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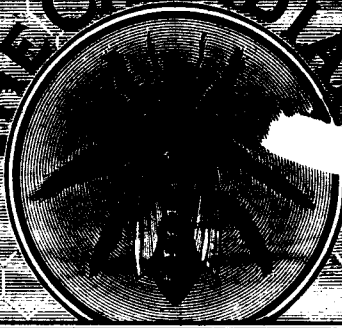
VOL. IV, NO. 5

1888

APRIL 25

PUBLISHED EXCLUSIVELY IN THE INTERESTS OF THE HONEY PRODUCER

THE CANADIAN



JOURNAL

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ONE DOLLAR PER YEAR

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Beeton, Ont.

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ERRORS.—We make them: so does every one, and we will cheerfully correct them if you write us. Try to write us good naturedly, but if you cannot, then write to us anyway. Do not complain to any one else or let it pass. We want an early opportunity to make right any injustice we may do.

We can supply Binders for the JOURNAL 55 cents each, post paid, with name printed on the back in Gold letters.

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TO CONTRIBUTORS

Communications on any subject of interest to the Beekeeping fraternity are always welcome, and are solicited.

Beginners will find our Query Department of much value. All questions will be answered by thorough practical men. Questions solicited.

When sending in anything intended for the JOURNAL do not mix it up with a business communication. Use different sheets of paper. Both may, however be enclosed in the same envelope.

Reports from subscribers are always welcome. They assist greatly in making the JOURNAL interesting. If any particular system of management has contributed to your success, and you are willing that your neighbors should know it, tell them through the medium of the JOURNAL.

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THE WORLD.

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One year for only \$1. These seeds are just such seeds as everyone having a garden wants and buys, paying 5c. to 10c. per package, the retail price of the seeds is \$1.75. We give away our paper and sell you the seeds at about half price to introduce both to Canadians. Seeds will be sent post paid and we guarantee satisfaction. Address,

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1 Untested Queen.....	\$ 1 15	\$1 00
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Many of the above will be reared in the height of the swarming season and all will be nearly, if not quite as good as the best swarming queens. In every case safe arrival and satisfaction guaranteed.

W. J. ELLISON.
 Stateburg, Sumter Co., Sth. Carolina.

THE BEE-KEEPERS'

REVIEW.

For March is devoted to "Planting for Honey." If undecided upon this subject, by all means read this number. The April number (which will be out in about two weeks) will take up the topic of "Securing Workers for the Harvest," or perhaps it would be more proper to say "Spring Management." B. L. Taylor, James Heddon, Dr. A. B. Mason, Dr. C. C. Miller, E. E. Hasty, F. P. Stiles, H. R. Boardman, J. H. Robertson, J. H. Martin, and Oliver Foster are among the contributors to these two numbers. Besides this, there are several pages in each issue devoted to extracts and to short, pointed editorials upon live, practical subjects. An exhaustive review of Mr. Cheshire's great work "Bees and Bee-keeping," is begun in the present issue. Price of the REVIEW 50 cents per year. Samples free.

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A neat little book of 45 pages, price 25 cents. The REVIEW and this book for 65 cents. Stamps taken either U.S. or Canadian. Address

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BEES AND HONEY.

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M. RICHARDSON & SON,
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100 COLONIES OF BEES FOR SALE OR EXCHANGE.

For Bee Supplies or anything that I can use. Beeswax wanted. Dealer in all kinds of Bee Supplies.

JAMES ARMSTRONG,
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I will sell about 50 colonies of bees at the following rates:

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They are in Jones' S.W. and Combination hives. FOR DELIVERY IN MAY at Beeton or Alliston R.R. station.

AMUEL BRAY, Beeton, P.O.

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Tested, ready in March. Untested, by April 1st. Contracts taken with dealers for the delivery of a certain number of queens per week, at special figures.

FOUR - FRAME NUCLEUS,

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In time to begin season to go to the North-West in charge of 50 colonies of Bees. Apply to

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Advertisements for this Department will be inserted at the uniform rate of **25 CENTS** each insertion—not to exceed five lines—and 3 cents each additional line each insertion. If you desire your advt. in this column, be particular to mention the fact, else they will be inserted in our regular advertising columns. This column is **especially** intended for those who have bees or other goods for exchange for something else, and for the purpose of advertising bees, honey, etc. for sale. Cash must accompany advt.

50 HIVES of bees for sale. Price \$5 per hive. Any person taking the lot. Apply to G. L. PEARSON, Clarksburg, Ont.

WANTED.—Young man who has had some experience in apiary. Willing to make himself generally useful. For particulars address WILL ELLIS, St. Davids, Ont.

HONEY.—We can take all that offers in exchange for supplies, at prices found in another advertisement in this issue. THE D. A. JONES CO., Beeton, Ont.

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WANTED.—A smart, respectable student to help in the apiary. Board and Lodging provided. Practical bee-keeping taught; also free use of apicultural literature. Apply to A. A. SANDERS, Arnold Vale Apiary, Guelph.

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'Practical Hints to Bee Keepers'

Sent free. Address

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Wenham, Mass, U.S.

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J. M. CLARK & CO., 1409 15th St., Denver, Col.
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and numbers of other dealers. Write for SAMPLES FREE and Price List of Bee Supplies. We guarantee every inch of our Foundation equal to sample in every respect. Everyone who buys it is pleased with it.

CHAS. DADANT & SON,
Hamilton, Hancock Co., Ill.



"THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER."

VOL. IV. No. 5 BEETON, ONT., APRIL 25, 1888. WHOLE No. 161

EDITORIAL.

THE U.S. Government have again taken up the matter of fractional currency the bill for re-issuing such having passed the House by a large majority. These silver certificates for ten, fifteen, and twenty-five cents will supersede to a great extent the use of postal notes, and on the whole they are much handier. It seems to us that they will be of a great deal more profit to the Government as well. We have in our possession at this time a ten cent and a twenty-five cent certificate of the series of 1874.

Mr. Henry Stennett, of St. Mary's, who had the misfortuné a short time since to lose his beloved wife under sad circumstances, is again called upon to mourn—this time for the death of his second daughter, Ellen, who died on the 15th inst. of brain fever. We extend the sympathies of the CANADIAN BEE JOURNAL.

The prospects in California for 1888 are as bright as were they in the spring of 1876, which was, taking all in all, the most prosperous known in that country. Rain fell continuously during February and for the first two weeks in March, thus making the season's prosperity almost assured. So says C. N. Wilson in the *Rural Californian* for April.

The revised edition of Rev. L. L. Langstroth's book is now in the printers' hands and will be out some time in the coming summer.

There is a movement on foot to create for the Rev. Father Langstroth a life annuity of as large a sum as possible—not to be less, however, than \$300. This is not a large amount to be raised and there will, we feel, be no difficulty in raising it. Only those who are ready to contribute from the heart are asked to respond. This matter is as yet confidential amongst his friends, and we only mention it, lest some of those who would like to help should be overlooked. For fuller information drop a card to Dr. C. C. Millar, Marengo, Ill., who has matter in hand.

OUR OWN APIARY.

TRANSFERRING.

A GOOD many of our readers will not take much interest in an article on this subject, because they have "been there" as the saying is. There are enough, however, who have yet some transferring to do to warrant taking the space, and so, without further apology we take it.

