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

Vol. I. BEETON, ONTARIO, NOVEMBER 18, 1885. No. 34

THE CANADIAN BEE JOURNAL. TABLE OF CONTENTS.

PUBLISHED BY

D. A. JONES & CO., BEETON.

WEEKLY - - \$1.00 PER YEAR

POSTAGE—Free in Canada and the U.S. Ten cents per year extra to all countries in the Postal Union.

SPECIAL OFFER.

To any one sending us \$5.00 in cash, with the names of five subscribers, we will send for one year, one copy of the JOURNAL FREE.

To any one sending us \$3.00 in cash, with the names of three subscribers, we will send for six months, one copy of the JOURNAL FREE, or for one year by sending 40 cents additional.

To any one sending us \$2.00 in cash, with the names of two subscribers, we will send for three months, one copy of the JOURNAL FREE, or for one year by sending 60 cents additional.

ADVERTISING RATES.

All advertisements will be inserted at the following rates:

TRANSIENT ADVERTISEMENTS.

5 cents per line for the first insertion, and 5 cents per line for each subsequent insertion. Space measured by a scale of solid nonpareil, of which there is twelve lines to the inch, and about nine words to each line.

STANDING ADVERTISEMENTS.

	3 MOS.	6 MOS.	12 MOS.
One inch.....	\$ 3.00	\$ 5.00	\$ 8.00
Two inches.....	4.50	7.50	12.00
Three inches.....	6.00	10.00	16.00
Four inches.....	8.00	13.50	20.00
Six inches.....	10.00	15.00	24.00
Eight inches.....	12.50	20.00	30.00

TERMS—STRICTLY CASH.

Contract advertisements may be changed to suit the seasons. Transient advertisements inserted till forbid and charged accordingly.

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THE CANADIAN BEE JOURNAL

AND "Gleanings," semi-monthly.....	\$1.80
"American Bee Journal," weekly.....	1.75
"American Apiculturist," monthly.....	1.75
"Bee-Keepers' Magazine," monthly.....	1.75
"Bee-Keeper's Guide," monthly.....	1.75
"Texas Bee Journal".....	1.80

TO CONTRIBUTORS.

We will always be glad to forward sample copies to those desiring such.

The number on each wrapper or address-label will show the expiring number of your subscription, and by comparing this with the Whole No. on the JOURNAL you can ascertain your exact standing.

"FOUL BROOD"

Its Management and Cure.

BY D. A. JONES. NOW READY.

This little pamphlet is presented to the Bee-Keeping public with the hope that it may be the means of saving infected colonies from death by fire and otherwise. No expense is required to successfully treat the disease, other than the little time required for fasting.

Price, 10 Cents. By Mail, 11 cents.

D. A. JONES & CO., PUBLISHERS,
Beeton, Ont.

NOW IS THE TIME TO INVEST.

One Hundred Colonies of Italian Bees, and 4000 pounds Extracted Clover and Basswood Honey for Sale. Also want to exchange Italian Bees for a 4 or 5 or 6 Horse Power Engine and Boiler, new or second hand or will pay cash for Engine and Boiler. All kinds of hives made to order. Write for prices.

JAMES ARMSTRONG,
Cheapside, Ont.

THE NEW ONE-PIECE SECTION.

Though these sections cost more to make than the old style, still we are supplying them at the same price. We keep in stock 3 1/2 x 4 (ours), and 4 1/2 x 4 (Langstroth), and can make any other sizes to order on short notice. Prices:

Per 1,000.....	\$ 6 00
" 5,000.....	27 50
" 10,000.....	50 00

Sample sections sent on application.

D. A. JONES,
Beeton, Ont

1-tf.

FARMERS BUY THE CELEBRATED LARDINER MACHINE OIL, AS IT EXCELS ALL OTHERS.

Manufactured solely by

McCOLL BROS.,
Toronto

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.

- A. H. NEWMAN, Chicago, Ill.,
- C. F. MUTH, Cincinnati, O.,
- JAMES HEDLON, Dowagiac, Mich.,
- DOUGHERTY & McKEE, Indianapolis, Ind.,
- CHAS. H. GREEN, Berlin, Wis.,
- CHAS. HERTEL, Jr., Freeburg, Ill.,
- E. L. ARMSTRONG, Jerseyville, Ill.,
- ARTHUR TODD, Germantown, Philadelphia Pa.,
- E. KRETCHMER, Coburg, Iowa,
- E. F. SMITH, Smyrna, N. Y.,
- C. F. DALE, Mortonville, Ky.,
- EZRA BAER, Dixon, Lee Co., Ill.,
- CLARK, JOHNSON & SON, Covington, Ky.
- KING, ASPINWALL & CO., 16 Thomas Street, New York.
- C. A. GRAVES, Birmingham, O.

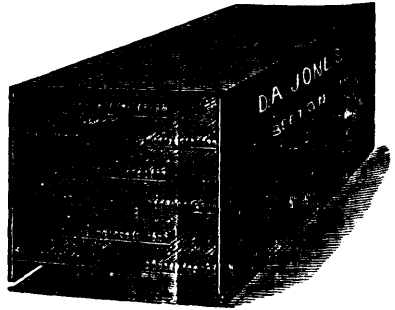
and numbers of other dealers. Write for SAMPLES FREE and Price List of Supplies, accompanied with

150 COMPLIMENTARY

and UNSOLICITED TESTIMONIALS from as many bee-keepers in 1883 We guarantee every inch of our Foundation equal to sample in every respect.

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

WINTER FEEDERS.



These are for feeding in winter, or at any other time when the weather is too cold to admit of feeding liquids

DIRECTIONS FOR MAKING THE CANDY.

Take pure pulverized, or granulated sugar—the former preferred—and stir it into honey, nicely warmed up, until the honey will not contain further additions. Allow it to stand in the dish until both are thoroughly mixed through each other, then place in feeders and set them on top of the frames, packing all around nicely to allow no heat to escape

Each, made up	30
Per 10,	2 75
Each, in flat	20
Per 10 "	1 75

We have a full stock on hand ready to go by return express or freight. D. A. JONES, Beeton.

Beeton Printing & Publishing Co.,

FINE BOOK, JOB, & LABEL PRINTING.

