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VOL. III, NO. 40

1887

DECEMBER 28

PUBLISHED EXCLUSIVELY IN THE INTERESTS OF THE HONEY PRODUCER

THE CANADIAN



JOURNAL

THE FIRST \$ WEEKLY IN THE WORLD

ONE DOLLAR PER YEAR

THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER

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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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" " "The Bee-Hive".....	1.25

TO CONTRIBUTORS

Communications on any subject of interest to the Bee-keeping 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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7½ Cords of Beech have been Sawed by one man in nine hours. Hundreds have sawed 5 and 6 cords daily. "Exactly" what every Farmer and Wood Chopper wants. First order from your vicinity secures the Agency. No Duty to pay, we manufacture in Canada. Write for Illustrated Catalogue sent FREE to all. Address **FOLDING SAWING MACHINE CO., 808 to 811 S. Canal St., Chicago, Ill.**

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We have 200 colonies more than we require, and to any one who wishes to embark in the business, we will sell in lots of fifty or over, at a very low rate, and with satisfactory security we will meet our customer as to time, should it be needed. This is a splendid chance. The price will be away down low. If you have any thought of investing, at least write us for particulars.

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

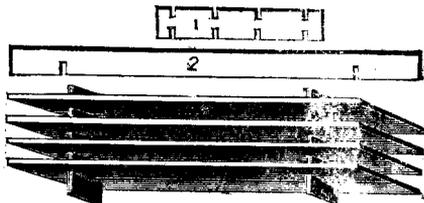
FEEDERS.



We have quite a number of the ordinary Feeders yet in stock which we will sell at 40c each; per 25, \$8.75. These cannot go by mail, so must be sent by express or freight.

IMPROVED CANADIAN FEEDER.

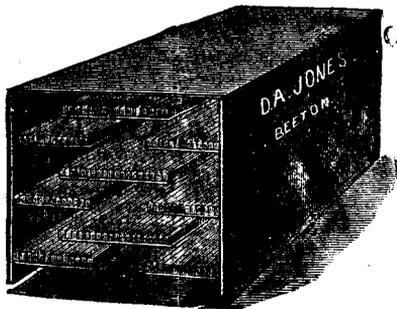
This is the Feeder spoken of on page 610 of the current volume of the JOURNAL. It is arranged with the float as shown in the engraving below. Holds 12 to 15 pounds of feed, and



may be divided making two feeders if needed.

The price is 50c. each, made up; per 25, \$10.00. In flat each 40c.; per 25, \$8.75. All orders can be filled by return freight or express.

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For feeding in winter, or at any time when the weather is too cold to admit of feeding liquids.

Price each, made up.....\$0 30
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These are placed above the cluster, filled with candy which is made by taking pulverized or granulated sugar, and stirring it into honey nicely warmed up, until the latter will not hold any more in solution. Allow the mass to stand till both are thoroughly mixed. Then place in Feeders and set over frames, packing around nicely to keep in the heat.

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HONEY WANTED!

We will take all the No. 1 EXTRACTED HONEY that is offered us at
10c. PER POUND

In exchange for supplies at our Catalogue prices. The honey is to be delivered at our own station, charges paid, but where it is sent to us in our own style of sixty pound tins we will allow 30 cents each for them or we will return them to the shipper at his expense. We cannot undertake to pay for any other style of package, though we will be agreeable to return them when empty.

For No. 2—off color— we will pay 9 cents per pound, same conditions as above.

For No. 3—Buckwheat and unsaleable grades for table consumption—we cannot offer more than 6 cents, as above.

Samples had better be sent us in all cases. They can be sent us safely, in small phials, which must be packed in wool or batting and put in a pasteboard box of suitable size.

For prices where supplies are not wanted, write us.

If you are satisfied that your honey will rank No. 1, you can send it along without sending sample.

Always send us an invoice of the weight and number of packages and put your name on every package.

Where it is not convenient for you to prepay the freight, we can pay it at this end and charge the amount on account.

The D. A. JONES CO., Ltd., Beeton, Ont.

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CANADIAN BEE JOURNAL

THIS OFFER WILL INTEREST YOU.

This Special Offer is made to *Subscribers* of the CANADIAN BEE JOURNAL.

To *Every Subscriber* who will forward to us the name of a *new* subscriber, accompanied by \$1.00, before April 1st, we will send FREE a copy of Rev. W. F. Clarke's "Bird's Eye View of Bee-Keeping," price 25 cents, or W. Z. Hutchinson's "Production of Comb Honey," price 25 cts.

To those sending us the names of two *new* subscribers, accompanied by \$2.00, we will send FREE a copy of James Heddon's "Success in Bee Culture," price 50 cents.

To those sending us three *new* names, with \$3.00, we will send Dr. C. C. Miller's "A Year among the Bees," price 75 cents.

To those sending us four *new* names and \$4.00, we will send A. I. Root's "A. B. C. in Bee Culture," paper, price \$1.00.

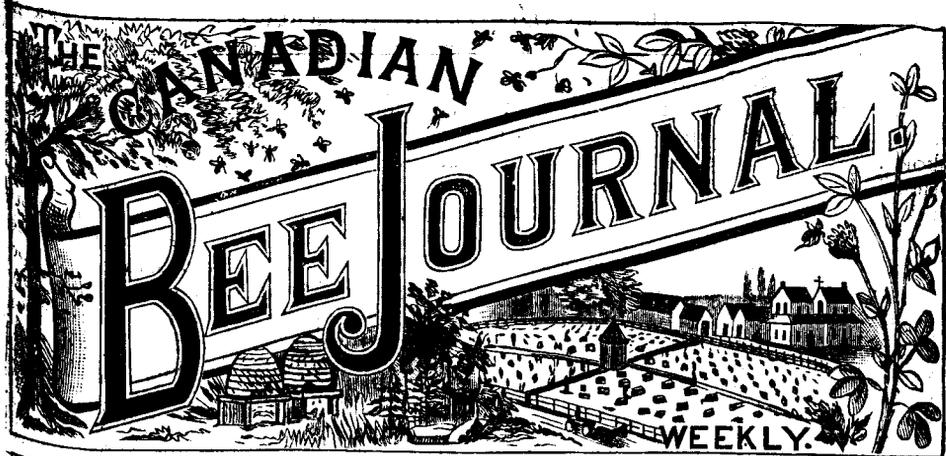
To those sending us five *new* names and \$5.00, we will send either Prof. Cook's "Bee-keepers' Guide," cloth, or Root's "A. B. C. in Bee Culture," cloth; price, each \$1.25

This offer is only to subscribers. Should anyone not at present a subscriber, wish to avail themselves of the offer, \$1.00 extra for their own subscription will make them eligible.

To all subscribers who send us ten *new* names and \$10.00, we will send FREE, Jones' No. 1 Wax Extractor, price \$4.00.

We will send sample copies for use in canvassing, on application.

THE D. A. JONES CO., Ltd., Beeton, Ont.



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

VOL. III. No. 40 BEETON, ONT DEC. 28, 1887. WHOLE No. 144

EDITORIAL

WHERE does not seem to be as much interest taken in the coming meeting of the Ontario Bee-keeper's Association as is warranted. The time is short now for talking the matter up and we sincerely hope that it will be taken hold of in such a way as will insure a successful meeting. We hope to publish next week an itemised programme giving the subjects which are to be taken by the different ones whose names have been suggested by the committee and which were announced in a preliminary programme published in these columns some time since.

* *

By the time our subscribers will be receiving the present number of the JOURNAL the new year will be here and we will write it 1888. We trust that all our subscribers have had a merry Christmas and that their new year will begin under auspicious circumstances. One way to start out right for the new year is to see that the subscriptions for the different papers and magazines for which you subscribe are attended to. The time has arrived when very many of our subscriptions fall due, and we hope that the renewals will come in rapidly. They are coming in very well but they could be increased to ten times what they are now, and yet leave many subscriptions unrenewed. As stated in another column we shall send out, each week, notices to all our subscribers whose sub-

scriptions fall due and we hope that the request which we make for renewal will be attended to promptly. It will help us the more to make the JOURNAL readable if we know that it is appreciated, and the appreciation cannot be shown in a better way than in renewing promptly for another year. We now wish all a Happy New Year.