About the first thing to be done is to get everything into shape, so that when you start there will be nothing wanting which will interfere with your work. You will need to have a smoker—it is sup-

posed, however, you already have one. If not, why take any old tin pan and build a fire in it of any substance which will produce lots of smoke. Punky wood is obtained about as easily as any. Get some old table out in the yard close to where you purpose working, and on this arrange all the little fixings required. Cut up a lot of cedar splints or strips, say one-quarter inch square, and sufficiently long so that when they are laid over the frame they will extend over the top and bottom a quarter of an inch or a little better. Have as many pieces of fine wire, (No. 30 will do very nicely), say eight or ten inches long, with which to fasten the sticks together at top and bottom of frames to hold the combs in position. If you cannot obtain wire handily, string will answer the purpose. These are about all you want for the job itself. But to do the work you need a hatchet or hammer, a small saw, a long-bladed knife and a basin of warm water. If you have an old chisel around it will come in useful to cut the nails with, but the hatchet will pry the sides off the hives pretty well.

Now that everything is in readiness proceed with smoker in hand to the colony to be transferred. But perhaps, we had better say first that you need a hive with movable frames, though we supposed you understood this, as we know you did move the box hive over and set the new hive just in the same place; use the smoker at the entrance of the hive until the bees have had a pretty good smoking. They will, when thus treated, fill themselves up pretty well with honey, and be less pugilistic. Just here a word as to the *time* of day when it is best to do the work. The fewer the bees in the hive the better, so that about 10 o'clock in the morning, while most of them are away in the field, will be the best time. Of course, you understand that you want to choose a nice warm day on which to work. It is as well to keep the transferred hive as close to where the box hive stands as possible, so that the bees when returning from the fields, may not have much trouble in hunting up their home. Well, we left you smoking the bees. When you have this done to your satisfaction, turn the box or log gum up on its end, with bottom side up, easy, without too much bending, and take off the bottom board. Over the box place

another one improvised for the purpose, so that the bees may run up into it. Then beat the sides of the box containing the colony sharply with a couple of sticks until you have got the most of the bees out and up in the top box. Lift off the top box and set it down at the side. Then, with the hatchet, split off one or two sides of the hive. In our list of things needed, we forgot to mention that three or four good, wide shingles (division boards will do), are wanted to lay the combs on as they are taken from the hive. Next cut the sides of the combs in the box loose with the long bladed knife:

Lean the division boards or shingles up against the combs and tip the combs over on to the boards, cutting the combs loose at the bottom. Lift the boards up and put them on the transferring table; keep on at this until all the combs are taken out. Commence at once to fit the combs in the frames. In fact, if the bees were coming back from the fields pretty early, it would be advisable to fit up the first or second comb cut from the old box. Then, when the bees enter their new home they will find combs ready for them, and it will not appear so strange as if they were ushered into a home having only the bare walls, and they will be more apt to stay. There will also be a place for them to store up the honey or pollen which they have been gathering.

HOW TO PUT THE COMBS INTO THE FRAMES.

Fit the piece of comb into the frames to the best advantage, and fasten the split cedars on both sides with the pieces of wire which have been previously prepared. When the pieces of comb are fitted in the frame, lay over the top as many pieces of cedar as will be required to hold them in position till the bees can fasten them. On top of these pieces of cedar, lay another shingle or division board and "whop" the whole over. Remove the board which now forms the top and lay cedar sticks on the top side, opposite to those put on previously; then fasten the ends, make the sticks fast at the top of frame first, and the bottom pieces can then be drawn together more tightly, holding the combs more solidly.

Be careful to transfer only worker comb—remove all drone comb and melt

it up. Keep the brood nest as perfect as possible. When all the combs are fitted and put into the new hive and a quilt is laid over the frames, put a cloth down in front of the entrance and shake all the bees out of the box and they will run in the same as a new swarm.

In two or three days the bees will have all the combs cemented together and fastened neatly into the frame, when the transferring sticks may be removed.

HINTS.

Should there be too much honey in the combs, it may be extracted before being put in the hives, by placing the pieces in a wire comb-basket. Then if the honey flow becomes irregular it may be fed back afterwards.

If the colony is not very strong drumming may be dispensed with. Smoke the bees in the manner described and proceed as instructed.

Any articles which have become smeared with honey may be placed in the back of hive behind the division board or over the frames by removing the cotton quilt. Or if honey was coming in pretty rapidly from the fields and there was no danger of robbing, they might be left near the entrance.

Be careful. Do not go at the job as though you were threshing peas. Bees object to rough handling just the same as does a donkey.

It makes no difference how the pieces of comb are put into the hive. They may be turned upside down or sidewise as best suits the circumstances of the case.

Keep the bees constantly in subjection by the use of smoke, so that they may not get to think that you are not "boss."

If there is lots of drone comb, instead of melting it up, save it and fit up frames composed of that kind only. It will come in well when the honey flow comes along, for store combs.

The smallest bits of comb may be saved and fastened into the frames.

After you have transferred one or two colonies, you will begin to get into the way of it, and you will soon enjoy the

work. Twenty minutes to half an hour is all that is required for each hive, when you have once got the hang of the thing.

If the transferring is done at a season when robbing is prevalent the whole work may be done under a tent.

TRANSFERRING.

EVERY little while somebody asks us when to transfer bees from box hives to the movable frame hives of the present day, and our answer has always been:—"Do it during fruit bloom." On this same subject, in the *Prairie Farmer* Mrs. L. Harrison says:

"Bee-keepers are an uneasy, restless, inventive sort of people, and are never content to do a thing twice the same way; but as to the best time of transferring bees, they have never varied all agreeing that it is just before or during apple bloom. Then there are few bees, little brood and honey, and they can repair all breakage, and fill all holes in comb during the flow from apple bloom. Choose a warm, still day, and have everything in perfect readiness before disturbing the bees."

How to do it forms the subject of an article in this number of the *BEE JOURNAL*. There are many box-hive bee-keepers who have recently joined the ranks of the *CANADIAN BEE JOURNAL*, in the neighborhood of Ottawa and eastward, and this article will be an answer to the many inquiries we are having.

SPRING AND SUMMER WORK.

IN the last issue of the *Apiculturist*, Mr. J. E. Crane, of Middlebury, Vt., writes up the above subject generally. We copy portions of the article as below:

FASTENING FOUNDATION IN SECTIONS.

In fastening in foundation I prefer to use beeswax one part and paraffine three parts, melted together, and with a teaspoon running a little along the edge of the foundation, and fastening it to the top of section. This mixture works much better than clear beeswax, and it takes much less of it, and seems to me is a much better way than mashing the foundations against the section. An active man can, with melted wax, put in 1500 starters a day, and pack the sections in clamps ready for the hives, and if well done they will stand almost any amount of shaking or

jolting without breaking loose, which is important where the sections are to be taken some miles over rough roads for use.

WINTERING BEES.

Much of one's success will depend on how bees are wintered. If well wintered, it is usually an easy matter to get them strong by clover time. I have wintered my bees most extensively out of doors in double walled hives. All that is essential is a good colony of bees, twenty to twenty-five pounds of good honey or sugar syrup, and the brood nest made small by the use of division-boards and thoroughly packed on all sides, top and bottom also, with wool, chaff, sawdust, leaves or fine shavings—I have used all these with entire success. The entrance should be kept free from ice or dead bees. If a large sack is made of cheap cotton and filled with planer shavings for the top covering, it can be easily removed for the examination of bees or to pack away for summer. The rest of the packing can remain on the hives during summer without harm. The hive that I formerly made for this purpose, with an under entrance, that has been patterned after so extensively, I have discarded, preferring to have the bees enter from the front, and experience proves that bees winter much better in such hives than those with an under entrance. Yet after more than twenty years' experience with hundreds of colonies, I am persuaded that for the colder sections of our country in-door wintering is to be preferred where one can command a cellar or other place where the atmosphere can be maintained at a proper temperature from early November until late in April.