Send for our FREE "Honey Label" circular. Printing furnished promptly, and neatly done. Estimates of "circular" and other work on application.

F. H. MACPHERSON,
Manager, Beeton, Ont.

3-tf.

120 Colonies For Sale!

Having too many colonies on hand I will sell the above number, all in movable frame hives, in first-class condition for wintering, and insured against fire. Purchaser can winter them in my cellar without extra charge. Address

J. B. LAMONTAGNE,
Box 964, Montreal.

BEEES FOR SALE.

100 colonies Italian Bees for sale cheap! Price 27 or five for \$30. Originated from Doolittle and Root stock. Are full of bees, in Jones hives, on frames from wired foundation, with twenty-five pounds of stores, and safe arrival guaranteed. References P. M., J. P., Mayor and station agent. Send for Price List of Hives and Supplies.

LEON E. DYER,
Sutton, P. Q.

GLASS JARS!

We have several gross of these jars ready for shipment by return freight or express, at the following prices:

		Gross.	Half gross
"Crown" brand"	1 Pint	\$14.75	\$7.50
" "	1 Quart	15.75	8.00
" "	1/2 Gallon	19.00	9.75

They are put up in half-gross cases—no charge for packing or cases.

D. A. JONES.

The Canadian Bee Journal.

D. A. JONES & Co., Publishers.

OUR OWN APIARY.

ODDS AND ENDS.

THIS morning (November 14th) one of our men after mixing up some arsenic, granulated sugar and flour in equal parts, as mentioned on page 451 in "our own apiary" started off to the outside yards to place it in the various bee-houses to destroy all the mice before the bees are set into winter quarters. Small quantities will be placed on pieces of paper and laid in the bee-houses where they can get at it conveniently. This will destroy every one of them in from one to three days, and sooner if they find the poison. Next week we expect to set some of our bees in clamps if weather is favorable. We shall winter the majority of them in our bee-houses, which hold from 150 to 400 colonies. We will use the same clamps as last year, and will take the hives from various portions of the yard, so as to have a fair average, enabling us to test the difference between clamp and in-door wintering pretty well. While we are writing this morning it is snowing and has been since 6 o'clock. This is the first we have had this season and expect it will not remain with us long as lightning was reported on the evening of the 12th, which is said to indicate open weather for some time. By the way, we wish our friends in northern latitudes,—as Canada, Michigan, Wisconsin and Maine,—would report to us the date of the latest thunder and lightning in the fall and the earliest in the spring also whether sheet or chain lightning. For a long time we have noted the latest and earliest dates of the thunder and lightning in fall and spring with the following results. It is generally from three

to six weeks, sometimes longer, after the last lightning before winter sets in, and early lightning in the spring indicates a late backward season. We never like to see thunder storms early in the year. We are of course speaking only of our own locality.

ANOTHER KIND OF CLAMP.

One of our assistants who has been with us for years, and who has also kept a few colonies on his own account has wintered his own bees on the following plan: He selects a high piece of ground usually dry, and sandy, if possible; digs a trench, throwing the earth all to the north or west of the same as the case may be, about two feet deep—sometimes three—and about four feet wide; along the front and back of the trench he places posts at suitable distances, and on tops of these are placed cross timbers to support the roof, leaving a space between roof and bottom of trench of from three to four feet; then he packs about one foot of straw at back of trench and six inches on bottom; places the hives on stringers keeping them about six inches above the ground; next the space from top of hives up to roof of earth clamp is tightly filled with straw and about one foot of straw is placed in front. Boards, slabs, planks, or timbers as the case may be are laid over top of posts, and down back and front of posts to earth. We nearly forgot to mention that there is a board put up in front of hives above the entrance leaving an air chamber in front of hive about one foot wide by ten inches deep, or say a foot square; this air chamber runs the entire length of clamp which in his case is about 100 feet long, and holds about 50 colonies. The air chamber is connected at both ends with an air ventilating pipe which runs about one or two hundred feet from each end of clamp to the east and west giving a direct circulation of air in front of all the hives from outside

no matter which way the wind is blowing, for furnishing a current of pure air all the time. Now this clamp is covered over with earth two feet deep and remains that way until late in the spring when the earth is thrown back, the straw pulled away and the bees allowed to fly until fruit bloom. Cold and unfavorable weather does not affect bees down in this clamp as they are warmly packed all around excepting the front, and the sun shining down on the entrance to the hives makes it much warmer than it otherwise would be. Continuous breeding was carried on late in the spring in this clamp during the three weeks of unfavorable weather when all the bees setting upon the summer stands in the ordinary way ceased to breed, spring dwindling following very much. During that unfavorable weather we examined his bees several times, as he lives about six miles from Beeton, and found them brooding more rapidly than bees ordinarily would in the most favorable weather on summer stands. To examine them he takes hold of the front of a hive draws it forward out of its cosy straw nest, smokes the bees a little, and lifts out the comb. He showed us solid combs of brood that would delight the heart of any bee-keeper, and this at a time when our bees upon their summer stands, were many of them clustered as closely as they are in winter quarters, and had ceased brooding entirely. When there were cold chilly winds and unpleasant weather he just tumbled down the straw in front of the hives—pea straw and could easily be removed. This system may come into use largely in northern localities, especially where the bee-keeper does not wish to go to much expense, as the same clamp will do for years.

NORTH AMERICAN BEE-KEEPERS' SOCIETY, at Detroit, Mich., on December 8th, 9th and 10th, 1885. W. Z. Hutchinson, Sec., Rogersville Genesee Co., Mich.

FOR THE CANADIAN BEE JOURNAL.

SOME OBSERVATIONS—INTRODUCING QUEENS.

MR. D. A. JONES, who is good authority on all matters pertaining to bees, tells his readers that it is no trouble to introduce queens, either virgin or fertile, and yet facts show that there are serious losses going on account of failure when attempting to introduce queens.

If Brother Jones has discovered a "rule" of procedure that has no exceptions he will certainly confer a great favor on all bee-keepers, except a few experts whose skill and judgment is equal to any emergency that may arise in apiary work, by giving a minute description of his manner of proceeding when introducing queens both virgin and fertilized.