A Visit to one of Our Muskoka Bee-keepers, Mr. Ernest Schultz of Lethbridge.

LAST fall Mr. Schultz, in a kind letter, invited us to pay him a visit, to see his apiary, talk bees, and do a little hunting, as there are many places in Muskoka which are known to be the "hunter's paradise." Mr. Schultz is one of those men who delights in the sport himself, as one can easily see when in his happy home, by the number of weapons of different kinds which he possesses, some of which are excellent. In the early part of November we availed ourselves of his kind invitation. Taking the morning train at Beeton we arrived at Lethbridge about 1 p.m. This station being only a flag station we had some difficulty in getting the conductor to stop and let us off. We were not long in getting our camping equipage and luggage stowed away in Mr. Brown's store, and securing a guide we started across the wood, one and a-half miles to Mr.

Schultz's. Here we found one of the pleasantest and most comfortable homes that it was our pleasure to see in Muskoka. Mr. S. is one of the early settlers, and he selected one of the best parts for farming purposes, also securing a good location for bees. It was not difficult, therefore, to account for his large yield of honey after seeing a good location, plenty of linden, plenty of wild flowers of all kinds, immense quantities of berries and a good range of clover fields, where white clover abounds. The absence of fruit trees in large quantities, is more than made up for by the immense quantities of dwarf maple which abound in almost every nook and corner wherever we went through this district. The ground or dwarf maple as we have mentioned before, commences to bloom about the same time as fruit trees, perhaps a little later, and continues to bloom profusely for about three weeks. It seldom fails in its yield of honey. If the colonies were as strong, during the time of its bloom as later, as large a yield of honey as can be got from linden could be secured from this source. Before the time for ground maple there are willows in great variety and in immense quantities. As soon as spring opens they commence to bloom, and continue for two or three weeks, in fact there is no cessation of bloom from the spring to the fall if the season be favorable. After the dwarf maple come the clovers and linden. In localities where the fires have run over and destroyed the original timber, the second growth that has sprung up is largely mixed with young trees that produce honey, such as dog wood, mountain ash, sour wood and wild cherry and a large number of trees that bloom at various seasons extending the honey flow so much longer.

When we arrived, Mr. Schultz had his bees all in winter quarters, in his cellar, and in going down into the cellar we found the bees in most excellent condition he having devoted the whole cellar to them, and seeming to have secured such ventilation that no lack of pure air may occur. Having two ventilators on the east going down into the earth about six feet from the house and extending down straight as far as the bottom of the cellar, then passing along comes out on the cellar bottom, also an-

other pipe north west going in a similar manner. The pipes reach up about four feet above the ground and seem to supply all the necessary fresh air. He also has a seven inch stove-pipe running down to within a few inches of the bottom of the cellar, then passing up to the ceiling, then an elbow passing the pipe along about six feet, then another elbow turning the pipe up through the floor and continuing on to ceiling in kitchen, whereby a T connects with the kitchen stove. Where the elbow should be at first turn from bottom of cellar that is next to ceiling, instead of using an elbow he uses a T with a cover so when he wants less draft and less heat he uses the T. A constant fire in the kitchen stove with a strong draft soon carries off any surplus heat, which is replaced by the cold air passing in through the ventilators at the bottom. This system seems to be admirably adapted to wintering successfully, as has been proven by the uniform success which Mr. Schultz has had in wintering in this northern and cold climate.

Mr. Schultz's better half is also of German birth, and like the true German women she assists much in the apiary, etc. In fact, as his health has been poor for some time she has had almost the entire charge of the bees. We may say that it would be necessary to visit Mr. Schultz in order to appreciate their kindness and hospitality. True to German instinct they are untiring in their efforts to make your visit a pleasant one, and few there are who can converse on all subjects connected with apiculture, or in fact almost any other branch of rural industry, more intelligently than can Mr. Schultz. He is a great reader and his untiring efforts to keep up with the times makes him a most agreeable companion with whom to spend a pleasant holiday. Being one of the members of the Council, he is thoroughly acquainted with that section of the country, as was proved by his choice in selecting a place to hunt deer. Our party, which seldom numbered five, in a short time secured nineteen very fine deer. We brought five of them home and found that number quite few enough to divide up with our neighbors and friends.

OUR PORTRAIT GALLERY.

S. CORNEIL.

THE subject of this sketch was born of Irish parentage in the township of Ops, County of Victoria, and Province of Ontario, April 7th, 1836. He worked on the farm until he was nearly eighteen years old, going to the common school in winter. He was big and strong for his age and being the eldest of the family and the only help his father had, got plenty of hard work. For some time before he left the farm he could take a man's place at most kinds of agricultural labor. He was always ambitious to excel, and won two prizes at ploughing matches before he quit farming.



S. CORNEIL.

From childhood he was a voracious reader, and received many a severe scolding from his father when he was found reading a book while his team was feeding. His father belonged to the Episcopal church. During a religious revival, young S. expressed a wish to join the Methodists. This displeased his father, who told him he might do so if he pleased, and could continue at home, but must do no more farm work. Learning that an examination of teachers was about to be held at Peterborough, young S. determined to attend it and try for a certificate. Peterborough was 18 miles distant, but our hero set off with a brave heart on foot. He got a friendly lift part of the way and arrived in good time to undergo the ordeal. He succeeded in obtaining a certificate, and found himself in

1853, at the early age of 17, a legally qualified school teacher.

He did not however take a school at once. His father, having relented, sent for him to come home again, which he did, and worked on the farm for another twelve-month. He then went to the Normal School for a session. He commenced teaching toward the end of 1854, and continued at it steadily for about 13 years, until June, 1867. He married early in life, so much so that statute labor could not be exacted of him until some time afterwards because he was under 21. The third year of his teaching he obtained \$400 a year, which was considered liberal wages in those days, and continued to get as good salaries as were paid to common school teachers at that time, but as the years

rolled on and his family increased faster than his salary, it became necessary to look out for more lucrative employment.

He decided to go into the insurance business, at which he has now been working for upwards of 20 years. During his career as a teacher he had the schools in Omeme, Balyduff, Cavanaugh, Milbrook and Ashburnham. He has resided in Lindsay for nearly 20 years. While attending the Normal School he was greatly benefitted by the teachings of Dr. Ormiston, which he found full of inspiration. It was not so much the information that was imparted, as the mental impetus given, that was of value. The Dr. always insisted on getting at the "whys" and "wherefores." Young S. at that time acquired a fondness for the study of natural sci-

ence, which has never since died out. Before he desisted from teaching, Mr. Corneil had obtained the highest certificate County Boards had the power to grant, viz., first class, grade A, permanent. It is still in force, so that if insurance fails, and bee-keeping goes to the dogs, he can resume that

"Delightful task! to rear the tender thought,
And teach the young idea how to shoot."

Mr. Corneil has been successful in the insurance business, his receipts having averaged not less than \$1800 a year, but, as he latterly remarked to the writer of this sketch, "it has never stayed with me, and I suppose it never will now;" a condition of affairs in which he is by no means alone. He has been twice married. His first wife, a native of Edinburgh, died in 1858. He married again in 1859, his second wife being a daughter of the late Christopher Knowlson, of Omeme.