The temperature that suits me best is from 50° to 55° in the early part of the winter, and 5° to 10° cooler the latter part of the season of confinement.

The temperature should be as high as possible and the bees remain quiet, which will doubtless vary with other conditions.

I have found that when the honey-board is raised one-eighth inch at one end, bees remain much more quiet at a given temperature, and the comb is much cleaner than when no upward ventilation is given.

SPREADING BROOD.

Much has been said and written about building up bees during early spring by changing combs, putting combs of brood from the centre of brood nest to the outside, and putting empty combs, or those having eggs or larvæ in the centre; but this practice is almost sure to fail of its object in the hands of a novice, and an experienced apiarist ought to have little use for it unless for a few weaklings.

A much better way, to my mind, is to reduce the brood nest to what combs each colony can cover in early spring, say May 1st, and then increase the size of the brood nest as required. Then if the colony is of fair size, with sufficient stores and fairly enterprising, it will be strong by clover time. A little feed between apple-bloom and clover, if a colony is short of stores, is very helpful in pushing forward a large amount of brood. Nearly all drone comb should be removed from the brood-nest that workers may be reared instead of a horde of hungry drones.

As clover comes into bloom most hives should be full of bees and brood with but little honey or empty combs.

If any weaklings remain, take two, or more if necessary, and unite the brood combs, getting as many as possible in the above described condition.

WHEN TO PUT SECTIONS ON.

As soon as honey comes in freely, put one clamp of sections on each hive, cover it with enamelled cloth, laying the honey-board over that.

If honey is abundant, most colonies will enter sections and begin work at once. Still, we often find some colonies strong enough, yet refusing to do anything in our surplus department. Whether the workers in such hives are trying to emulate the easy life of the drones, or are discussing the propriety of emigrating, I do not know. Usually exchanging their clamps for one partly filled will set them at work. Queens of such hives had better be exchanged at once.

SWARMING TIME.

About this time the heart of the bee-master is happy. The beautiful snow white combs, in perhaps hundreds of hives, are daily increasing in size, while the purest nectar is sparkling from each tiny cell, while to his utter disgust the work lags in many hives, and eggs and larvæ are found in queen cells. Soon a harsh, heavy sound announces that swarming has begun, hive after hive is left nearly empty of workers, and work in sections is entirely neglected, while the honey harvest is swiftly passing away. What is to be done? If we multiply colonies it is at the expense of surplus honey, unless the season is longer than most of us enjoy. Mr. Heddon, of Michigan, gives a method by which he claims nearly all mature bees are secured with the new colony, and surplus storing but slightly interfered with, while the old colony never casts a second swarm.

I have tried this method very carefully the past season with Italian bees, and found about every other colony would cast a second swarm.

I think it might work well with black bees, as the swarming impulse does not seem to be nearly as strong with them as with the Italian race. I have prevented black bees from swarming by simply cutting out all queen cells, moving the hive to a new place, and running the swarm into the hive; they would work on industriously until the close of the season, finishing off their surplus boxes to my entire satisfaction, but Italian bees are not made up that way.

After many years of experience, and after making a great many experiments with hundreds of colonies in several yards, the way that suits me best is as follows: See that every queen's wing is clipped before the swarming season begins. When a swarm issues, pick up the queen, and, if you wish to save her, cage her with a few of the workers, or otherwise destroy her. Open the hive from which the swarm came, and cut out every queen cell; this can be done without smoke. By this time the swarm will be ready to return or cluster in some place, when it can be returned. Again in eight or nine days open the hive and again remove every queen cell, and at the end of another week give a virgin queen. Black bees will accept a laying queen while Italians as a rule will destroy one under the same circumstances, but they will usually accept of a virgin queen. If a queen cell nearly mature is given they are quite apt to swarm after she hatches, but if the virgin queen is given as above directed, I do not remember to have had such a hive, out of many hundreds so treated, attempt to swarm. Again, the same season, I frequently run these queens into the hive without smoke or other ceremony, and some years not three per cent. will get lost. In other years perhaps ten per cent. may be lost or destroyed, so that a few new colonies should be made early in the season to make up any deficiency likely to occur. When the season is quite long more increase is admissible, using early swarms for this purpose. Where the swarms are used for increasing the number of colonies, the hives casting these swarms should have their queen cells removed and virgin queens given the same as where the swarm is returned to prevent second swarms.

The advantages of this system of management are, briefly, that it effectually prevents increase of colonies beyond the desire of the honey producer; it leaves only a small amount of brood to be nursed during the greatest yield of honey; it prevents the maturing of a large amount of brood too late to be of use in storing surplus, while too early to be of much value for wintering; gives nearly all our colonies young, vigorous queens from our most productive colonies, and,

so far as my experience goes, much less work than where swarming is allowed to proceed without any check; and, best of all, it keeps every hive supplied with a large force of workers from the beginning to the close of the honey harvest, and work in surplus department goes on almost without interruption from beginning to the end of the season.

CONTRACTIONS.

Some bee-keepers practise putting new swarms in very small brood chambers to force the bees into the sections, as for instance one section of the Heddon hive or Langstroth hive with four or more frames, filling the rest of the brood-nest with dummies or division boards. I think it best to use seven or eight Langstroth frames, putting one and one-half good swarms into each hive, thus making all new colonies strong enough to enter sections very soon after being hived. It will be observed that the object of all this system is to keep the largest number of strong colonies at work in the sections from the beginning to the end of the season.

Some writers recommend that new swarms should be hived upon empty frames without comb or foundation, while the sections are to be put on at once with good starters, or light foundation in them, thus encouraging the bees to begin in sections first. My experience has been that when so treated more or less pollen is sure to be stored in the sections, and the appearance injured and the attacks of the wax moth invited to the destruction of the combs, so I advise that the frames for brood chambers be filled with clean comb or foundation.

To return to our sections. As the first clamp of sections become nearly filled, or the bees much crowded, let it be raised up and another placed under it, being careful that the bee-spaces correspond, that the bees may pass freely to the upper clamp, and so continue as needed until the close of the season.

REMOVING SECTIONS.

As soon as all the sections in a clamp are filled and finished, let it be removed, as the longer it remains on the hive the more the bees will stain and discolor the combs. Some writers recommend taking off each section as soon as finished. This may be a very nice way, but not practicable in a large apiary, so it seems to me.

Near the close of the season the number of sections on each hive should be reduced to the capacity of each hive to finish as far as possible.

In removing sections, lift the cloth on top and blow hardwood smoke down between the sections, driving most of the bees before it into the brood chamber, and remove the clamp or clamps at once. If bees are inclined to rob, place the

clamps in a tight box, covering the top with a cheap cotton cloth.

The bees remaining in the clamp will crawl up on the cloth, and can be quickly removed.

When clamps are well filled, an active man can remove and get the bees out of 2,000 sections a day, and carry them into the house. I prefer to store surplus honey in a dry, warm room, giving the air a chance to circulate around and through each clamp.

FUMIGATING HONEY WITH SULPHUR.

Much has been said and written of the necessity of using sulphur smoke to keep the larvae of the wax moth from injuring the comb; but if the combs are white and clean, with no dead flies, or no pollen that the worms can get at, the latter will do much less harm than the sulphur smoke, which is sure to ruin the flavor of the honey, and, if too much is used, the appearance of the combs, also.