A. I. Root has frequently said that perhaps one-fourth of all the queens sold by him were lost when introducing. I have but little doubt of his conclusion if his customers follow strictly his "directions" sent out with each queen sold. My experience as a queen breeder warrants me in saying that about fifty per cent. of the queens sold are purchased by beginners and others who are not sufficiently advanced in the science to risk their judgment as to when a queen will be accepted or rejected by a colony of bees. Hence when such persons are "directed" how to proceed, a plain strict rule must be laid down for them to follow till they gain sufficient knowledge of the business, and possess that confidence in themselves that only true knowledge can inspire.

When speaking of a "rule" as to when a queenless colony of bees in a normal condition will accept a queen, we may say that they will sometimes accept her by direct introduction, and more frequently after making her acquaintance twenty-four hours, and with more certainty after forty-eight hours. Now, if we follow up the experiment we will find that we may safely fix the "rule" at seventy-two hours. I claim that by blindly following this rule a mere novice should never fail. It will be seen that no rule as to *time*, suitable to the inexperienced, can be carried out by the popular plan of caging the queen on a comb. This method gives the matter too much into the hands of the bees, as they may release and destroy the queen. For this reason, and for the further reason that it is less labor, I use a cage suitable for placing on top of the frame right over the cluster of bees. My cage is so arranged that when the stopple is removed the bees while appropriating the soft candy with which the cage is provisioned, will release the queen under the most favorable circumstances.

Practical apianists tell us that seventy-two

hours is too much waste of time in the busy honey season. Very true. But I am not fixing a rule for skilled apiarists, but for the novice. The expert can tell by the behavior of the bees when they are willing to accept a queen, but the novice cannot trust his judgment in so delicate a matter. Time must pay the penalty for lack of experience. Newly hatched queens have an infantile confident way of staggering in among the bees which seems to protect them from harm, or even notice on the part of the vigilant workers. But not so with the pert miss of several days old, her pretentious ways seem to excite the jealousy and envy of the feminine commonwealth, and they proceed to teach her "lessons in manners," and generally wind up the proceedings by murdering her, even at the risk of the extinction of the colony. It requires as much care and skill to introduce virgin queens of several days old as it does to insure the acceptance of fertile queens. And to introduce them I proceed in precisely the same way. There is no way to help beginners in this important branch of apiary work but to give a plain "rule" for them to follow till such time as they may have acquired the skill and judgment to introduce a queen by the rule given: Remove the queen to be superceded, and place the cage containing the queen to be introduced, wire cloth down, right over the cluster of bees, and cover with a quilt. At the expiration of seventy-two hours remove the stopple which encloses the food apartment of the cage and leave the bees to release the queen by removing the soft candy with which the cage is provisioned. Do not disturb the bees for several days after the queen is released. If this rule is strictly followed not one queen in a hundred will be lost, no matter what may be the experience of the operator.

If a queen is released too soon, and once "balled," the bees seem to know such a queen ever afterwards, and she is likely to be murdered at any time even if she is apparently received all right. I never had but one queen that was "balled" that afterwards did good service. My experience is the once "balled" queen is ever after a spiritless down-cast slave. I once had a very fine queen that I forced a colony to take against their inclinations, and even after she began to lay rapidly some bees might be seen dogging her footsteps biting and worrying her as she went about her business. In a few months she gave up the contest. I had reason to believe that she left the hive to die rather than to submit to the indignity she was subjected to.

G. W. DEMAREE.

Christiansburg, Ky., U.S.

We think chloroform, properly used,

would be successful for it appears the only difficulty is to make the queen behave in such a manner as not to excite the bees and cause them to ball her. If young queens, although not all behaving alike, can be introduced as soon as hatched without loss, should we not study to induce old ones to behave in a similar manner. We do not think there is any rule that can be laid down for successful introducing in every instance. The bees, when the queen is liberated, should be as far as possible in the same condition as they are when the queen is passing over the combs depositing her eggs. When bees are excited, or on the alert, as it were, watching for intruders, it is much harder to get them to accept a queen, than when they are in a quiet unsuspecting condition. Some apiarists excite the bees by opening the hives, thus causing them to sting, leaving an odor in the hive. If, with the bees in this condition, the introduction of a queen is attempted, loss is almost certain to follow; or if the bees are disturbed so that they become angry, an introduction should not be attempted. Those who are accustomed to handling their bees roughly do not have much success in introducing. If all the manipulations are in accordance with the required wants of the bees, the introduction of the queen is a very simple matter. We have sometimes thought that it might work well to cage a queen and give her food containing sufficient alcohol to make her stupid so that she would move about like a young queen. While we write this our attention is drawn to a drunken man on the streets, for we are sorry to say that we do have some drunken men in Beeton, the thought just struck us, that if the queen did not behave any better when intoxicated than that drunken man did the bees would scarcely be doing their duty if they did not kill her.

FOR THE CANADIAN BEE JOURNAL.

OUR "PAPER"—THE O.B.K.A. "ORGAN."

SIRS—Your issue of the 4th inst., is to hand brim full of good things, as is its wont. Mr. Pringle discusses "the organ question" at length, Prof. Cook furnishes a valuable and timely paper touching on many points of interest to bee-keepers. Your confrere over the way gives you a bit of his mind on the title of your paper. You made a grand mistake when you named it the CANADIAN BEE JOURNAL. Did you not know that there was a "Bee Journal" published in the most savoury smelling city of the Great United States whose proprietor claims the exclusive right to the title for his paper. Sensible man! He is not ignorant of the fact that "there is something in a name." Have not the patent medicine men discovered this long ago? And have they not rushed with "doubled neve" at all and sundry who dare strike a label bearing anything approaching the title of their own nostrums? Why did you so far forget the sensitive nature of your neighbour on this matter? You might have set the Lion and the Eagle pawing and clawing one another by your rashness, you thoughtless man. Maybe you committed the rash act from worthy motives for imitation is said to be the sincerest kind of flattery. If so you missed the mark this time for it is averred that your flattery—or the term journal which?—has cost somebody several thousand dollars. Flattery that carries with it such results is not usually appreciated. You might as well have been accommodating and called your paper the "Freezeland Apiarist," then everybody would have known it was published somewhere away up amid the eternal snows of Canada. It is true a man may commit a wrong without knowing it but if the wrong be pointed out and persisted in there is little hope of the wrong-doer and if it be repeated he is doubly guilty, therefore be advised, and if a son and heir should be born to you in the near future don't for the life of you have him baptised "Thomas G.," for that name is the vested right of another, and therefore not yours to use.