In 1875, Mr. Corneil bought his first stock of bees. It cost him \$10, as it stood in his garden ready for business. He did not then know a worker-bee from a drone, and had no idea of ever keeping more than three or four colonies—just to supply honey for his own table. He determined, however, to read up on bee-keeping in the winter, when he had more time. He got "Langstroth on the Honey Bee," and "Quinby's mysteries of bee-keeping explained;" those old-time standard books, to which many of us owe so much. He also read the writings of Mr. Quinby in the *American Agriculturist*, getting the back numbers for the purpose of tracing up every item of apicultural information. He was thus peculiarly a disciple of Quinby's, and naturally contracted a preference for the closed-end frame which was used by the great New York apiarist. After reading up on this fascinating pursuit, Mr. Corneil could not be satisfied without having the latest improvements. This meant outlay of money, and to recoup this expenditure, he bought more hives, and went more extensively into bee-keeping. Thus, from less to more, he got into it as a business. When he left home to attend the Colonial and Indian Exhibition a year ago last summer, he had 212 stocks of bees. In preparing them for winter, they were doubled down to 180 to avoid sugar feeding, and make the apiary self-supporting. They were packed and prepared for winter as usual, but unfortunately, the bees had gathered a large quantity of honey-dew. About half-a-dozen stocks which were given sealed comb, filled early in the season, were clean, bright, and strong; but wherever there was a considerable store of honey-dew, the bees were either sick or dead. On the first of June of the present year, 122 colonies out of 180 had

succumbed. Nothing daunted, however, Mr. Corneil went vigorously to work to repair his losses, and, though the past season has been an exceptionally unfavorable one, he has 105 colonies in winter quarters; 64 packed on their summer stands, and 41 housed in the cellar. Mr. Corneil is now an authority on honey-dew, and strongly advises extracting it from the combs, and feeding sugar to take its place.

The subject of this sketch is one of our foremost Canadian apiarists, and in the scientific branches of bee-keeping is probably "the noblest Roman of them all." He is a careful experimenter, a patient investigator, and arrives at his conclusions logically. He wields the pen of a ready writer, and his articles are always interesting, instructive, and to the point. He has filled the highest offices among Ontario bee-keepers, having been President of the Association in 1884, and one of the four commissioners to England in 1886. In the last named capacity he rendered invaluable service as book-keeper and accountant, performing a lot of hard work, at late hours, in keeping the cash balance up to the mark.

At the present time Mr. Corneil is experimenting with a straw hive which he hopes will prove "just the thing" for out-door wintering in this climate. It is a model of neat workmanship, thanks to the mechanical ingenuity of his son, whom the writer watched one day last winter, dexterously weaving in the layers of straw, and making a very compact, nice job of it. This hive is designed so as to have the sheets of comb built transversely and converging to the centre where it is meant to secure a vacant space large enough to admit of the bees forming one solid cluster, instead of being in *strata* between combs. It is believed that, on this plan, bees will hibernate more perfectly, and winter better, than on any other at present in use.

Mr. Corneil has never aspired to municipal or political distinction. But before the change from the Local Superintendency to County Inspection, he was Local Superintendent of Public Schools in Ops for several years. He is now, and has been for the past nine years, a prominent member of the Lindsay Board of Education.

W. F. CLARKE.

Guelph, Ont.

For the Canadian Bee Journal

Bees, Sheep and Alsike Clover.

DULY appreciating Brother Shaw's "ideal combination" and lest his remarks might pass unnoted, I would like, as a brother bee-man (and Canadian also), though in Uncle Sam's domain, to attest to the truth of his

remarks. I am engaged in the production of comb honey, fruit and lambs for the Buffalo trade, and I depend upon alsike clover for my sure honey crop. With plenty white clover, linden, buckwheat, thistle and golden rod my crop would have been nowhere this year if my five acres of alsike had not been there. So while all my neighbors, who pretend to keep bees and cows, took in the village fair, I was enabled to run over to Toronto and have a pleasant chat with our worthy brother Jones and esteemed visitor, Mr. T. W. Cowan, besides attending the meeting of the O. B. K. A. and getting a view of many faces that could be recognised as contributors to that most valuable JOURNAL, whose weekly visits are like so many bank notes.

I would remind brother Shaw though that it is not necessary to "purchase a large tract of comparative waste land." I would say, purchase a few acres of the best land possible, or rent it, and feed out all your fodder on the place and keep it well tilled. I run, as a general thing, five acres alsike every year, also sixty sheep and the same number of colonies. I run eighty acres, sixty free from stumps, and attend to it nearly all myself; whereas if I had cattle to attend and milk like many I could not advance a foot, besides for pastime while watching the bees swarming, etc., I run an acre of beans or onions. The fruit is an addition to this ideal combination, and I must say it sometimes taxes me but the children help and we sometimes trade off, but when a man has a thousand currant bushes, and hundreds of pears, plums and quinces, etc., besides fields of raspberries to superintend the harvest of, he must more or less neglect his bees. But then comes in the *simplicity of management*. My mode of running bees summer and winter is based on that idea. I do it for dollars and cents, consequently I have spent considerable time, bees and money to arrive at my "ideal combination" and *ideal manipulation* to produce the most honey with the least amount of tinkering and time consistent with the safety of my bees in wintering, which I have got lately to average about the same as the sheep, less I think. I want to say also that I get a good third crop out of the alsike besides the honey and hay. I am just about commencing failing out the seed which I allow to ripen before cutting (alsike seed ripens from first bloom) this is worth 20c. a pound. There is another honey harvest in winter you see. Now my raspberries give me three, also honey and fruit sets; the large fruits three, also honey, fruit and vinegar. Cider and honey vinegar make a very nice "combination." I mean in conjunction with bee-keeping I am adding a vinegar yard this year and will have over

600 gallons in the spring. I make everything I raise dovetail in with the honey, as that is not only the most important cash income, but it is to be the principal industry in the future at Gilston apiary.

CHAS. PENTON.

E. Aurora, N.Y.

For the Canadian Bee Journal.

BEE HIVES, FRAMES, ETC.

I HAVE been much pleased with the several articles recently published from the pen of that excellent writer, Amateur Expert, on the subject of hives, frames, etc. I was aware that the English bee-keepers had adopted a "standard frame," but Amateur Expert's articles have given me a better insight into the methods used across the ocean than I had been able to gather from what I had seen on the subject heretofore. Their standard frame seems to be 14x8½, but it is not clear to me why the top bar should be 17 inches long. Were I making a frame 14 inches long its top bar would be but 15½ in. long. This would make the projecting ends of the top bar ¾ in. long. This allows ¾ in. bee space at the ends of the frames, and ¾ in. to enter the rabbets in the end pieces of the hive. It seems to me in all my practice with frames there is no need of any greater projection of top bar. But it is wonderful how people will become "used" to anything by constant use.

There was a time that it was hoped that a standard frame would be settled upon in the United States, but if there was ever any chance for such a thing that day is passed, at least for some time to come. About every other bee-keeper in this country has "invented a hive," and "patent bee gums" are counted by the thousands. It is wonderful to see how visionary bee-keepers can be. Last fall when on my journey to attend the Kentucky State Bee-Keepers' Convention which met at Falmouth, I was introduced to a new "patent hive" that had nothing under the sun peculiar about it except some wire springs attached to the frames which were really in the way of rapid manipulation, and yet the inventor was "dead set" on his invention.

In this country there are hundreds of patent hives that have no peculiar features about them, except that they vary in size and depth of frame and have some *novel* attachments about them such as clamps, wire springs, thumb screws, side opening devices, etc.

With this state of things there is not much show for a standard hive with us as long as this "patent bee gum" craze lasts. One of the severest "set-backs" that the standard frame scheme has encountered was the careless variation in

the length of the Langstroth frame. The standard "L" frame was practically a "standard frame" at one time in the middle and southern States of the United States, and would have spread its claims wider and wider had it not been for the unfortunate circumstance thrown in its way by the manufacture and sale of a "newly invented" frame just a little longer than the standard "L" frame, and called by the same name.