The facts are, these worms cannot develop on wax and honey any more than a child can on sugar and starch. They must have some nitrogenous food, which they can find in old combs, dead bees, pollen, or even a dead fly.

CLEANING SECTIONS.

Before sending to market, every section should be made clean and tidy and carefully graded, and each grade packed in small cases by itself, either with or without glass, with wood sides or in paper boxes, as your market may demand. The marks on the case should accurately represent the grade.

I have now mentioned very briefly the most important factors in the production of comb honey, with but one exception. After all that man can do, much will depend on the season.

Some years the yield will be abundant, while in others very small, and it is always well to follow the advice of Moses Quinby and lay in a stock of patience and courage in the good year to carry you through seasons of adversity.

Middlebury, Vt.

For the Canadian Bee Journal.

Spring Work With Colonies Wintered on Summer Stands.

THIS is a subject upon which much has been written and I am not sure that I can add anything new, but as we all have some "kinks" of our own, I will give in this short and hastily written article my method of spring management. My experience has been almost entirely confined to out-door wintering. In fixing our bees in the fall we place an absorbent cushion over the brood nest in the top story. Then we go over the apiary and take off all the

honey-boards, carry them to a table and after scraping them clean of propolis with a small paint brush apply tallow to the edges of the joint where the cover sits on the super or top story. Then in early spring if I wish to take a peep at the bees the cover comes up without any snapping and the peppery rascals do not come boiling up to be in our way. So on the first warm day in spring we take off the cover and place it at the entrance of hive. We then very carefully lift the the cushion between which and the brood frames there is a space formed by placing pieces of old barrel hoops on top of the brood frames. The bees love to congregate in this snug place (presumably to hold a bee-convention) as we often find them clustered on the under side of cushion. If the colony is strong and we can see plenty of honey we place the cushion back. That colony don't need any more spring management, as somebody has said, "they are bound for de kingdom," just let them alone and leave the cushion on until fruit bloom is well advanced. Now if the colony is strong and we cannot see much honey, we carefully lift the cushion with adhering bees out of the super and place them at the entrance of hive, a few may run in but the most of them will remain on the cushion, now we place a few strips of wood one-half inch high on the brood frames and then lay a frame of sealed honey (we save them from last season's extracting although we sometimes use unfinished or un-saleable sections for this purpose.) Then we place a few sticks on top of the honey and put back the cushion bees and all. If, however, the colony seems weak we quietly remove the frames not covered by bees and place a frame of sealed stores close up to the cluster, then fill out the hive with "dummy" frames. To make sure that they have enough stores we sometimes place a few sections over the cluster also taking care that the sections do not touch each other by one quarter of an inch every way providing there are no passageways in the corners of the sections then cushion as before. These colonies are the ones that we need to look after sharp to get them in shape for the June harvest. If they have a good queen and are kept snug I am not sure that they in this locality need any stimulation beyond that which the natural resources give to get them up to "concert pitch" for clover time. About the time that fruit bloom opens however I like to take another look at them which means a regular overhauling, lifting every comb and giving them combs for brood rearing just as fast as needed, and if at this time they do not cover more than three combs and have all the brood they can care for do not by any means

consider them poor property. I think it pays better to let them build up themselves than to draw brood from strong colonies; as, however, different localities require different management, I speak for my own only in this particular. The reader will notice that I aim not to disturb the cluster when examining bees in early spring. With indoor wintering my experience has been too limited to give much of an opinion. But by what I have gathered from some experience and considerable reading I should leave them indoors until I thought they should have been out a week ago and then leave them in four or five days longer to be on the safe side.

J. F. DUNN.

Ridgeway, April 13th, 1888.

For the Canadian Bee Journal.

Spring Hints from Mr. McKnight.

BEES should be examined as soon as placed on their summer stands.

When bees are placed on their summer stands they should be disturbed as little as possible till warm weather sets in. The more warmth secured to them the better.

If hives have movable bottom boards the bottom should be unhooked and scraped clean of dead bees and debris, the hive being set on a clean bottom board as soon as removed.

The next duty will be to ascertain the condition of the hive as to stores. If there is not sufficient food in the hive to carry the stock through till fruit bloom they should be fed. This should be done with as little disturbance as possible. If a stock of comb honey remains on hand a can or two may be placed in the hive, the cappings being scratched or partially removed, or the quilt may be removed and the comb placed on its flat over the top bars, the quilt placed over this and carefully tucked in so as to prevent the heat escaping. If there is no honey in stock sugar syrup will answer the purpose equally well. As little disturbance as possible should accompany spring feeding in whatever form it is done.

Weak stocks are hardly worth the trouble of nursing. Bees should not be "killed with kindness" at this season of the year. Be sure they are suitably provisioned then annoy them as little as possible. Watch the robbers and the robbed, head off the one and protect the other. This will excuse the ingenuity of the watcher. It will be best done by preventing facilities for reinforcement of the attacking force and by protecting those invaded by reducing the avenues of access to a minimum.

R. MCKNIGHT.

Owen Sound, Ont.

For the Canadian Bee Journal.

SPRING MANAGEMENT.

IN spring management much depends upon how the bees have wintered. My experience of late years has been confined to cellar wintering, and therefore use single walled hives entirely. I try to leave the bees in until there is natural pollen or honey flow from some source, and the weather is likely to be fine. This is generally between the 10th and 25th of April; last season it was the 23rd or 24th, and think it will be about as late this season. Try to select a warm, calm day for setting them out, when the temperature is above 60°. If you are not certain that the day will be suitable, wait until about ten o'clock then you will be able to decide. Two years ago I started putting them out about seven and at eight o'clock the thermometer registered 80°. I always put the entrance blocks on all of the hives before I take any out; then carry them out very quietly and place the hive on the stand; put the lid on at once and open the entrance a little; as soon as all are out or as many as I intend putting out that day, I proceed to examine them at once and see that all have plenty of stores, a queen, clean hive, and crowd them up with division board to as small space as possible. Let me emphasize the advisability of keeping the heat in the hive in some way till the cold weather is past. I use half-stories filled with dry sawdust.

All queenless colonies are united with some of the weaker ones that have queens. But the trying time comes in about three or four weeks after being put out, when the colonies begin to depopulate by the old bees dying off. If we find very weak colonies that are not able to carry themselves through, take young, hatching bees from some of the stronger colonies and shake them down at the entrance of the weak one, and let them crawl in, as this colony would not be strong enough to care for a frame of hatching-brood. If they are, give them the brood, but I think it is not advisable to help any that can get along without as this would be keeping the vigorous ones back. Those colonies that require more room should be given an extra empty comb or two at a time, carefully watching that the brood is not spread too much, for fear of it being chilled. In the weaker colonies these empty combs I put outside of the brood frames, and often turn the brood outside frames end for end, thus saving space. See that all have plenty of feed; do not be afraid to examine when necessary if the weather is warm enough: gauge the entrance to suit the strength of the colony. I don't think stimulative feeding necessary if there is plenty of feed in the hive, but if it is scarce, feed syrup in the evenings to keep the bees from robbing,

or give them honey from those that have it to spare.

It may not be out of place for me to say here that it would improve the sale of honey very much if, on the approach of the honey flow, every bee-keeper, (and especially those who have been feeding syrup), would extract the old honey and spring honey out clean and save it for fall feeding, and then if we manage right, or rather, let the bees manage right by allowing them to cap the honey well before extracting it, we will then have a first class grade of honey throughout the season if it is to be had.

H. COUSE.

Cheltenham, April 13, 1888.

For the Canadian Bee Journal

SOME EXPERIMENTS IN WINTER.