I quite agree with Mr. Pringle that an "official organ" is no longer needed by the O.B.K.A. The C. B. J. supplies all its members need as far as a medium of communication is concerned. I would regret to see the journal become the organ of any man or set of men. I prefer to see it remain what it is: an independent bee-paper—beg your pardon, BEE JOURNAL, giving to its patrons value for their money and prospering on its own merits; but I do not agree with him that no inducement such as referred to should be offered to members. It is true bee-keepers "should not

be babies and require taffy" to induce them to remain or become members of a fraternal association, the object of which is to advance their own interests, but without attending the conventions little personal benefit can result, except such as is common to all readers of the public prints; and it is a well-known fact that not a tithe of the members in former years have attended the society's meetings. Men should not be looked upon as babies because they expect or accept an inducement to identify themselves with an organisation having for its object the general good of the class to which they themselves belong. Where there is no direct personal advantage an inducement such as that under consideration is one of the means very generally employed by such societies to secure and hold together their membership. Mr. Pringle will, I think, admit that the members of the Ontario Fruit Growers' Association are in no sense of the word "babies," yet they accept with a good deal of satisfaction the taffy they annually receive in the shape of trees, shrubs or flowers by right of their membership and a *quid pro quo* for the fee they pay. I believe it is frankly admitted by the officers of the Association that the full list of members could not be maintained if some such inducement were not held out. If this Association, with a much greater number of people interested in their work than the Bee-Keepers' Association can hope to have for many a day, find it expedient to offer some special inducement in order to the maintenance of a good list of members, it is an absolute necessity on our part to do the same thing if we would save the Association from decay and death. Just what the discount, bonus or taffy should be is a point upon which different people may be expected to hold different views. In my opinion it should be something useful to beginners and small bee-keepers, as they are largely in the majority—professionals will have already nearly everything that can be offered, and will doubtless remain members under any circumstances.

R. MCKNIGHT.

Owen Sound, Nov. 11th, 1885.

We were not aware that the words "Bee" "Journal," or "Bee Journal" were patented, copy-righted, or "owned" by any one else or we should not have "christened" our "paper" by the name we did. We had no idea or intention of injuring anyone, and, if any injury has been done, we are quite sure that it is not chargeable to the name, but to the excellent contents of our JOURNAL

—for which we do thank its contributors. The success of the CANADIAN BEE JOURNAL, from every standpoint—contributions, patronage, and good will—has exceeded our most sanguine expectations, and if it has had the effect of reducing the cost of some bee literature by one-half, it has in that way, if in no other, been of great service to the bee-keepers of America, and judging by the hearty support they have given it since that reduction, we believe they have appreciated that service.

We fully agree with you Friend McK. in regard to the desirability of having in the CANADIAN BEE JOURNAL an independent paper. We have no desire, and so stated at the late convention, to become the official organ of the O.B.K. A., giving our reasons therefor. Our JOURNAL must stand or fall on its own merits.

FOR THE CANADIAN BEE JOURNAL.

BEE-KEEPING PAST AND PRESENT.

THE history of the honey-bee so far as I can gather goes back to the Revolutionary War, when my father was a boy and tossed his hat for King George under the glitter of the British officers, boy-like, he and the little darkies amused themselves by sticking their fingers in the straining honey hanging at the old Dutch fire place in the cellar kitchen of his grandfather on the banks of the Mohawk, Dutchess county. It would appear that bees were introduced by the early Dutch settlers when New York was called Amsterdam, working their way northward, notwithstanding the severity of the climate, as far north as our great inland lakes. As early as 1830 bees were plentiful both wild and in a domestic state, and managed successfully by the inhabitants. My memory carries me back to the above date when a great calamity came upon the bees in Prince Edward county, where three of my uncles on the banks of East Lake had kept bees in sheds made for the purpose, two of them lost all of their bees, leaving their bee houses and hives empty; they never returned to bee-keeping again, not knowing the cause of the great loss that befell them. In time bees became more plentiful and in a wild state were found by the bee hunters, and kept by those supposed to be lucky on long open

stands in board hives with success. Not satisfied, ingenuity set to work and made hives with drawers to be filled with honey, and gables of buildings were used to keep bees in. These proved to be failures. Then the frame hive was taken in hand and bee-keeping as a science became better understood, Langstroth being the first, and after that patent hives were all the rage in this county. The introduction of the Italian bee stimulated a desire for movable frame hives and the science of bee-keeping in general. The experience and the vexation set the inventive powers to work and in 1870 the "New Dominion" bee hive competed with the "Thomas" hive at Montreal where competent judges decided in favor of the former. Artificial swarming and the introduction of Italian queens brought on another disaster in 1872, both indoors and out. Many bee-keepers lost all. On looking around us we found the careless bee-keeper who had kept bees on the "let-alone" principle, had succeeded in snow banks without care or expense. "Try again," is our motto. Two stocks were procured of common bees and set on their summer stands, and allowed to remain as long as they chose, doubling their number every year, both in box hives and double-walled frame hives, producing moderately both extracted and box honey up to 1882, a very cold spring, and the season altogether unprofitable to the bee-keeper. March 31st, 1883, passed leaving a record of the most constant cold weather for fifty years. Bees were four months exposed to constant cold weather, and very few out of fifty that were in tolerable condition failed, proving that bees are able to stand a great amount of cold. Passing another cold spring into an abundance of fine clover pasturage, we placed them in fine condition to stand the winter then coming upon us. The winter of 1884 was, if possible, more extreme, but bees have survived it all and have procured stores sufficient, notwithstanding an unfavorable summer.

B. LOSEE.

Cobourg, Ont.

BOTANICAL.

NABALUS ALBUS.