This put things into a terrible mess. The standard "L" frame is $17\frac{3}{8} \times 9\frac{1}{2}$, while the *new, so called* "L" is $17\frac{1}{2} \times 9\frac{1}{2}$. The difference is just enough to prevent the two frames from working interchangeably, but not enough to keep the novice from getting into trouble on account of not knowing the difference between them. This bastard frame is gradually becoming unpopular, as bee-keepers are able to distinguish between it and the standard L, and it is to be hoped that it will go entirely out of use. Certainly the standard L frame has the best claims, the fact is the Standard "L" frame is too long already without tacking a fractional part of an inch on it. If it was a mere matter of choice with me I would make and use a frame only $16\frac{3}{8} \times 9\frac{1}{2}$ —that is I would have the L frame shorter rather than longer if a change was desirable. Amateur Expert tells us that "shallow frames are old" in England. The same is true in the United States. I have used them in my apiary for about ten years, and perhaps they have been in use in some form ever since the advent of the movable frame. My shallow frames are made the same length as the standard L frame, but are only $4\frac{1}{2}$ inches deep so that two frames will set in the ten-inch extractor reel. The shallow frames are adjusted in shallow cases or supers, so as to be handled in bulk, and suitable to be "tiered up" to accommodate the size of the colony. The filled cases are raised in the tiering process and consequently are at the top when ready to be removed. When the honey is ready to take the bees are driven down with smoke and the full cases are lifted off the hive with their full sets of frames, and are set in the dark closet which stands at one end of the apiary, and left there till the bees have deserted them and returned home. The cases are now removed to the honey store room, the honey thrown out of them with the honey machine, and the frames readjusted in the cases. They are again ready to be tiered under the partly filled cases and so on through the honey season. I have found by experiment that one shallow frame case works well with one standard depth super. When the combs in the standard size super are filled with crude nectar, and while

the nectar is being evaporated and the combs sealed by the bees, the same working force will fill a case of shallow frames if added on the tiering principle, as so much clear profit to the apiarist. Some visionary persons of late have rigged up the shallow frame cases into what they call "double brood chamber" hives, and claim that they are new and original with them. If it was true that they first used the shallow frame duplicate cases for brood rearing on the "tiering up" plan it would be only putting to a *new use* an *old device*. But even this claim is not tenable.

G. W. DEMAREE.

Christiansburg, Ky.

A Letter from Mr. I. S. Young.

MESSRS. D. A. Jones Co. Lt., Beeton, Ont. Messrs. Editors:—Will you kindly allow me to express, through your honored BEE JOURNAL, my most cordial thanks for all the friendliness and affability which were so profusely shown to me during my memorable visit amongst the Canadian and American bee-friends. I will, as long as I live, take delight in thinking back of my trip, and never! no never! forget the world's most able bee-keepers, nor their exceeding hospitality towards me, as a stranger. I only regret that my time was so limited, that I had no opportunity of personally calling on the many more, whose names were so well known and dear to me from the bee-journals.

Respectfully yours,

IVAR S. YOUNG.

Christiania, Norway, Nov., 1887.

FOR THE CANADIAN BEE JOURNAL.

A Report from Prescott.

GENTLEMEN: Enclosed you will find one dollar for my subscription to the C.B.J., which I peruse with pleasure and profit each week.

You have expressed a wish to hear the results of each bee-keeper's experience for the past year, and though yet in a small way, and without a great deal of experience, I shall venture to narrate in as brief a way as possible what I accomplished last season. I started with four weak colonies last spring, all having wintered through, although having lost heavily in numbers through the winter by death's casualties, I believe in great measure owing to being placed in winter quarters without removing the bottom-boards, as in the spring the dead bees were sticking in masses between the combs, although I repeatedly tried to take them out during the winter.

When setting them out I put them in clamps, which I think helped them materially; they numbered eight in the fall after losing three swarms and doubling up three more. I secured eighty pounds of surplus honey, or twenty pounds with spring count. I am a great advocate of strong colonies, and, if possible, hiving two swarms together if not too large, or doubling as soon after swarming as practicable; as an evidence, on 7th July I hived two swarms together making a very strong colony. From this I took fifty pounds of surplus honey and it weighed seventy-two lbs. when placed away on the 21st of November; another I hived—or rather a friend of mine in my absence did—on the 7th of August and it weighed 53 pounds on the same date (Nov. 21st).

Next year I intend tiering up as much as possible, and the plan I have mapped out for myself is this. About swarming time to go through my hives cutting out all the queen cells, and placing an empty hive filled with racks and starters beneath the old one—please excuse the Hibernicism—leaving them for say a week, or until well drawn out, then reversing the position of the hives, replacing the old one on the stand and putting the other with starters, bees and all on top of the old one, and then when this is full putting another hive filled as before between these two to be filled in turn.

My experience with queen-excluders or honey-boards is that in the strong colony before mentioned it proved no absolute hindrance to brood being placed in the upper hive, as quite late in the autumn when I came to remove the surplus honey I found, notwithstanding the honey board, that five racks contained from three inches square to half a rack of beautiful capped worker brood, so you see they are not an infallible obstacle. I think if they are used, that they would be improved by being made small enough to drop in so as to rest on the frames or nearly so, as the bees appear to look upon it as a matter of honor to fill up the space between with comb and honey, which I think could be avoided by the plan I suggest.

This has drawn itself out to a greater length than I had anticipated, but if you deem it worthy of a place in your columns, and have room for it, I shall be proud to consider myself a contributor.

H. B. WHITE.

Prescott, Ont., Dec. 17th, '87.

We are pleased to note the interest you take in our JOURNAL. In reference to the perforated wood and metal honey boards we have not known of any queens passing through these to the

upper story and we have used several hundreds of them, but we have known the metal to be placed in, leaving some spaces larger at the ends, and a queen would pass through; sometimes the perforated metal drone traps are the same. If the corners are not bound as they should be, so that the edges of the metal fit down tightly to the bottom of the hive when they are placed on the entrance, queens sometimes get out, and we have known swarms to issue in that way. There has been perforated metal sold, and we believe is being sold yet, that is much too large and allows queens to pass and repass through it. We have never dealt in it. Considering the poor season we think you did fairly well. We hope you will be successful in wintering next year and you may have a more favorable report.

For the Canadian Bee Journal.

TOO MUCH POOR HONEY SOLD.

IF every bee-keeper would only sell choice honey there would be more honey used. In the C.B.J., of December 14, we have a valuable letter from J. F. Dunn. I am pleased to see that he has put his foot down on poor honey. I hope others will do the same. Honey gathered in spring from fruit bloom, dandelion and other things is only second class honey and *never* should be mixed with clover honey. When my bees begin gathering honey from clover I extract all the honey from every hive as I do not want any of the spring honey to get mixed in with my clover honey. Some of this second class honey will be old honey left from wintering the bees and some will be fruit bloom, and some will be from dandelions and other things and some will be new honey gathered from clover. I put this second class honey by itself, I heat it well and skim it which improves it very much, I then sell it all at home. I soon get it all sold as I only charge a little over half the price of clover. Very choice clover or basswood honey will always sell well and bring new customers, but to be very choice in flavor both clover and basswood honey *must* be very bright in color and extra thick in body. *Where the color and the body are the flavor will be there also.* The flavor of honey is in proportion to its color and body which are the *two main points* to judge honey by. I have not had any buckwheat honey in nine years and I do not want any of that black trash about me. I don't want my bees to winter on such stuff. I want my bees to winter on the very best of honey. I don't want bright honey stained with that black

trash. I would not sell any buckwheat honey in any town or city if I had it. It will kill sales every time it sold for table use. From 1873 to 1878 I sowed four acres of buckwheat each year near my bees so that I have had enough experience with that black trash to do me.

WM. McEvoy.

Woodburn, Dec. 19th, 1887.

Thank you friend McEvoy for the valuable hints in your article. There is no doubt that too much care cannot be taken in putting the superior article on the market. Those who do it are almost sure to have a good market for all they can produce. We occasionally have applications for buckwheat honey and we try to supply any demand as far as possible for any kind of honey that is asked for, but our own preference is basswood, clover and thistle. We do not care for buckwheat. Perhaps those who are accustomed to it may like it. In some localities in Canada there is difficulty in getting honey without buckwheat being mixed with it. The plan you adopt in reference to extracting your early honey when clover commences to yield is what we have practiced for years. We never allow the spring and fall honey to be mixed with our fine clover and basswood.

From Gleanings.

TWO VALUABLE FACTS.

ARE ENRAGED BEES LIABLE TO ATTACK BLACK OBJECTS?