WHAT bees have been wintered as a general rule with fair success in cold climates under the conditions to which they are subjected in winter confinement, to my mind proves nothing more than that the honey bee possesses wonderful powers of endurance. In the absence of better and more natural conditions, perhaps an *even* or uniform temperature in the winter repository will give the most uniform results as to bringing bees through the winter in the possession of life. But under such conditions, those bees should dwindle and waste away in the early spring is the most natural conclusion in the world. A uniform temperature of 45° or any other uniform temperature is most unnatural and contrary to all sound theory, and I should expect any living thing to wear out under the monotonous influences except in a state of profound hibernation. That bees do survive such treatment is persuasive evidence that they do hibernate in some degree as claimed by Brother Clarke.

Reasoning from this standpoint I have had a theory for several years that a better way to winter bees in a cold climate would be to keep them in a low temperature, perhaps just above the freezing in the repository in very cold weather, and at intervals of about ten days raise the temperature in the repository to a summer heat and keep it up for ten or twelve hours.

My theory was that such a "warming up" would enable the bees to discharge by exhalation all surplus moisture from their bodies external or internal. In other words have the same effect as does a winter flight. In order to test the matter at the beginning of last winter I placed in a fruit and vegetable cellar where the temperature goes down to near the freezing point during very cold weather, a small colony of bees, and at intervals of about ten days the

hive was carried into my office where the temperature was kept all through the day at a summer heat. The pad was removed from the top of the brood-chamber so that nothing but a thin screen cover was left on to keep the bees in place. As the warm air of the room would begin to be felt by the bees they would gradually rouse themselves and in a few hours they would send up a loud roaring noise like hot summer time. Just before night the pad was replaced and the hive was returned to the cellar for another period of repose. The experiment covered about one hundred days or till the 15th day of March when the bees in the yard began to gather pollen from the elm. On that day the hive was taken to the yard and placed on the summer stand and the heroic little band of workers were carrying in pollen in an incredible short time. These bees wintered perfectly though they were subjected to the severest tests for experimental purposes. In the early part of February they were fed on warm syrup in which flour had been stirred while the spruce was boiling hot, to try what effect such an "impure food" would have on the bees in their confinement, and although the experiment was repeated several times the bees were able to overcome every difficulty by means of the "warming up process."

This experiment leads me to believe that bees can be wintered with perfect success in any tolerably close room if it is so arranged that it can be heated up at the will of the apiarist to a high temperature. Perhaps a furnace under the building would heat it more evenly than in any other way, still it could be heated from a small side room.

The hives should be covered with wire cloth screens so as to give perfect upward ventilation when the cushions are removed preparatory to the heating up process.

To test the matter more thoroughly I extended the experiment to four little weak nuclei with not exceeding a pint of bees each already enfeebled by the first shock of winter, and by my new process I have brought them safely through the winter. They had no sealed stores, hence were fed on syrups at intervals through the winter.

It is proper to say here that none of these bees were fed on *pure food*. The syrup was made of damaged honey mixed with sugar syrup.

The warming up process "so lives the wintering problem."

G. W. DEMAREE.

Christiansburg, Ky., U.S.

We have known of cases somewhat similar to the one related by Mr. Dem-

are above, except that the periods of warming up were not so regular. We remember one case particularly where a colony of bees was taken up stairs and put in a bedroom, when it was discovered that they were short of stores and starving. The colony was kept in this room all winter. The pipe from the kitchen stove ran through the room and the temperature would be about 60° or 70° all the time. The curious part of the affair was that during the whole time the colony was fed daily with a spoon—that is syrup was poured into the combs every day. And this colony came through all right and did well the next year. Another friend only a few miles from Beeton, had a number of cases of starvation on hand, and to prevent this he took his bees from the cellar, which was pretty cold, and warmed them up every time he fed them, but he found that they were taken very bad with dysentery. Of course he was not so particular in the matter of regularity as Mr. Demaree. It is possible, too, that he did not warm them up sufficiently. The experiment is certainly worth going into a little deeper. There are many cases we doubt not where bees have been warmed up, and this article will perhaps bring some of them in.

FOR THE CANADIAN BEE JOURNAL.

Something More About L Rests.

WHILE we believe that you have the right to write up the merits of any or all of your inventions, in any part of your own journal, and while we think it mean of any one to try to "beat" in an "ad." by working it into the reading matter, yet we cannot allow the remarks made on page 47 (in your comparison of the L super, with your new system of manipulating sections) to pass without entering our protest against the mis-statements therein contained. And, to use your own remark, "we are under the impression, too, that you "hardly understand" how to properly construct a L super. In enumerating the number of pieces to be handled, you say there is "the honey board super, two L rests and two L rests" or six pieces in all.

Now, nearly everyone knows that in a properly constructed L super there are no L rests, so that reduces the number of pieces to four, and by using four small wire nails you can fasten the L rests in their place, and that will reduce the number of pieces it is actually neces-

sary to have to two, namely, the honey-board and super.

Also, on page 46 you say "and there is always so much more trouble putting in the sections. The edges catch on the strips of tin, and make a man feel very wicked at times." Now, this shows plainly that you do not understand how a L super ought to be arranged, as there are no edges of tin anywhere except the Ls themselves, and as they are folded and very smooth, there is absolutely nothing to "catch" the sections.

And as to your remarks about reversing, they do not apply, because reversing grew up like a mushroom and has died about as quick.

We do not want to criticise your arrangement, but if our memory serves us right, your super alone is made of four separate and distinct pieces of wood held together by clamps, and yet in the article referred to it is counted as one piece.

J. & R. H. MYERS.

Stratford, April 13, 1888.

We are glad to have the above in defence of the L rests. We think they are a good thing too, but we believe we have something better in the new reversible honey-board and super reverser. We had better say just here that we are the originators of the L rest system, and as such ought to know a good deal about them. We have perhaps sold more of these than all other makers in Canada combined, and we are not going to set up in opposition to them at all. We have no object in doing so. The L rest is used, and very largely, by a great many, and we spoke of the whole arrangement as it is in general use at the present time. That it was capable of a better arrangement there was no room to doubt. Of course the L rests can be done away with by using strips of tin tacked on to the edges of the super on which the sections may rest, and the L rests can be tacked in, but such is not the way they have been generally used up to the present time. But the super is in no way reversible, as is the case with the one we described. Whether inverting and reversing are good things or not, to have a super capable of this is certainly no harm. And that it is a good thing at certain times, there are but few bee-keepers deny. The strips of tin to which we referred as having edges on which the sections catch, are the identical ones you speak of. No matter how smooth the edges are, if your sections are not very loose

they will be sure to catch on the edges more or less. We *know*, because we have put a good many sections into supers fitted with these self-same \perp rests. You are quite right as to the super you speak of having seen—that is, if you refer to the ones we had on exhibition at the Toronto Industrial in the fall. Only (and here we want to emphasize) *we do not claim as a part of our invention the portable super* such as you speak of. It may be used in conjunction with the honey-board and reverser, but for all ordinary purposes the same super as used with the \perp rests, only the proper depth, and without any saw-cuts or tin strips tacked on, is needed, and the bulk of those we send out are of this class. Now, while we are talking on this subject, let us say that we do not intend to occupy a lot of space every week, right in our regular reading columns, with this matter. We have been charged with allowing too much free advertising to be given the Heddon hive, and we will not be guilty of it in our own case. Anything to be said in the way of explanation will be put in the regular "business notice" department set apart for our own use.

QUERIES AND REPLIES.