THE plant sent for identification belongs to the order compositae, *Nabalus Albus*, (white lettuce, rattlesnake root, lion's foot, An elegant plant conspicuous by its stout purplish stem and variously shaped leaves those at the base being triangular—half-lobed form, sinuate toothed, and sometimes deeply lobed; stem leaves roundish ovate, oblong, undivided, lobes obtuse, the uppermost lanceolate. Scales purplish, corollas whitish. pappus brown. It is

said that some of the varieties have medical properties and are antidotes for the poison of the rattlesnake. This plant is common throughout Canada and southward to Carolina. Found in moist woods and shady places. Flowers in August. Is a valuable honey plant.

"HERCULES CLUB"

Aralia Spinosa (*Angelica tree*, Hercules Club). This plant, highly recommended by a correspondent in the C. B. J. for cultivation as a honey plant, is a native of Pennsylvania and south to Florida, and will be found too tender for our climate except in sheltered places and along the shores of Lakes Erie and Ontario. Many efforts have been made to cultivate the plant for its beauty, but our winters have proved too severe, not further north than the county of Wellington.

C. MACPHERSON.

Prescott, Nov. 9, 1885.

OVER PRODUCTION.

THE Hon. M. M. Estee, in the *Rural Californian* writes.

"Who ever heard of too much to eat? The fact is, California has produced so much of everything, and produced it so well, that whenever we do enter into competition with the rest of the world in a new field of industry, after all other complaints are dissipated, we hear the old cry, 'There is too much of it. True, it is good; but you produce too much.' Think of an over-production in fruit! Why, there are 50,000,000 pounds of prunes imported into the United States annually. There is no reason why California should not produce them all. How then, can we produce too much wine, if it is good? but wine, like wheat or fruit, must seek a market. It will not sell itself. Let me remind you there cannot be an over-production of the best of an article. If we make the best raisins, the best wine and the best brandy, and if we can raise the best fruits, these will always sell, because for these things we have the world for a market, but the world must know what we have to sell."

The writer's object was to show that too much wine could not be raised in California. While we are not in accord with the object for which he writes, still the argument as regards wine can be applied to our own business, as producers of comb and extracted honey. If we "make the best honey, it will *always* sell, because we have the world for a market; but the world must know what we have to sell."

FOR THE CANADIAN BEE JOURNAL.

BEES IN NORTHERN CANADA.

AS Mr. C. F. Smith, of Cheboygan, is enquiring how bees have done in Northern Canada I will give my report. The spring of 1885 was at least two weeks later than usual in this locality—we are about 133 miles north of Toronto on the Northern Railway—consequently bees did not breed with their wonted vigor and by the time the queens were in full swing laying many old bees had died off leaving them somewhat weak in bees. About the 15th of May maples were in full bloom followed by wild cherry, and as the honey comes in fast we were able to extract a little by the 23rd of May. The wild raspberry has usually given some surplus during June but this year failed to do so. So that the lull lasted from May till the first week of July, when Alsike clover began to yield and the way they worked on Alsike was something wonderful for the first ten days in July. Then we had a spell of dry weather when the bees only obtained enough to keep the queens laying. Basswood came on with great promise but owing to unsuitable weather for honey extraction very little was obtained from that source. Canada thistle bloomed well but also failed to give any surplus. Buckwheat followed and the bees were very busy on it for several mornings but all the honey gathered was used in brood raising. A frost about the end of August cut off most of the fall bloom, and ended one of the poorest seasons we have known for five years. On examining the hives in September many were found without sufficient stores for winter; a few had some to spare. Those having less than twenty-five pounds were fed with granulated sugar syrup to make up to that amount. A summary of the past season is: Took twenty-four out of winter quarters, doubled back to nineteen, increased to forty-two, principally by artificial swarming, doubled back to thirty-six for wintering, and obtained twenty-five pound of comb honey and about 800 lbs. of extracted honey, nearly all from Alsike clover.

R. H. SMITH

Falkenburg, Muskoka,
November 6th, 1885.

From "Prairie Farmer."

MORE ABOUT WINTERING.

HIVES IN THE CELLAR.

J. A. S. Ill, writes:—I wrote you last winter asking directions for keeping bees in the cellar. I had good success, only for one thing, that was

dampness causing the loss of swarms. Mold hindered others from doing as well as they should have done. My hives are the Improved Langstroth Simplicity—on top of which I can place a half story, or a whole story, as may be needed. Will you please inform me what to do? I am partitioning off room in my cellar, as you directed me last winter. It will be 16 by 18, feet with one window, and by opening door in partition can get others.

REPLY.—I should think the difficulty with this cellar is lack of proper ventilation. Honey without bees in some cellars will get watery, burst the cappings, and ooze from the comb. Bees have wintered well in cellars in which there is a flowing spring; the water no doubt purified the atmosphere. I have often thought that the cellar in which my bees are stored might be too dry, being in sandy soil upon high ground. Before this cellar had sub-earth ventilation, mold would grow upon the walls like a spreading vine, but since air has been admitted from the bottom, the mold ceased to form. I would not like to dispense with this ventilator, if no bees were stored there, for the air is so much purer—no musty smell or mold. D. A. Jones, a prominent apiarist of the Dominion of Canada, claims that these ventilating pipes ought to be laid below the frost line, and extend 100 ft. from the cellar, so that the cold air will moderate before entering it. This may not be necessary in all climates. Six inch tile answers the purpose very well, and the out-door opening should be covered with wire gauze to prevent mice or rats from entering the cellar; the indoor opening can be covered up, if the temperature gets too low for safety of the bees in severe weather.

I do not think that opening a window for the air to escape is just the right thing. When so opened it causes too sudden a change; a stone pipe extending down to about 6 inches from the floor, and entering a flue above, or better still connecting with a pipe where there is a fire continually kept would create a draught, drawing off impure air. I have seen wooden ventilators about 6 inches square, opening into the cellar above, having several turns, or as it were elbows, so that no light entered.

A cellar so constructed that it would be a healthful abode for human beings, with the exception of sunlight, and kept at an even temperature of 45° , would be as nearly right as possible for bees. In order to keep the temperature at this point, the size of the cellar should correspond to the number of colonies stored. A bench, or a frame work of scantling, a foot or so from the floor to set the hives upon, is a good thing. Let the floor be cemented or paved, so the dead bees can be swept up, and taken out occasionally; if they are permitted to lie there all winter and decay, the noxious gases will enter the rooms above, causing a disagreeable stench unhealthy for the inmates.