THE above is the heading of an article in *Gleanings*, Oct. 15, page 785. You think the material has more to do with it than color. Several years ago I transferred my bees from deep frames to the Langstroth, or Simplicity frames, and by so much shaking of the bees they became enraged. There was a hen and chickens in a coop, close to the apiary; part of the young chickens were white, and part were black. They were attacked by the bees. I lifted the coop off from them, and the black chicks were completely covered with bees. You could not see them. They were balled, just like a balled queen; and the white chickens were not touched. I poured water on them, and got them away from the bees, but I don't recollect whether they lived or died. Was there more wool on the blacks? I think it was the color of the wool.

WILL CHICKENS EAT WORKER-BEES?

This is doubted by some, and I think it is very seldom that chickens eat bees; but sometimes

they do. I once caught a hen catching worker-bees at the entrance of the hive, as they came in loaded. She would snatch the bee and jerk back but took them about half as fast as she would pick up corn. It was on Sunday, and I was eating my dinner when I saw her at her feast. I jumped up from the table and killed her, cut her crop open, and counted 53 bees in it. I don't know which commenced first. I think I was half done. I then went to work, I think the next day, and fenced them out; but since then I have let them run in again. Keep me a place in Blasted Hopes. I am coming.

R. ROBINSON.

Laciede, Fayette Co., Ill., Nov. 1, 1887.

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.

Temperature for Least Consumption of Stores.

QUERY No. 169. At what temperature will bees consume the least stores?

M. EMIGH.—42°.

J. F. DUNN.—I do not know.

O. O. POPPLETON.—I don't know.

C. W. POST.—From 42° to 45° Fah.

HENRY COUSE.—At the proper temperature.

G. M. DOOLITTLE.—43° to 46°, according to my experience.

H. D. CUTTING.—From past experience, I think 34° to 36°.

DR. DUNCAN.—About 45°, if kept even without sudden changes.

JAS. HEDDON.—At that temperature in which they remain most inactive. It varies in different places from 35° to 50° F.

PROF. A. J. COOK.—I prefer the temperature of a cellar to remain at about 45° F. Then the bees keep very quiet and eat but little.

A. PRINGLE.—At the temperature which best conduces to a natural quiescent condition. This will range from 40° to 50° F. depending upon various conditions among which are the amount of hive ventilation and protection, degree of humidity, etc.

MISS H. F. BULLER.—At the temperature that keeps them most quiet and nearly torpid, and I have found that to be about 42°. In a damp

cellar a higher temperature might very likely be required, but I have only had experience with a very dry house.

S. CORNELL.—The temperature at which they will remain most dormant and this depends again on the apartment being kept dark and on the purity and humidity of the air. The strength of the stock is also a factor in the case.

J. E. POND.—Who can tell? Tests of different persons give different results. From my own experience I am unable to give an opinion, as I have found large consumption where I least expected it, and the reverse. It depends too, upon whether they are kept on summer stands, or in a special depository.

DR. C. C. MILLER.—I presume at that temperature at which they are the most nearly dormant. I think you will find that out best by closely observing your own bees. With me I think it is somewhere about 43°, but your thermometer may not be the same as mine, and besides I think it possible that on account of difference of moisture or other reasons, what may be the best temperature for one cellar may not be the best for another.

Best Packing for Out-Door Wintering.

QUERY No. 170.—I am packing my bees out doors. What is the best packing? How thick may I place it around them without making them too warm?

C. W. POST.—Sawdust. No danger of making them too warm, place it as thick around them as you please.

H. D. CUTTING.—I prefer chaff to any packing I have used. Forest leaves are good. four to six inches suits this locality the best.

DR. DUNCAN.—Dry sawdust is the best; it is as warm as chaff or straw and it will not harbor mice. There is no danger of your bees being too warm at any thickness.

MISS H. F. BULLER.—I should say dry sawdust is as good if not better than anything else. I do not think there is any danger of making them too warm by the thickness of the packing but have found four to six inches answer very well.

JAS. HEDDON.—I think it makes little difference what you use for packing, dry sawdust, leaves, chaff, well-packed chaffy straw, cut-cork, are all good and safe material. You can't make them too warm.

PROF. A. J. COOK.—Clover chaff or dry sawdust are both excellent. You can't get it too thick, if you give them a chance to fly. I presume six inches will be about as thick as will generally be necessary.

HENRY COUSE.—Dry sawdust or chaff, when packing with sawdust put six inches around the sides and bottom and about double thickness on top. Chaff packing should be a little thicker. If

you are packing several hives in one clamp about two inches between each will be sufficient.

A. PRINGLE.—Cork, chaff, dry sawdust and leaves make good packing. As to thickness I should say for chaff and leaves twelve to eighteen inches while of the other materials, less would be required.

G. M. DOOLITTLE.—I use fine straw for sides and a dry sawdust cushion for top. As a rule the more packing you get the colder the bees during days in which the sun shines out. Five inches is better than more or less in my opinion.

J. E. POND.—This question goes to the bottom of the matter, and would require a long article to discuss thoroughly. Give ample stores, a large entrance, space above the frames, and four or five inches thick of some absorbent over frames that will retain heat and allow excess of moisture to escape, and all will have been done that is possible.

M. EMIGH.—I do not pack but I have advised several to pack with forest leaves, four inches in front, ten inches in back and ends ten or twelve inches on top, hives four inches apart. They are well satisfied with the packing. Refuse flax from flax mill is a goo packing.

J. F. DUNN.—I prefer dry "culled lumber" pine sawdust—in double walled hives. I do not want less than three inches packing between walls, a cushion four inches thick over brood nest. In clamp about six inches of sawdust or 12 inches chaff all around. Give full width entrance and you need have no fear of bees getting too warm.

S. CORNELL.—Perhaps the best available packing may be chaff. They may have chaff a foot thick on all sides without being too warm, but there must be no mistake about giving ventilation through the fly hole. A neighbor had two cases of combs melted down while packed in a chaff bin, caused, it is supposed, by want of air.

O. O. POPPLETON.—I have used several kinds of chaff for packing, and find them best in the following order. Timothy, wheat, oats and buckwheat. The last two I shouldn't use at all if the others could be obtained. I hear clover chaff highly spoken of by those who have used it. Very fine, dry sawdust is good but not from lumber mills. You cannot get it too thick, the almost universal fault with chaff hives is not using enough.

CAN BEES BE MADE TOO WARM.

QUERY No. 171.—Can bees be made too warm without artificial heat. If so, how?

O. O. POPPLETON.—This question is too indefinitely stated.

HENRY COUSE.—Yes. By being shut up in a repository insufficiently ventilated.

M. EMIGH.—Yes. By packing a tight room full and not giving proper ventilation.

C. W. POST.—I think they can. By packing too many together in a small warm cellar.

G. M. DOOLITTLE.—Yes, in summer. In winter no, if a good circulation of air about the hive is allowed.

DR. DUNCAN.—Where there is a warm cellar and a small room filled with hives they will get too warm and require cool air sometimes.

JAS. HEDDON.—I think not, unless too many colonies are packed in too small and poorly ventilated a place. If they are in any special repository, however warm you may keep them, they can keep cool by spreading in the hives.

H. D. CUTTING.—In packing for winter we use from four to six inches of chaff or leaves with cushion on top and never get too warm. Its the cold that gives us the most trouble on summer stands.

J. F. DUNN.—I presume you mean during winter. I have known cellars that during very cold weather would register 45° when empty. When filled with bees such a repository would be too warm without special ventilation.

MISS H. F. BULLER.—I think they might, by having a perfectly frost proof house and putting in as many colonies as it would hold by tiering them up. The heat generated by so many bees would raise the temperature so much that it might be too warm.

A. PRINGLE.—Yes, a large number of colonies packed closely together in a comparatively small and warm repository with little ventilation of either repository or hives, would doubtless get too warm without any artificial heat.

J. E. POND.—In summer bees often get so heated from lack of proper ventilation, as to melt down their combs and thus become ruined. With proper shade and ventilation, no trouble of the kind need be apprehended.

S. CORNEIL.—I heard of a bee-keeper who closed up the fly-holes to prevent his bees from swarming while he was away at an Orange celebration on the 12th of July. When he returned he found the combs had melted down and the honey was running in streams through the yard. His bees were too warm and the heat was not artificial.