UNDER THIS HEAD will appear Questions which have been asked, and replied to, by prominent and practical bee-keepers—also by the Editor. Only questions of importance should be asked in this Department, and such questions are requested from everyone. As these questions have to be put into type, sent out for answers, and the replies all awaited for, it will take some time in each case to have the answers appear.

Entrances Facing South.

QUERY No. 179.—Has a hive with the entrance to the south any advantage over those in other positions?

S. CORNEIL—No.

H. D. CUTTING—I think not when all things are taken into consideration.

PROF. COOK—I prefer entrance to the east. Then the early morning sun is most felt by bees.

DR. C. C. MILLER—There is little difference, but on cool days there is an advantage in having entrances face the south or east.

G. M. DOOLITTLE—Yes, I think so, especially in wintering out-doors. Bees often get a good flight in winter when facing south, while if facing north they would not fly at all.

O. G. RUSSELL—We usually set them with the entrance to the south, but have had them do well with entrance to the east. It depends a good deal on the immediate surroundings and whether the apiary is protected from winds.

M. EMIGH—My hives face east, west and south. Taking it one year with another, I don't see much difference; south by west is as good as any position, other things being favorable.

ALLEN PRINGLE—On the whole I think the south entrance the best—though east and west are good and in some cases north. My own colonies mostly face west and south—partly for convenience and partly on principle.

Wintering in Northern Latitudes.

QUERY No. 180.—How far north can bees be wintered successfully for a succession of years, or at how low a temperature do you think it would be safe to try them? Here in Manitoba we sometimes have it 50° below zero in the northern part.

O. G. RUSSELL—I do not know.

H. D. CUTTING—Have had no experience in such cold localities.

G. M. DOOLITTLE—If as far north as Manitoba I should not try wintering, except in cellars.

DR. C. C. MILLER—I don't know that bees have ever been tried at a point too far north to winter.

PROF. COOK—I think with intelligent care, as far north as flowers would warrant bee-keeping. The ground, rightly used, makes us independent of temperature.

M. EMIGH—Just as far north as you can find a nice warm October and May. It don't make any difference how much below zero it is so long as your bee cellar is 50° above.

S. CORNEIL—I think the northern limit for successful wintering will be found where the frost begins to remain in the ground winter and summer. In the Northwest I would try a very deep cellar.

ALLEN PRINGLE—I wouldn't care to try to winter bees on the summer stands at 50° below zero, but give me a good cellar and let me fix them up to suit me, and I don't care if it is a 100° below outside. You can also keep them in confinement for seven consecutive months under proper conditions, and that would be long enough, I presume, even for Manitoba.

WOULD NOT BE WITHOUT IT.

JAS. C. McDONALD.—I like the JOURNAL very much and would not do without it on any account.

Barnett, Ont., April 13, 1888.

CAPPINGS

WHICH FELL INTO OUR RIPENING CAN.

LIKE IT VERY MUCH.

Mrs. BROCKWELL.—I like your combination hive very much.

Bedford, N.S., April 23, 1888.

EXCELLENT STYLE OF MANUFACTURE.

R. L. MEADE.—The queen-excluding honey-boards (100) just received are just the right thing. I am well pleased with your excellent style of manufacture. The zinc strips are not the same as sample sent sometime ago, but they will do remarkably well.

Nassageway, Ont., April 13, 1888.

MAKING A GOOD JOURNAL OF IT.

J. F. DUNN.—Though I am very busy, I gladly sit up late at night to help the CANADIAN BEE JOURNAL in the success of which I take a deep interest. You are making a good JOURNAL of it—no mistake.

THAT NEW INVENTION.

That new invention of yours will work, I think, complete. I shall have to order a hive or two this season to try it anyway.

Ridgeway, Ont, April 14, 1888.

SUNDRY SELECTIONS.

CORRECTION.

MAHALA B. CHADDOCK.—On page 32 Prof. Le Conte's sentence should read, "it is as irrational to talk of an evolutionist as to talk of a gravitationist," not a quotationist, as you have it.

ROBT. RIVETT.—As you were wanting to know how bees did in all parts I thought I would send you an item. In 1886 I put away for the winter twenty-five colonies and in the spring of 1887 I had twenty-one, at the end of the season I had sixty-one, or an increase of forty; I also got 2,250 lbs. of strained honey at 15c. per lb.; I also got fifty lbs. of comb honey which I sold for 25c. per lb. Now, I would like to hear of any one that can beat the above, especially in a northern country like this.

Kagawong, April 3rd, '88.

A POOR REPORT FROM MISSOURI.

JNO. NEBEL & SON.—Bees are doing well now. Fruit bloom has just opened, and new honey is coming lively. We do not get any surplus from fruit bloom, as bees require all for brood rearing. We went into winter quarters with 200 colonies; wintered 194, the six that died being too weak in bees when put in. Ours were all wintered in cellar. Fully one-half the bees in our county are dead.

High Hill, Mont Co., Mo., April 14th 1888.

HOW TO PREVENT INCREASE.

SUBSCRIBER.—I have eleven colonies of bees. I do not want them to swarm more than once during the coming season. How am I to prevent them from doing so?

Place second stories on your hives and give the bees lots of room for storing and the queen lots of space in which to lay. The queen may be kept out of the second story by using the perforated metal honey boards. Extract from the second story as fast as filled. You can, if you find the colonies unusually strong put on a third story and extract from both top stories. We had as many as four upper stories filled with frames the same size as yours in the brood chamber and the same number on some of our colonies last year. We thus prevented them from swarming to a great extent.

THE CANADIAN BEE JOURNAL.

THE D. A. JONES Co., Ltd.,

— PUBLISHERS, —

D. A. JONES,

Editor
and President.

F. H. MACPHERSON,

Asst. Editor
and Business Manager.

WEEKLY, \$1.00 per Year, Postpaid.

BRETON, ONTARIO, APRIL 25, 1888.

BUSINESS DEPARTMENT.

Observe our special offer of sections, in large lots, as given in our advt. columns.

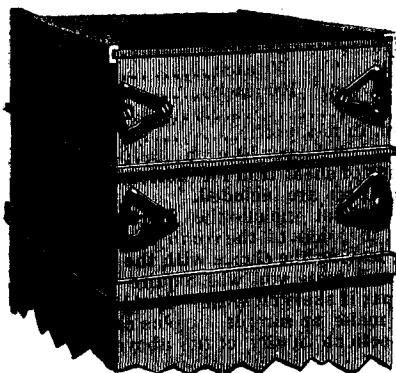
Our "Sundries" department, though only in going order for a week or two, has proved a decided success. We are getting good orders every day.

Our plan of sending out notices to those whose subscriptions expire from time to time, a week in advance, is a splendid thing and we find meets with general favor. Most all of them renew, and in cases, where the subscriber wishes his JOURNAL discontinued, we have only to receive a card to give effect to his wishes. We have said that "most all of them renew" but still there are some who do not, neither do they order a discontinuance. This is all right, but in such cases, wouldn't it be much nicer for us to receive a card something like this: "Please send on the BEE JOURNAL, I know my time is up, but I'll remit pretty soon." How much better it would make us feel, and at what a small cost to yourselves.

OUR NEW Reversible Honey - Board

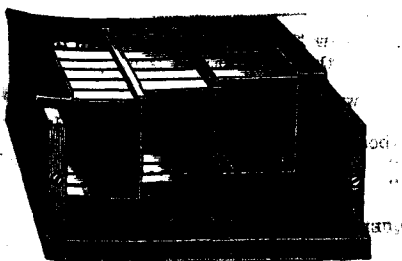
— AND — SUPER REVERSER.