WHEN TO PUT IN CELLAR.

A bee-keeper must be governed by the latitude his apiary is in, with reference to the time of putting bees in the cellar. By a vote of the North-western Convention last year, it was decided that November was too soon to store them. Last season ours were stored December 1st, and two weeks of fine weather followed, when bees that were upon the summer stands flew many days. Experience teaches us that it is better to store late, and then keep them there until warm weather comes to stay. When the bees are to be carried into the cellar, I fasten them in until the next day, in the meantime leaving the cellar ventilators open. When the bees are quiet, the hives are opened. Don't confine the bees to their hives in the cellar, but leave fly entrances open, and the frames covered with "comforts," or better, with woolen blankets.

MRS. L. HARRISON.

Peoria, Ill.

INTERESTING ITEMS

IN CONNECTION WITH OUR PURSUIT.

THE Golden Jubilee of the great bee-master Dzierzon will be celebrated in Germany during the coming year.

Italian bee-keepers have just had a large and interesting convention at Milan, at which Mr. T. W. Cowan, editor of the *British Bee Journal* was present.

QUERIES AND REPLIES.

UNDER THIS HEAD will appear each week, Queries and Replies; the former may be propounded by any subscriber, and will be replied to by prominent bee-keepers, throughout Canada and the United States who can answer from experience, as well as by the Editor. This Department will be reserved for the more important questions, others will be answered in another place. We hope to make this one of the most interesting departments of the JOURNAL.

DIFFERENCE BETWEEN FERTILE QUEENS AND DRONE LAYERS.

QUERY No. 43.—1. How do you tell a fertile-queen from a drone-layer? (2.) What difference is there between a drone-laying queen's mode of laying eggs and that of a fertile worker? (3.) How do you tell the difference in the eggs before they hatch?—J.

G. M. DOOLITTLE, BORODINO, N.Y. — Never had a drone laying queen in my life so an answer would be mere presumption.

R. MCKNIGHT, OWEN SOUND, ONT. — Some one who knows more of drone laying queens than myself must answer these questions.

DR. A. B. MASON, WAGON WORKS, O. — (1) By her progeny, or by a microscopical examination of their eggs. (2) Have had no experience with drone laying queens.

O. O. POPPLETON, WILLIAMSTOWN, IOWA.— (1) Cannot tell by any difference in the queens. (2) None that I have ever noticed. (3) Cannot tell except with the aid of a powerful microscope.

M. EMIGH, HOLBROOK, ONT. — (1) By the work she does. (2) One is liable to fill a cell half full of eggs, while the other usually lays but one egg in each cell. (3) By the way they are placed in the cell.

H. D. CUTTING, CLINTON, MICH.—(1) From the brood when hatched. (2) A fertile worker places the eggs on the side of the cell, while a drone laying queen puts them on the bottom. (3) I don't believe I can.

B. LOSEE, COBOURG, ONT.—(1) Couldn't tell the difference. (2) Queens laying drone eggs only, lay them regularly; fertile workers irregularly. (3) Fertile workers mis-place them; queens lay them regularly and all queens look alike.

DR. C. C. MILLER, MARENGO, ILL.—(1) You can't tell them apart till their brood is capped over. (2) A laying worker lays irregularly, perhaps several eggs in a cell and prefers drone cells. (3) You can't unless by the irregular laying.

S. CORNEIL, LINDSAY, ONT.—(1) By her progeny. (2) I have had very little experience with fertile workers. Both place the eggs in the cells irregularly, in different positions and often several eggs in the same cell. I do not know of any characteristic difference between their modes of laying eggs.

PROF. A. J. COOK, LANSING, MICH. — It were better to ask, How do you tell an impregnated queen from one not impregnated? The eggs from the latter will produce only drones. Can only be done by aid of the microscope, and is quite too difficult then to be of practical value even with the expert microscopist not to say the common bee-keeper.

H. COUSE, THE GRANGE, ONT.—(1) Fertile queens are generally much larger than drone layers, the latter being not fully developed, the abdomen being more tapering. (2) Fertile workers place their eggs here and there and a number in a cell, while the drone laying queen places her's more uniform. (3) Have not observed any difference.

S. T. PETTIT, BELMONT, ONT.—(1) So far as my observation goes I can tell for a certainty by their progeny. The extremity of the abdomen of a drone layer is comparatively large while the other parts of the abdomen seem slack, small or poorly filled. Some queens that lay mostly drones are extremely large. (2) Don't know. (3) Cannot tell.

ALLEN PRINGLE, SELBY, ONT. — The fertile queen is distinguished from the virgin by fullness and enlargement of the abdomen, by slower movements, and a greater degree of self-possession. (2) The distribution of the eggs by a fertile worker is less regular in the cells. (3) Whether microscopic examination would reveal any perceptible difference dependent saith not.

J. E. POND, JR., FOXBORO, MASS. — I have never been able to see any difference in the whole matter involved in this question, except so far as results are concerned. Some claim to find a slight difference in size; in the way and manner the queen deposits her eggs, and the position of the eggs in their cells. I have not been able to find any difference of the kind great enough to be appreciable to my eyes. I would pay a handsome bonus to any one who will give an answer to the above containing a sure and certain method of determining the matter involved.

DR. DUNCAN, EMBRO. — (1) A fertile queen lays her eggs more regular, one in a cell where

a drone layer often lays more than one in a cell; the latter is smaller in the abdomen and not so easily found as a fertile queen. (2) If a drone layer from old age, she lays quite regular, one in a cell; if a young unfertilized queen there is sometimes more than one in a cell. A fertile worker lays sometimes two or three in a cell, and scatters them promiscuously in and around the sides of the cells. (3) No apparent difference in the eggs only in the order in which they are deposited, and the capping is elevated and converse in all drones before they emerge from the cells.

P. H. ELWOOD, STARKVILLE, N.Y. — (1) By their work usually. Sometimes there is a difference. (2) I don't know. (3) I don't tell the difference. I have never seen a fertile worker although I have been looking for one for half a score of years. In several thousand swarms made queenless by our method of raising honey I have observed no eggs laid except by queens. In breaking out queen cells when queenless for a week very many stocks will raise queens from the unsealed larvæ. Such queens are good enough to lead off swarms and to make considerable trouble at home. They preserve so much of the queenly appearance that the experienced eye need never confound them with workers. In cool weather the same state of affairs may occasionally present itself after being queenless for eight days.