DR. C. C. MILLER.—Your question is somewhat vague, as there is no trouble getting bees too warm by fastening them with little or no air in a hive standing in a hot July sun. But I suspect you mean in winter confinement. I have known them to become too warm when shut in a close cellar in unusually warm winter weather. A very warm cellar well filled with bees might be too warm most of the time.

The Ohio State Bee-keepers' Association will hold their 5th annual convention in the United States Hotel, cor. High and Town sts., Columbus, Ohio, Jan. 10 and 11, 1888. An interesting program will be arranged. Reduced rates at the above hotel. FRANK A. EATON, Sec.

SUNDRY SELECTIONS.

A BEGINNER.—I should like a little information through your valuable JOURNAL with reference to feeding in the cellar. I sold my bees last fall and expected the man to look after them and get them ready for winter. He failed to take them according to agreement, however, so I am wintering them myself and I will have to feed some before spring. You will do me a favor if yourselves or some of your valuable correspondents will tell me how to feed them and how to make the food. I have no feeder and only four hives of bees.

Vaudeleur P.O.

We would recommend you to use the winter feeder of which an advertisement appears in the JOURNAL with directions how to make the food.

ASTER HONEY IN OHIO.

G. W. FELTER.—Have just packed for winter the last of twenty-two colonies. On the 10th September scarcely a colony had five pounds of honey, but on the 19th wild aster opened its bloom and by the middle of October each full colony was full of honey in the lower story and was working in the sections. I extracted from several colonies and by Nov. 1st removed three full frames leaving seven to winter on. Aster honey has proven equal, if not superior, to any other honey for bees to winter on. Several combs broke down with the excessive weight of honey. Have had as many as four combs to break down in one hive. Four years ago wild aster was not known in southern Ohio, but now forms the substantial fall crop for wintering.

New Richmond, Ohio, November, 22nd 1887.

We are glad to have your report. We were not aware before that aster grew to such profusion in the southern portions of Ohio. What has been the cause of the scattering of the seed? Has it been done artificially or did it come naturally? You have evidently had beautiful weather else the bees could not have worked as late as they did. It would have been impossible to have gathered honey here at that time of the year.

A. FYFE.—I send you a report of my season's work for 1887. It is not a very good one but I send it as it comes. I commenced the season with 50 colonies nearly all in fair condition, which built up very fast during maple and fruit bloom. The beginning of the honey season was all that could be desired, everything seemed to grow like magic. Swarming commenced June 9th. About July 10th the dry weather set in which brought the honey season to a close very rapidly. White clover yielded fairly well, linden bloomed for three weeks, every tree was chuck full of bloom from the smallest to the largest, but it seemed to secrete honey very slowly and but little at that. My bees worked quite freely on the field pea bloom this season at which I was very much

surprised. I obtained 1,000 lbs. of extracted honey and 200 lbs. of comb honey, increased to 100 colonies and 8 nuclei. I let all colonies swarm naturally, clipped all queens' wings and bived the swarms all on starters as advised by Mr. W. Z. Hutchinson; it was a success with me. I only used 11 lbs. of brood foundation for my 50 new colonies. I got some of the neighbors seven acres of buckwheat. I furnished them the seed gratis, they not to plow it under until the bloom began to fail, but alas when it was all in full bloom a frost paid us a visit on Aug. 6th and destroyed it all, thus ended my buckwheat. I made an exhibit of bees and honey at three of our local fairs winning five first prizes. You would really think some people never saw bees or honey before. It seemed to attract the attention of the people more than anything at the fairs. I think there is no better way of advertising honey. Very often when I ask a person "do you want to get some nice honey?" the answer will be what is the name?" "Fyte." "Oh, well I will take some." Thus you see as long as it was Fyte's honey it must be good. I had to feed \$50 worth of sugar for winter stores, left full number of frames in brood chamber. Put five colonies in bee house Nov. 1st, 60 Nov. 10th, and the remainder on the 17th. All are keeping well. The first put in are keeping by far the best, each cluster can be seen hanging on bottom bars of frames. Scarcely any bees have dropped from the frames, think they must be hibernating. Temperature in bee house 46°. Would it not be a good idea to have something done at the coming convention of the Ontario bee-keepers in the way of appointing competent judges for local and county fairs? It is something which is needed badly.

Harriston, Ont.

We have frequently told our friends that Mr. F. formerly a student here, would make his mark as a bee-keeper, and the above shows that he is on the right track. There is no doubt that exhibitions do much to educate the people and increase the consumption of honey. We are pleased to note that consumers of honey in that district know Mr. F., and we are sure he will always give them an article that will encourage and increase the consumption rather than decrease it. We hope that next season will make up for all his past losses.

THE CANADIAN BEE JOURNAL.

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

— PUBLISHERS, —

BRETON, ONTARIO, DECEMBER 28, 1887.

BUSINESS DEPARTMENT.

We offer Vol. 1, nicely bound in cloth, Vol. 2 unbound, and Vol. 3, now running, all for \$2.75. Who wants them? t f.

We are prepared to buy any quantity of No. 1 Section Honey. Those having such for sale will kindly write us saying the quantity they have on hand and how much per pound they will require for it.

Sometime since we announced that it was probable that the Dominion Express Company would shortly have offices all along the line of the North & North-Western Railway on which Beeton is situated. Since that time we have not heard anything further with reference to the proposal to open offices, but we are glad to be able to tell our friends and customers who are on the lines of railway controlled by the Vickers express company, that arrangements have been made between the latter company and the American express company (which office we have at Beeton) whereby all goods shipped to any points on the lines controlled by the Vickers Express Company will be carried at the same rates as though it were all controlled by the American Express Company. For instance, formerly it cost 50 cents to send a parcel, no matter how small from Beeton to Newmarket, the cost now for the same will be 25 cents. The same is applicable wherever the Vickers company have offices.

Occasionally we have a subscriber complain to us that he is receiving his JOURNAL after his subscription expires. This may be so, because if our subscribers will turn to the second page of the cover of their journal they will find among the publishers notes the following:—THE CANADIAN BEE JOURNAL will be continued to each address until otherwise ordered and all arrears paid. Our wish is not to be obstinate, but we have so many subscribers who would prefer that the JOURNAL be sent on to them until they write us to stop it, that we decided when we first commenced the publication of the JOURNAL that we would continue it as stated above. All that any subscriber requires to do is to keep in mind the date when his subscription expires, and then if he does not wish to continue his subscription, we shall be just as anxious to cut the name from our list as we are that it should be continued. If we do not make the BEE JOURNAL worth \$1.00 per year to every one who takes it we prefer not to have the dollar. There is nothing compulsory about it. Just here let us tell you of something that you must not do in justice to us and to yourselves. Do not wait until you have received three or four extra numbers or until your subscription has run over time about a month, but notify us, because if you allow it to run on we will of necessity have to ask you to remit the amount of subscription for that month. It would not be fair to us that we should have to send you the JOURNAL for a month or so more than the time for which you have paid, and no honest man would expect us to do so. Instead of telling your postmaster to stop it first drop us a card saying that you wish it discontinued, and then if it is not cut off at once you could refuse to take it from the post office. We think perhaps our best plan would be to notify every subscriber just when their time expires and send them a blank form for renewal.

The CANADIAN BEE JOURNAL will not make a special club offer with the *Beekeepers' Magazine* for the ensuing year. We mention this that our subscribers may not think that it is at our instance, should they continue to receive the journal mentioned. Our clubbing price will be \$1.40.

We can supply 250 envelopes and 250 note heads, each with your name and business neatly printed on the corner for one dollar. The paper is of good quality, the envelopes are in boxes of 250 and we pay the postage. At this writing we have executed nearly three hundred orders, and have in many cases been favored with repeat orders for friends. Cash should accompany order and copy be plainly written.

BEE-KEEPERS' CIRCULARS.

During last season we printed quite a large number of catalogues and price lists for beekeepers, and we believe that in every instance the work as well as the price gave satisfaction. We have much better facilities now than we had at that time for turning out work, and we shall be happy to quote prices to any who may be requiring circulars. All we want is the privilege of estimating, and we will then leave the matter with the customer. We generally get up a sample circular (in blank form) showing the style and quality of paper which we quote price for, and we always allow the free use of any cuts or illustrations which have ever appeared in either the C.B.J. or our catalogue. Give us an idea of what you want and we will try and send a sample of it with prices. tf.