This is the invention about which so much has been said in the bee journals during the past winter, and we are satisfied it will meet



THIS CUT SHOWS THE GENERAL APPEARANCE OF THE SUPERS.

with the approbation it merits. We have tested it thoroughly in our own apiaries, and have had it in operations in the apiaries of three other able, practical and successful bee-keepers.



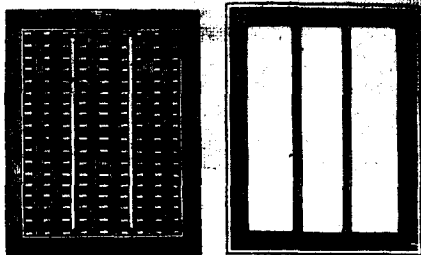
IN THIS ENGRAVING THE SECTIONS ARE SHOWN AS RESTING ON THE HONEY-BOARD WITH THE REVERSER COVERING THE JOINTS OF THE SECTIONS.

We claim for it:

1. That section honey can be produced with less expense and with less handling than with other hives.
2. The great simplicity of the whole arrangement which adapts itself to the requirements of the merest novice as well as to the skilled apiarist.
3. It can be adapted to any hive in present use at very small cost.
4. The cost of wide frames, section cases, skeleton crates, rests, etc., is done away with.

5. The hive and supers are rain proof and wind proof.

6. The trouble of having the sections propolis together is done away with entirely.



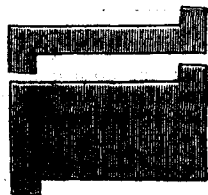
SHOWING REVERSIBLE HONEY-BOARD AND REVERSER.

7. A most perfect and exactly correct bee-space is maintained at all times.

8. There is no shrinking and swelling of wide frames or section arrangements, there being none.

9. The sections may be reversed or interchanged, either by the whole crate or individually, with the utmost simplicity.

10. Separators can be used with this style of super just as readily as with any other.



CROSS SECTIONS OF SIDES OF REVERSIBLE HONEY-BOARD AND REVERSER.

11. The sections are brought just as close to the brood chamber as it is possible to get them in the tiering up system, and a quarter more sections can be put in every super.

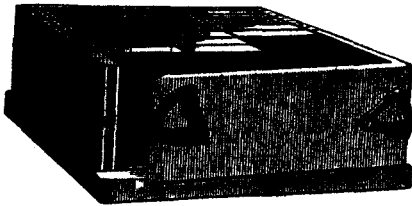
12. There being less weight and bulk the shipping charges will be much less than ordinary.

The prices of these honey-boards and reversers, for the different styles of hives, are given under their proper headings. We keep on hand a stock suitable for the "Jones," "Combination" and "Langstroth" hives. In ordering for any other style of hive, be particular to give the exact inside and outside measurement of the hive, so the honey-boards may be made to fit properly.

SPECIAL PORTABLE SUPERS.

Almost any super will suit this new arrangement, and we give in the price list the prices of the honey boards and reversers separately. We make a special "portable" super which is put together with a very light hive clamp, which answers its purpose capitally. When the sections are ready to take off, all that you need to do is to unfasten one corner (see cut following), and lift off the whole super. We make

them for the Combination Hive only, except to order.



SHOWING PORTABLE SUPER WITH SIDE THROWN OPEN SO SECTIONS MAY BE REMOVED.

The price in flat includes the clamps and screws necessary to put them together.

	made up in flat		
Portable Supers each.....	\$ 25	\$ 22	
“ “ 10 and under, each	22	20	
“ “ over 10 and up to 25	20	18	
“ “ 25.....	19	17	

THE D. A. JONES CO., LD.,
BEETON, ONT.

THE COMBINATION HIVE

We believe that for all general purposes this hive is the best and cheapest in the market today. It combines all the good qualities of the most expensive hives offered, and the simplicity wanted by the novice or beginner in bee-keeping; its cheapness alone being one great characteristic.

The inside dimensions of the hive are: Length, 10½ in.; width, 13½ in.; depth, 12½ in. The frames are 10½x12½ in. In other words, the frames are of the same dimensions as in the "Jones single walled hive" but are turned over on the side. There are those who object to using a hive with so deep a frame as the ordinary Jones hive for comb honey, while the frame turned on its side meets their views; the supers are worked by the use of skeleton crates or \perp rests, and either 3½x4½ or 4½x4½ sections may be used, unless, of course, you desire the new reversible honey-board and reverser, prices of which are given farther on; when neither skeleton crates or \perp rests are needed.

COMPLETE HIVE FOR EXTRACTED HONEY

Will consist as follows: 1 Brood Chamber, (including cover, bottom and frames) 75c.; 1 Second Story, (including frames) 65c. Total (ready for use) say.....\$1 35
3 and up to 5..... 1 20
Over 5 and up to 10..... 1 10
Over 10 and up to 25..... 1 00
Add 15 per cent. to these prices for one coat paint; and 25 per cent. for two coats.

The prices of the above complete hives in the flat, will be:—

Over 3 and up to 5.....	\$1 00
“ 5 “ “ 10.....	90
“ 10 “ “ 25.....	85
“ 25 “ “ 50.....	82
“ 50 “ “ 100.....	78
“ 100.....	75
Brood chambers alone, in flat, each...	55
Second stories, alone, in flat.....	45

COMPLETE HIVE FOR COMB HONEY

Consists as follows: Brood chamber (including cover, bottom-board and frames) 70c. two supers made up, each 15c. (30s) say..\$1 00
Over 3 and up to 5 each..... 95
“ 5 “ 10 each..... 90
“ 10 “ 25 each..... 87
“ 25 “ 50 each..... 85

Add for one coat paint 15 per cent; two coats 25 per cent.

Prices in the flat—include brood chamber, as above, and two supers—and are as follows:

Over 3 and up to 5 each.....	\$ 75
“ 5 “ 10 each.....	70
“ 10 “ 25 each.....	65
“ 25 “ 50 each.....	63
“ 50 “ 100 each.....	60
“ 100.....	58

Supers, in flat, each..... 12½
“ “ per 10, each..... 10

Strips of sheet iron for bottoms of supers or section cases are included.

We do not include the \perp rests or skeleton crates, in prices of the comb honey hives. We prefer leaving the choice with the customer. If you use \perp rests you will require to buy 3½x4½ sections; if skeleton crates, 4½x4½.

We make up sample surplus cases complete with sections in any of the above ways at 45c. each.

The prices of ordinary queen-excluding honey-boards of metal and wood to fit this hive are as follows:—

	MADE UP.	IN FLAT.
Price, each.....	\$ 25	
“ per 10.....	2 35	\$ 2 10
“ “ 25.....	5 50	4 75
“ “ 100.....	20 00	17 00

Prices for New Reversible Honey-board to suit the Combination Hive

WITHOUT PERFORATED METAL.

	Made up.	In flat.
Honey-boards, each.....	25	22
“ 10 and under.....	22	20
“ over 10 and up to 25.....	20	18
“ over 25.....	19	17

QUEEN-EXCLUDING BOARD WITH METAL.

	Made up.	In flat.
Honey-boards, each.....	30	25
“ 10 and under.....	28	23
“ over 10 and up to 25.....	27	22
“ over 25.....	25	20

REVERSERS.

	Made up.	In flat.
Reversers, each.....	15	13
“ 10 and under.....	14	12
“ over 10 and up to 25.....	13	11
“ over 25.....	12	10

The super arranged as above holds 24 sections 3½x4½x1½.

