As most of my readers know, I re-queen my apiary each spring with young

QUEENS

Ý,

From the South. This is done to do away with swarming. If doneearly enough it is usually successful. It will be seen that the queens displaced by these young queens are never more than a year old; in fact, they are fine, tested Italian queens right in their prime; yet, in order that they may move off quickly, and thus make room for the untested queens, they will be sold for only

\$1.00

Or I will send the Review for 1893 and one of these queens for only \$1.75. For \$2 I will send the Review, the queen and the book "Advanced Bee-Culture." If any prefer the young, laying queens from the South, they can have them instead of the tested queens, at the same price. A discount-given on all orders for untested queens. Say how many are wanted, and a price will be made.

W. Z. HUTCHINSON, FLINT, MICH.

THE PEOPLE'S



HORSE, CATTLE

SHEÉP

Containing in four parts clear and concise descriptions of the diseases of the respective animals, with the exact doses of medicine for each.

A book on diseases of domestic animals, which should present a description of each disease and name, the proper mediciner for treatment in such condensed form as to be within the means of everybody, has long been recognized as a desideratum. This work covers the ground completely. The book embodies the best practice of the ablest Veterinarians in this country and Europe, and the information is arranged so as to be easily accessible—an important consideration. Each disease is first described, then follows the symptoms by which it may be recognized, and lastly is given the proper remedies, and lastly is given the proper remedies, and lastly in the book is copiously illustrated, including engravings showing the shapes of horses' teeth at different ages. An elaborate index is a valuable feature.

It is printed in clear, good type on fine paper, and is handsomely bound in cloth, with ink side stamp and gold back, and is a book which every person ought to possess, who has anything to do with the care of animals.

It will be sent to any address—postpaid—on receipt of the price, One Bollar, or on the remarkably liberal terms stated above.

DOCTOR.





THE ABOVE BOOK MAY BE HAD FOR

ONLY 75 CENTS

BY ADDRESSING THE

Canadian Pou'try Journal, Beeton. Ont.

HASTINGS' LIGHTNING





ESCAPE



Send for sample of Hastings' Lightning Bee Escape and you will be convinced that it is the best and most practical Escape yet produced. It will clear the supers in a short space of time (2 to 4 hrs.) and it is impossible for the bees to clog the passage as they cannot return. Each Escape guaranteed as represented. Price by mail each, 20c, \$2.25 per dozen. Full directrons with each Escape. Write for discount. Electrotypes for dealers' catalogues furnished free.

TESTIMONIALS.

M. E. HASTINGS,

Dear Sir'—The Lightning Ventilated Bee Escapes which you sent to me last season worked well and all that you claumed for them. They do not clog, and clear the supers rapidly. In fact it is the best escape! have yet used. I cannot speak too highly of the Escape, and consider it a great boon to bec keepers.

Respectfully Yours, W. E. CLARK.

Dear Sir.—

New York Mills, N. Y., April 4, 1892

The Bee Escape invented by you is the best I have yet seen, freeing the sections most effectually in abort order, and its construction being such as to make it impossible to get out of repair. It will therefore meet with the approval of all bee-keepers.

Yours Respectfully,

F. A. GLADWIN

M. E. Hastings,

Dear Sir,—Your Lightning Bee Escape does away with the hard, disagreeable work

attending the harvesting of honey, being very much easier than the old way. In my opinion
it is the best Escape yet produced

Truly Yours,

B. E. FOSTER.

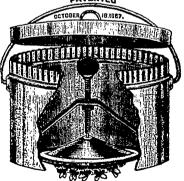
yaştıngs' positive r**e**versible extractor

The above illustration shows a New Extractor now ready for the market. The principal features are that it is positive in the reversing of the baskets, as they all move at once without either the use of chains or reversing of the crank.

It is not necessary to turn the crank more than one way in extracting; but if desired it can be turned either way. It is prounced by experts in extracting to be the most desirable Reversible Extractor yet produced. When ordering send a sample frame and price will be quoted on either 3, 4, 5 or 6 frame Extractors.

Hastings' Perfection Feeders.

These Feeders are now made with a capacity of two quarts, and the price is reduced to thirty cents each, or \$3 per dozen, by express or freight. When ordered by mail add ten cents each for postage. These Feeders can be re-filled without moving the Feeder, or disturbing the bees. The letting down of food is regulated by a thumb screw. It is easy to regulate—either a quart or a spoonful can be given in a day or an hour, as may be required, and where it is most needed, over the cluster of bees. For rapid feeding two feeders may be relaced over the bees at one time, not a



be splaced over the bees at one time, not a drop of food can be lost, and the robber bees cannot get at it. Special rates to dealers. Write for prices. Supply dealers furnished at wholesale prices. An electrotype will be furnished free to dealers wishing to advertise Feeder in their catalogues.