A SPECIAL OFFER.

We have a special offer to make to our present subscribers. It is one which we should advise all who want to take advantage of it to take the chance while it is offered. You all know how nice it is to have a nicely printed note head and envelope for your correspondence. It gives you a business standing, which blank paper and envelopes never can. Now, then, to all those who send in their renewals for the JOURNAL for another year we will forward by mail, post paid, 250 note heads and 250 envelopes—good paper and nice large envelopes—for 75c. That is \$1.75 will procure your renewal for another year and the paper and envelopes printed as advertised. If sent for by themselves the latter are worth \$1.00.

HONEY MARKETS.

DETROIT HONEY MARKET.

Best White Comb Honey in one pound sections 17 to 19c. Extracted 9 and 10c. Beeswax 21 to 25c.

M. H. HUNT.

NEW YORK HONEY MARKET.

Our market for honey is opening up earlier than usual, and at higher prices. We quote as follows until further notice:—Fair White, one lb. sec's., 16 to 18c.; Fair White, two lb. sec's., 13 to 14c.; Fair to Good, 1 lb. sec's., 13 to 15c.; Fair to Good, two lb. sec's., 10 to 12c. White Clover extracted in kegs and bbls. 7 to 8c. Beeswax 21 to 22c.

MCCAUL & HILDRETH BROS.

PHILADELPHIA HONEY MARKET.

Fancy new white honey in good demand. Inquiry is for 1-lb sections, New white clover, 18 to 20c. Buckwheat, 14 to 15c.

PANCOAST & GRIFFITHS.

CINCINNATI HONEY MARKET.

There is a quiet but fair demand for honey of all kinds. Extracted honey brings 4 to 9c. a lb. on arrival; demand exceeds the arrivals. The demand for comb honey is rather tame. It brings 16 to 20c. per lb. for best in the jobbing way. Demand is good for beeswax which brings 20 to 22c. per pound for good to choice yellow on arrival.

CHAS. F. MUTH & SON.

CONVENTION NOTICES.

The Ontario Bee-Keepers' Convention will meet at Woodstock, Ont., on Tuesday and Wednesday 10th and 11th January 1888. This will afford an opportunity of continuing the meeting another day if those present desire to do so. S. T. Pettit, President. N.B.—Program will be published later.

PRICES CURRENT

BEE-SWAX

We pay 30c in trade for good pure Beeswax, delivered at Beeton, at this date, sediment, (if any), deducted. American customers must remember that there is a duty of 25 per cent. on Wax coming into Canada.

FOUNDATION

Brood Foundation, cut to "Jones' size" per pound... 48c
over 50 lbs. 45c
Section " in sheets per pound... 55c
Section Foundation cut to fit 34x44 and 41x44, per lb. 60c
Brood Foundation, starters, being wide enough for
Frames but only three to ten inches deep... 45c

THE BEE-KEEPERS'

REVIEW.

About January 10th, 1888, we shall begin the publication of a 16 page monthly with the above title.

As indicated by its name, one of its distinctive features will be the REVIEWING of current apicultural literature. Errors and fallacious ideas will be faithfully but courteously pointed out, while nothing valuable will be allowed to pass unnoticed. But few articles will be copied entire, but the ideas will be extracted, given in the fewest words possible, and commented upon when thought advisable.

Another feature will be that of making each number to a certain extent what might be termed a SPECIAL number. For instance, a large share of the correspondence, extracts and editorials of the first number will be devoted to the subject of "Disturbing bees in Winter."

Our own apiary will hereafter be largely experimental, and of this our readers will have the benefit. The price of the REVIEW will be 50 cents per year; and while we have not the slightest objections to receiving subscriptions in advance, our only request is that each one interested will send his address and allow Uncle Sam to hand him a copy of the first issue as soon as it is printed.

THE PRODUCTION OF COMB HONEY.

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

W. Z. HUTCHINSON,

Flint, Mich.

EXCHANGE AND MART.

Advertisements for this Department will be inserted at the uniform rate of **25 CENTS** each insertion—not to exceed five lines—and 5 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.

\$1.00 Will secure you by mail, post paid, 250 Noteheads and 250 Envelopes with your name, business and address printed on the corner of each. Send in your order now. **THE D. A. JONES CO., Beeton, 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.**

SECTIONS.—We have a large lot of V groove sections put up in 500 boxes in the following sizes, viz., $3\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{2}$, $3\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{8}$, double slotted, which we will sell at \$2 per package, and will take as pay either honey or cash. **THE D. A. JONES CO., Beeton, Ont.**

ADVERTISEMENTS.

BARNES' FOOT-POWER MACHINERY



Read what J. J. PARENT, of Charlton, N. Y., says—"We cut 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, 574 Ruby St., Rockford, Ill. 21

BEE-KEEPERS ADVANCE

Is a Monthly Journal of 16 Pages. 25 CENTS PER YEAR. Clubbed with the CANADIAN BEE JOURNAL for \$1.10. Sample copy sent free with our catalogue of supplies. Don't forget to send name and address on a postal card

J. B. MASON & SONS,
Mechanics' Falls, Me.

W. Z. HUTCHINSON,

ROGERSVILLE, GENESEE, CO., MICH.

Has published a neat little book of 45 pages, entitled

"THE PRODUCTION OF COMB HONEY."

Its distinctive feature is the thorough manner in which it treats of the use and non-use of Foundation. Many other points are, however, touched upon. For instance it tells how to make the most out of unfinished sections, and how to winter bees with the least expense, and bring them through to the honey harvest in the best possible shape.

Price 25 cts. Stamps taken; either U.S. or Canadian

CANADIANS

Want to supply their wants at home as much as possible, but heretofore they have not been able to do so, at least for bees by the pound, frames of brood, and nuclei. We have decided to furnish them at the prices as found in the following table:

BEES BY THE POUND.

	May	June	July	August	Sept.
Bees, per $\frac{1}{2}$ pound	1.75	1.50	1.00	1.00	.90
" " pound	3.00	2.50	1.85	1.75	1.70
Frame of Brood	1.75	1.50	1.00	1.00	.90
2-frame nucleus..	4.00	3.50	3.00	2.75	2.50
\$ " " "	6.00	5.50	4.75	4.50	4.50

Frames of brood cannot be sent alone.

Queens are not included in above prices. Choose the kind you want and add enough to price found here to cover cost of queen.

Two frame nucleus consists of $\frac{1}{2}$ pound bees, two frames partly filled with brood and honey, and a nucleus hive. If wanted in either "Jones" or "Combination" hive, add price made up, and deduct 40c. for nucleus hive.

Three frame nucleus, same as two-frame, with the addition of another half pound of bees, and another frame of brood, etc.

All prices here quoted are for frames that will fit the "Jones" or "Combination" hive.. You may have whichever style you desire. Be sure to specify when ordering.

The above must go by express.

QUEENS.

	Homebred	Untested	Tested	Selected	Virgins
May	2 00		2 50	3 00	
June	1 50	1 00	2 00	3 00	0 60
July	1 00	90	2 00	2 50	50
August	1 00	1 00	2 00	2 50	50
September	1 50	1 50	2 50	2 75	
October	2 00		2 50	3 00	

FULL COLONIES.

	Italian	Holy Land Crosses	Caribbean Crosses	Hybrids
May	\$9.00	\$10.00	\$11.00	\$8.50
June	8.00	9.00	10.00	7.50
July	7.50	8.00	9.00	7.00
August	6.50	8.00	9.00	6.50
September	6.50	7.00	8.00	6.00
October	7.00	8.00	9.00	6.50
November	8.00	8.00	9.00	8.00

The above prices are for up to four colonies; five colonies up to nine, take off 3 per cent.; ten colonies and over, 5 per cent. Colonies as above will each have six to eight frames of brood bees and honey, and good laying queen.

The D. A. Jones Co., Ltd., Beeton.