Where separators are wanted add 10 cents to the price per super.

PORTABLE SUPERS.

For the prices of these see page 5. We only stock these to fit the Combination Hive.

THE D. A. JONES CO., LD.,
BEETON, ONT.

D. A. JONES, Pres.

H. H. MACPHERSON, Sec.-Treas.

THE D. A. JONES CO., LD., BEEFON, ONT.

Manufacturers of and Dealers in Apiarian Supplies

OUR CIRCULAR SENT FREE ON APPLICATION.

Publishers Canadian Bee Journal.

Fine Book and Job Printers.

QUEENS.



Our trade in queens grows greater each succeeding year, and we seem to be giving better satisfaction as well. We endeavor to raise queens which will produce good honey-gatherers irrespective of breed or race.

We pay much attention to the class of drones with which our queens come in contact.

The annexed table shows the prices at different seasons, of different varieties. These are, of course, subject to change depending upon the supply and demand. All changes will be noted in the CANADIAN BEE JOURNAL :

MONTH.	Untested	Tested	Selected	Virgin
May	1 50	2 50	3 00	
June	1 00	2 00	3 00	0 60
July	1 00	2 00	2 50	50
August	1 00	2 00	2 50	50
September	1 50	2 00	2 75	
October		2 50	3 00	

Three at one time, deduct 10 per cent.; six at one time, deduct 20 per cent.

EXPLANATIONS.

We are not, owing to our high latitude, able to sell queens before May, nor later than October.

Untested queens will be ready for sale as soon as mated, and before they have had a chance to prove themselves.

Tested queens are those which have been proven as to race and honey-gathering qualities. Selected queens are chosen because of color, size and honey-gathering qualities.

Queens cannot be shipped unless the weather is warm enough, except at risk of purchaser otherwise safe delivery is guaranteed.

We replace all queens lost in transit, but not those lost in introducing.

BEEES.

Bees should always go by express, unless they are personally cared for en route.

We do not hold ourselves responsible for breakage or delay in transit of colonies of bees they always leave our hands in good shape. We will send out only such colonies as we are sure will give satisfaction. Our bees will be such as the queens we offer will produce.

MONTH.	Italian	Italian Crosses	Carriolan Crosses
May	\$8.00	\$ 8.00	\$ 9.00
June	7.00	7.00	8.00
July	7.00	7.00	8.00
August	6.50	6.50	7.00
September	6.00	6.00	6.50
October	6.50	6.50	7.00

The above prices are for up to four colonies; five colonies up to nine, take off 3 per cent.; ten colonies up to twenty-four, 5 per cent.; twenty-five colonies and over, 10 per cent—always cash. Bees at these prices will always be sent out in the Combination Hive, and each colony will contain a good queen, some honey, and brood according to the season.

BEEES BY THE POUND.

Just as soon as we can raise them in the spring, we will have for sale, bees by the pound at the following prices:—Up to July 1st, \$1.25 per pound; after that date, 90c. per pound. Orders must be accompanied by the cash, and they will be entered and filled in rotation as received. We are booking orders now. Do not delay in ordering if you want prompt shipment.

NUCLEI.

A two-frame nucleus will consist of one-pound of bees, two frames partly filled with brood and honey, and an extra good queen, price \$4. Two at one time, \$3.75 each—up to July 1st.

After that date the prices will be \$3 singly; two at one time, \$2.75 each.

We can send frames that will suit either the Jones or Combination hive. Please specify which you wish. Should you prefer the nucleus in either Jones or Combination hive, add price of the hive, made up, to the cost of nucleus.

Bees by the pound and nuclei must always be sent by express. Orders for nuclei filled in rotation the same as bees by the pound.

APIARIAN SUPPLIES

MANUFACTURED BY

W. T. Falconer, - Jamestown, N.Y.

Are unsurpassed for Quality and fine Workmanship. A specialty made of all sizes of the Simpli-city Hive. The Falcon Chaff Hive, with movable upper story continues to receive the highest recommendations as regards its superior advantages for wintering and handling bees at all seasons. Also manufacturer of FALCON BRAND FOUNDATION. Dealer in a full line of Bee-Keepers' Supplies.

Send for Illustrated Catalogue for 1888. Free.

W. T. FALCONER.

Bee-Keepers Guide —OR— MANUAL OF THE APIARY.

The fourteenth thousand just out. 10th thousand sold in just four months. More than 50 pages and more than 40 costly illustrations added to the 8th edition. It has been thoroughly revised and contains the very latest in respect to Bee-Keeping.

Price by mail, \$1.25. Liberal discount made to dealers and to Clubs.

A. J. COOK, Author & Publisher,
STATE AGRICULTURAL COLLEGE,
LANSING, MICH.

BEESWAX WANTED

Will pay 30 cents in cash, 33 cents in trade for any quantity of pure Beeswax.

Comb Foundation for sale to suit any size frame or section. Wax worked on sheets or for cash. All freight to Campbellville station C.M. If by mail to

ABNER PICKET,

Nassagawaya P.O., Ont.

Agent for D. A. Jones Co.'s supplies.

250 ENVELOPES

—AND—

250 NOTE HEADS

FOR \$1.

On good paper, printed with name and address, post paid.

CANADIAN BEE JOURNAL OFFICE,

BETON ONT.

Muth's Honey Extractor.

Perfection Cold Blast Smokers, Square Glass [Honey Jars, etc. Send ten cents for "Practical Hints to Bee-Keepers." For circulars apply

CHAS. F. MUTH & SON.

Cor. Freeman & Central Avenues, Cincinnati

BEES FOR SALE CHEAP.

30 COLONIES OF ITALIAN BEES FOR SALE. In lots of 3 or more \$6.00 each. Now is the time to send in orders for spring delivery. Bees second to none.

Address

LEWIS JONES,

DEXTER P.O. ONT.

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FRIENDS. IF YOU ARE IN ANY WAY INTERESTED IN

BEES AND HONEY

We will with pleasure send you a sample copy of our **SEMI-MONTHLY GLAZING IN BEE-CULTURE**, with a descriptive Price-list of the latest improvements in Hives, Honey Extractors, Comb Foundation, Section Honey Boxes, all books and journals, and everything pertaining to bee culture. Nothing patented. Simply send your address on a postal card, written plainly.

A. I. ROOT, Medina, Ohio.

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—THE

BEE-KEEPERS' ADVANCE.

—AND—

POULTRYMAN'S JOURNAL.

Only 25 cents per year, sample copy free. Address

J. B. MASON.

McFalls, Maine.

BARNES' FOOT-POWER MACHINERY



Read what J. J. PARENT, of Charlton, N. Y., says—"We out with one of your Combined Machines last winter 50 chaff hives with 7 inch cap, 100 honey racks, 500 broad frames, 2,000 honey boxes and a great deal of other work. This winter we have double the number of beehives, etc. to make, and we expect to do it all with this saw. It will do all you say it will." Catalogue and Price List free. Address W. F. & JOHN BARNES 544 Ruby St., Rockford, Ill. 21

SECTIONS FOR THE MILLION.

We are turning out sections at the rate of 10,000 per day right along, in addition to our regular hive and supply trade, and we are prepared to furnish them in any regular size and style in large quantities at very low rates.

Our prices are as follows:—

1000	\$ 4 50
3000	13 00
5000	20 00
10,000	37 50

All orders entered as received, and shipped with promptness. Order early to avoid the rush. These prices are spot cash.

THE D. A. JONES CO., LD.,

BETON, ONT.