M. E. HASTINGS
Patentee and sole Manufacturer, New York Mills, Oneida Co., N.Y.

LANGSTROTH

${f HONEY-BEE}.$

REVISED.

Price by Mail, \$1.40; by Express or Preight With Other Goods, \$1.25.

By its copious indexes, by its arrangements in numbered paragraphs, including reference numbers on any question in bee culture, any information can be instantly found. This book is the most complete treatise on bee-keeping yet published. A French Edition Just Published.

78 Dadant's Comb Foundation '93

More than ever. - Better than ever. -Wholesale and Retail.

Half a million pounds sold in thirteen years. Over \$200,000 in value. It is the Best, and guaranteed every inch equal to sample. All dealers who have tried it have increased their trade every year. Samples, Catalogue free to all. Send your address,
We also make a specialty of Cotton and Silk Tulle of very best grade for bee-veils. We supply A. I. Root and others. Prices low. Samples free.

Smokers, Honey Sections, Extractors, Tin Pails for Honey, etc. Instructions to Beginners with Circulars free.

Chas. Dadant & Son, Hamilton, Hancock Co., III.

AFTER: APRIL 301H

I will ship Pure Italian Queens by return mail at the following prices:

Warranted Queens, each \$1.00
Tested Queens, each 1.50
Belect tested yellow to the tip, breeders', each 2.00

I refer by permission to the Editor of this journal who has purchased a number of Queens from me.

W. H. LAW,

b 22-7m. Lavaca, Ark., U. S.

MISMATFD

I have some beautifully Mismated and Hybrid Queens that I will sell for 60 cents each, or two for \$1.

> G. A. DEADMAN. Brussels, Ont.

_MUTH'S---

HONEY EXTRACTOR

Square Glass Honey-Jars,

Tin Buckets, Bee-Hives,

Honey-Sections, &c., &c.

Perfection Cold-Blast Smokers. Dealers in Honey and Beeswax.

CHAS. F. MUTH & SON CINCINNATIO

Send. 10c stamp for 'Practical Hints to Beskeepers. WINTIO THIS JOURNAL B-2- 1y

TOTONTO ISLAND. For sale, as early as the season admits, pure bred mits, pure bred mits, pure bred mits, pure bred season admits, pure bred mits. Sland. Our situation enables us to warrant Untested Queens purely mated. This is no experiment. Send for descriptive circular. Untested, \$1; Tested, \$1.50. Special rates on large orders.

JOHN MCARTHUR & CO.,

b24-4t

881 Yong St. Toronto, Ont.

HAVE YOU SEEN IT?

If not send for free Sample Copy of the

" Progressive Bee-Keeper."

A Wide Awake Monthly Journal that pleases everybody. 50c. per year.

ADDRESS:

Progressive Bee-Keeper - Unionville, Mo.

PATENT

WIRED COMB FOUNDATION.

Is better, cheaper and not half the trouble to use that it is to wire frames. Every cell perfect. Thin, flat-bottom foundation has no fishbone in surplus honey. Being the cleanest is usually worked the quickest of any foundation made. J. VAN DEUSEN & SONS, Sele Manufacturers, Sprout Brook, Montgomery Co., N.Y. b4 1y.



Ontario Beekeepers.

INTENDING exhibitors of Honey at the Chicago Exposition, will kindly place their Extracted Honey in tin jars, as the Commission intend shipping the Honey in treas cans to Chicago. The Dorninon Government will furnish glass jars in which the Extracted Joney will be shown. This will seoure safe transport, and Exhibits will reach Chicago in much before shape.

NICHOLAS AWREY, M.P.P.. Ontario Commissioner World's Columbian Exp. b14 tf.

QUEENS AND BEES!

FINE ITALIANS

From South Carolina to Canada in nice condition:—

MAY. JUNE AND AFTER.

1 untested Queen, \$1. 75 cents each. 6 untested Queens, \$5. \$4.

1 tested Queen, \$1.50. \$1.50. 3 tested Queens, \$4. \$4.

Select tested, \$2.50. \$2.50. 2 Frame Nuclei with any queen, \$1.50

each, extra. Safe arrival guaranteed.

W. J. ELLISON,

3 12in Catchall, Sumter Co., S. C.

BIG SMOKERS FOR BIG BEEKEEPERS.

My new Smoker is now ready. I claim the following points of excellence, viz.:—A stronger blast than any ever made: a valve accessible from the outside, and for delicacy of spring exceeded by none; calfskin leather instead of sheepskin; bellows boards protected against damp by shellac inside and outside; fire-barrel, 3½ x 10 inches, and bellows 6 x 9, spring outside, grate heavy, and riveted in the barrel. Neither ashes nor cinders can possibly get into the bellows. The whole is well constructed. There is not a weak or flimsy spot in the whole machine. Price, \$2.50 each, cash with order. When 3 or more are ordered together, express charges will be prepaid.

S. CORNEIL.

Lindsay, March 25, 1893. 1-tf