TOOLS For BEE-KEEPERS

HAMMERS.

We shall hereafter keep in stock a full line of tools suitable for bee-keepers. For ordinary use, where a person has only a few hives, etc., to nail, we have an iron hammer (with adze eye) which we can send you at 15 cents.

Then in steel hammers we have three styles with adze eyes, which we sell at 40c., 50c., and 60c each.

Small hammers—steel face with adze eyes, just what are needed for frame nailing, etc., No. 55, 35c.; No. 52, 50c.

SCREW DRIVERS.

With good hardwood handles and of the best steel—nicely finished, round bits, in two kinds, No. 1, 5 inch bit, 18c.; No. 2, 6 inch bit, 20c.

TWO-FOOT SQUARES.

In iron squares we have two kinds—the first of these is marked down to one-eighth of an inch, and is marked on one side only, the price is, each, 20c.

The other style is marked on both sides down to one-sixteenth of an inch—price, each, 35c.

We have a splendid line in steel squares which we can furnish you at \$1.35. They are well finished and are usually sold in hardware stores at \$1.75.

TWO FOOT RULES.

A splendid line in rules we offer at, each, 18c. Then we have a nice box-wood rule at, each 25c.

HAND SAWS

Just at the present we have but one line in these—26 inch long—A. & S. Perry's make—usually sold at 75 cents we offer them for 55c.

PANEL SAWS.

These are what are often called small hand saws, and for the finer classes of the bee-keepers work are indispensable. We have started out with two lines in these. The 18 inch are of good steel (Shirley and Dietrich) and can be sold by us at 50c.

The 20-inch are finer steel—same make—cheap money.

PLANES.

Iron block planes, just the thing for dressing off hives, each, 75c.

Wooden smoothing planes—the best of the kind, 85c.

All the above goods are sold at prices 20 to 25 per cent. below the ordinary retail price, so that when ordering other goods you may just as well have any you want as the cost of transportation will not be any greater. These will be included in the next revision of our price list.

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

BEETON, ONT.

RAYS OF LIGHT.—A new publication devoted to Bee-keeping and Poultry-raising. A number of the leading, most practical and successful Bee and Poultry-Keepers have already been secured as regular contributors. Its principal aim will be to advance progressive ideas upon the various topics of modern scientific Bee-culture and Poultry-Raising. Subscription, 50 cents a year. Sample copy free.

J. J. MARTIN & CO.,
North Manchester, Indiana.

D. A. JONES, Pres. F. H. MACPHERSON, Sec-Treas.

The D. A. Jones Company, Ltd.

BEETON, ONT.,

MANUFACTURERS OF AND DEALERS IN

APIARIAN * SUPPLIES.

Our Circular sent free on application.

PUBLISHERS

THE CANADIAN BEE JOURNAL

FINE BOOK & JOB PRINTERS.

Sample copies free on receipt of name and address. ††

DADANTS FOUNDATION

is attested by hundreds of the most practical and disinterested bee-keepers to be the cleanest, brightest, quickest accepted by bees, least apt to sag, most regular in color, evenness and neatness, of any that is made. It is kept for sale by Messrs.

- T. G. NEWMAN, & SON, Chicago, Ill.
 - C. F. MUTH, Cincinnati, O.
 - JAMES HEDDON, Dowagiac, Mich.
 - F. L. DOUGHERTY, Indianapolis, Ind.
 - CHAS. H. GREEN, Berlin, Wis.
 - CHAS. HERTEL, Jr., Freeburg, Ill.
 - E. L. ARMSTRONG, Jerseyville, Ill.
 - ARTHUR TODD, 1910 Germantown Ave., Philadelphia
 - G. B. LEWIS & CO., Watertown, Wis.
 - E. KRETCHMER, Coburg, Iowa.
 - E. F. Smith, Smyrna, N.Y.
 - EZRA BAER, Dixon, Lee Co., Ill.
 - J. B. MASON & SONS, Mechanic Falls, Me.
 - M. J. DICKASON, Hiawatha, Kans.
 - ED. R. NEWCOMB, Pleasant Valley, N.Y.
 - J. W. PORTER, Charlottesville, Va.
 - ASPINWALL & TREADWELL, Barrytown, N.Y.
 - BARTON FORSGARD & BARNES, Waco, Tex.
 - WE CLARK, Oriskany, N.Y.
 - PAUL L. VIALLO, Bayou Goula, La.
- and numbers of other dealers. Write for SAMPLES FREE and Price List of Supplies, with 150 COMPLIMENTARY and UNSOLICITED TESTIMONIALS from as many bee-keepers in 1885. We guarantee every inch of our Foundation equal to sample in every respect.

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

Promote a Home Market!

(By a judicious distribution of the) Leaflet,

"HONEY: Some Reasons why it Should be Eaten."

never fails to bring results. Samples sent on application. Prices printed with your name and address. 10c 80c.; 25c. \$1.25 50c. \$2.00; 1,000, \$3.25.

The D. A. JONES CO., Ltd., Beeton, Ont.

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 Chad 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 1887. Free.

W. T. FALCONER.

BEE-KEEPERS' GUIDE,

—OR—

MANUAL OF THE APIARY

15,000 SOLD SINCE 1876.

The fourteenth thousand just out. 10th thousand sold in just four months. More than 50 pages and more than 40 costly illustrations were 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

250 ENVELOPES

—AND—

250 NOTE HEADS

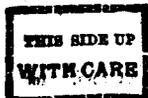
FOR \$1.

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

CANADIAN BEE JOURNAL OFFICE,

BEEOTON ONT.

SHIPPING LABELS.



These are for pasting on the tops of cases.
Price, per 10, 5c. by mail, 6c.
" 100, 25, by mail, 27
" 1000, 1.50 by mail, 1.60

THE D. A. JONES Co., LD., Beeton, Ont.

NO BEE-KEEPER SHOULD BE WITHOUT

Clarke's Bird's Eye View of Bee-keeping

68 pages, bound in cloth; profusely illustrated; price 25 cents.

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

BEEES AND HONEY

TO ALL that are interested in Bees and Honey, send for our Free and Illustrated Catalogue of Apiarian Supplies. Address

M. RICHARDSON & SON,

Port Colborne, Ont

THE

CANADIAN * POULTRY * REVIEW

IS THE ONLY PAPER PUBLISHED IN CANADA IN THE INTERESTS OF THE

Poultry, Pigeon and Pet Stock Fraternity.

Circulation always on the increase. Subscription only \$1.00 a year. Address,

H. B. DONOVAN,
20 Front St. East, Toronto.

FRIENDS. IF YOU ARE IN ANY WAY INTERESTED IN

BEEES AND HONEY

We will with pleasure send you a sample copy of our **SEMI-MONTHLY GLEANINGS 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.

FOLDING BOXES

Our **Caskets** for enclosing Section Honey are the best and lowest priced in the market. Made in one piece. With or without tape handles, with Mica fronts or willow out. In the flat or set up. Printed or not, any way to suit. We are bound to satisfy you. We have just put in special machinery for their manufacture and are prepared to fill orders promptly. Price list **Free**. Samples 5c.

PRICE LIST OF 4 1/2 x 4 1/2 x 2 or THINNER.

Advance Printed.....	500	1000	5000
Same with Mica Front.....	\$4 50	8 75	\$32 50
Same with Tape Handle.....	5 50	9 25	40 00
Same with M F and T H.....	6 50	10 50	46 25

14 oz. Glass Jars \$5.35 per gross, including corks and labels. 1 1/2 and 2 gross in a case. Catalogue of Honey labels free.

A. O. CRAWFORD, S. Weymouth, Mass.

OUR 60 LB. TINS.

We have already sold enough of these to hold a crop of over 100,000 lbs of honey. They are better made than ever, and are encased in our new style of wooden case. Have a large screw top, as well as a small one, and are thus excellent for granulated as well as liquid honey. The prices are:

Each.....	\$ 0 50
Per 10.....	4 80
Per 25.....	11 25
Per 100.....	42 00

"Charcoal" tin used in these. As a rule "coke" tin is used.

THE D. A. JONES Co., LD., Beeton.