G. W. DEMAREE, CHRISTIANSBURG, KY.—(1) There is no way to distinguish a drone (egg) laying queen from her fertile sister except by her progeny. I have had two or more queens laid none but male producing eggs that were simply superb queens as to size, form, color and majestic carriage and deportment. I kept one of these queens that had every opportunity to mate when of the proper age, during the summer, and part of the fall months, keeping up her working force by supplying her with young workers from other colonies, and with all this trial she produced only male progeny. (2) These queens perform their work just as do the fertile queens. (3) With such queens as I have described you must wait till the brood is capped to distinguish the sex. Once in a great while a young fertile queen will lay a few drone eggs at the start and do awkward work like a laying worker, but come alright afterward.

APICULTURE COMMERCIALY.

QUERY NO. 42.—In the March No. of the *American Apiculturist* I asked five questions to which two replies were given, one by Arundell, of California

which was to the point but the conditions between California and Ontario being somewhat different his views might not be applicable here; the other by Mr. Demaree is somewhat unique inasmuch as he thinks "a bee-keeper does not need as high a salary as a first-class clerk." As neither of the replies hits the nail squarely on the head I beg space to repeat the questions and solicit replies through the C. B. J.

(1.) Charging for salaries for work done, for necessary expenses, and for depreciation in the value of accessories, does bee-keeping pay?

(2.) If yes then suppose a specialist having a fair field for operations where basswood is fairly plentiful, say in some line of railroad where his apiaries could be located about every four miles, and running them say for extracted honey at 10 cts. per pound, how many colonies would he require to have to ensure him an average salary of a first class clerk, or say from \$1000 to \$1200 per annum over and above expenses and depreciation?

(3.) How many assistants would he require during the honey yield to operate these colonies successfully?

(4.) Given a first class hive and fixtures, how many colonies could one man examine and extract honey from in a day of ten hours hard work?

(5.) With proper assistance how many colonies run for extracted honey could an apiarist successfully oversee?—Apis Canadensis.

DR. J. C. THOM, STREETSVILLE, ONT.—I have never "ben thar" and don't consider myself capable of giving an answer without using more "ifs" than might be satisfactory to the enquirer.

PROF. A. J. COOK, LANSING, MICH.—(1) Yes, if carried on wisely. (2) In our best locations 100 colonies, if he were a real "bee master." (3) *Very little*. (4) 25 to 30 easily. (5) Mr. Jones must answer this, or Cap. Hetherington.

DR. A. B. MASON, WAGON WORKS, O.—(1) It depends upon the man. (2) From twenty to seventy-five. (4) Almost ad infinitum. (5) With proper assistants an experienced apiarist could oversee thousands of colonies.

DR. C. C. MILLER, MARENGO, ILL.—(1) I can only answer the 1st question and to that I answer "No." This answer may not be correct in all cases, but is the true one in my own case.

based on an experience of 24 years, the last 7 being spent solely in beekeeping.

M. EMIGH, HOLBROOK, ONT.—(1) Yes, if properly managed. (2) 150 colonies to be kept in one apiary. (3) One assistant for six weeks only. (4) About fifty. (5) Six apiaries of 120 colonies each.

G. M. DOOLITTLE, BORODINO, N. Y.—(1) Not at present prices of honey. (2) As extracted honey is now selling, delivered in New York city at 6½ cents, I again say it could not be made to pay. (4) Not over 20 on an average. (5) Perhaps 500 to 1000.

DR. DUNCAN, EMBRO.—(1) It pays if properly managed and in a good locality. (2) The basswood is a failure some seasons where it is plentiful. It would depend on fruit and clover blossoms. He would require three or four hundred colonies. (3) He would require two good assistants. (4) About 20 is a good day's work; if honey capped about 12. (5) Probably he might oversee from 500 to 1000. The editor can answer this query best of all.

H. D. CUTTING, CLINTON, MICH.—(1) Not always. (2) 150 colonies, but would advise the addition of 100 more to cover the last word in No. 2. (3) The less assistants a man has the better; do it yourself if possible. (4) Depends on a great many conditions. I know of one man that will work hard all day and not get through with 20 colonies and another that will go through 100 in ten hours. (5) With *proper assistants* how many could he not oversee?

ALLEN PRINGLE, SELBY, ONT.—(1) Yes, successful bee-keeping pays. (2) Presupposing first rate management, a good average season, and moderately fair price for surplus stock or increase, 100 colonies would do it. (3) If he be thoroughly competent, active and expert himself, one assistant will be amply sufficient. (4) Under the conditions named I think I could go over from 50 to 75. (5) If we take the phrase "proper assistants" for all it is worth a proper overseer could I should think oversee about 10,000.

P. C. DEMPSEY, TRENTON.—(1) Yes. I have known a lady with 40 colonies spring count 10 to sell \$600 worth of honey and double her stock, not counting the honey used by the family. (2) Within four miles of where I write one beekeeper attends about 100 colonies and usually sells from one to six tons of honey and only occurs about our months of his time during the year. He also has a large number of bees to sell and sells them besides a large number of queens. Sold: 4 tons honey at 10c. per lb, \$800.00;

80 colonies of bees at \$10 per colony, \$800.00; 500 queens at \$1.00 each, \$500.00.

S. T. PETTIT, BELMONT, ONT.—(1) I think about one in every fifty who try bees make it pay and the other forty-nine lose time and money at it. (2) I could not answer that question. Why say ten cents per pound? What guarantee have you for that price in large quantities one year after another? We should not mislead. (3) Don't know. (4) Don't know. This would depend largely upon how much the bees troubled with swarming and also upon your mode of doing things. If the honey were capped it would take twice as long as to throw it out in a raw green state. (5) Don't know. I feel inclined to say that a few years actual experience will answer these questions for such individuals much better than we can.

S. CORNEIL, LINDSAY, ONT.—(1) An accurate answer to this question requires closer book-keeping than is usually done by those who learn the business by making blunders and then correcting them. I think it pays when the business is once learned. (2) I would rather undertake to make \$1200 by keeping only one yard and would not want more than 120 first class colonies. (3) I have an assistant who could do all the work himself. (4) A first class man having everything in readiness before the flow commences, can run from 126 to 150 stocks for all they are worth. (5) Don't know. Depends on his ability to manage men as well as bees.

G. W. DEMAREE, CHRISTIANBURG, KY.—(1) I answer yes, if you compare bee-keeping with other rural pursuits. (2) If I was getting \$1000 or \$1200 per annum and liked the business, and it did not injure my health or morals, I would not give it up for a rural pursuit. There would be no necessity for taking the risk of making the change. Bee-keeping as a business can be utilized only by those who are adapted to the business. And to such, and only such, it will pay as well as other rural pursuits. Perhaps 200 colonies in the hands of a practical beekeeper would insure an income equal to the amount you name. (3) One smart boy in addition to his own labor, with a little extra help in times of "pinch," would enable the apiarist to pull through. (4) About twenty. (5) It would depend on the capacity of the apiarist. About three apiaries of 100 colonies each would be enough for most men.

H. COUSE, THE GRANGE, ONT.—(1 and 2) I would advise the writer to have considerable practical experience before he may expect said amount clear of expense annually, better try a

few colonies and work up, rather than a great number and then have to work down. (3) During the extracting season in a large apiary the apiarist should have one or two boys to carry combs, one to uncap and one to extract while he manipulates the hives. The remainder of the season he should do nearly all the work. (4) This depends on circumstances. When there is but little honey in the hives a great many could be extracted, but if the hives are full I don't think he could do so many. (5) If the writer means proper assistants to do the extracting I would say from 100 to 150 colonies spring count, in an average season if the apiarist is expert.

J. E. POND, JR., FOXBORO, MASS.—(1) I have never kept bees except as a matter of recreation, but I have kept 50 colonies and even more at times. My locality is not up to the average, as we have a short season of white clover and no basswood. I have kept a strict cash account at times and have found beekeeping with me to pay well. (2) Presuming him to thoroughly understand the business, and attend to it faithfully from 175 to 200 colonies, provided he could market his honey from 12 to 20c. per lb. for comb and from 10 to 12 for extracted. (3) He should need but one man and a boy during the height of the season; a boy the year round. (4) I don't know. It would depend largely upon the man, the condition of the hives, etc. (5) Ordinarily from 1000 to 2000, but this will depend upon the man. One could oversee 2000 while another would be lost with 200.

P. H. ELWOOD, STARKVILLE, N. Y.—This is a hard set of questions. We have all heard of the old man teaching his grandson his letters. When he came to one he didn't know he would say "this is a hard one, we will skip him." (1) At present prices bee-keeping doesn't pay with nine-tenths of the bee-keepers. (2) At present prices, perhaps four hundred if well managed. You needn't expect 10 cents per pound. (3) Not any. Chas. Dadant & Son have a man who takes care of 400, and it would not be courteous to suppose a smart Canadian would do less. (4) We will skip this one; there is so much difference in men and in the number of combs in a hive and the amount of uncapping, etc. We heard of a smart girl who once extracted 1000 pounds in a day, and probably a man ought to do half as much when he works hard. (5) Several thousand, if he has the executive ability of a Capt. Hetherington.

O. O. POPPLETON, WILLIAMSTOWN, IOWA.—(1) Yes, many men make more of a success in life by keeping bees than they would do at any

business on a salary of \$1000 or \$1200 per annum. (2) This question can be answered by each one for his own location only. The result in my apiary has been an average annual yield of about 108 lbs. per colony, spring count, during the past twelve years. If honey would bring ten cents per lb. I would need about 200 colonies to insure me the average annual income specified over and above expenses of the business and depreciation. (3) One competent assistant for four months, June 1st to Oct. 1st, and two lady assistants for a month or six weeks would be amply sufficient. (4) From 10 to 20 according to facilities and methods of management. (5) Some men can successfully oversee hundreds of assistants, while others seemingly of equal abilities otherwise, cannot successfully oversee a single workman, therefore any answer to this question would be pure theory, and is not wanted. These questions of *Apis Canadensis* cover a large field and cannot be satisfactorily answered in this department, a long article being required for that.

R. MCKNIGHT, OWEN SOUND, ONT.—(1) There are two sides to the first of these questions which admit of two answers, Yes and No, just as there are two sides to the question "Does farming pay?" After deducting the wages of hired help, necessary expenses and depreciations in the value of implements, buildings, etc., we all know it does and it does not. Whether the result is a gain or a loss to the proprietor depends very much on his own capability. In like manner it will depend upon the capability of the beekeeper whether he made it a paying or a losing business. (2) If he be a specialist, which implies a special adaptability for beekeeping as well as a thorough knowledge of it, he ought with from 150 to 200 colonies average a profit of \$1,000 a year. (3) Two boys would fill the bill. (4) One man alone cannot with profit or satisfaction extract. Even with assistance, the number gone through in a day will depend on the quantity of honey each contained, whether the comb was capped or uncapped, would make the difference of work of one hand—twenty-five minutes would be an average time to allow for taking out and returning the combs of a hive. (5) With the assistance of a couple of boys in the busy season, 200 hives might be successfully manipulated.

By THE EDITOR.—(1). It most certainly does when properly managed. (2.) From one to two hundred, according to location and management; less would frequently do. (3.) One man will

care for 100 colonies by having one or two little boys or girls to assist for a few days in the extracting season. (4.) From twenty-five to fifty. (5.) From 500 to 1000 colonies if you have good assistants.

SUNDRY SELECTIONS.

BEES IN ROOT HOUSE—TRANSFERRING.

GEO. COOK.—I would like to ask you a few questions for I know you to be very obliging by answering them. Is a good dry root house good for bees; if so, do they want chaff under them or over them or a good blanket over the top of them? Mine are box hives. Would your feeders do for these, or how could I get the bees into frame hives and when is the best time to do it and how?

Collingwood, Ont., Nov. 2, 1885.

Yes, a good dry root-house if properly ventilated would be a good place to winter bees. The temperature should be kept at about forty-five degrees if kept at that point they would need no chaff or sawdust around them. It would have to be covered with earth, sawdust, manure or some other material to keep it at that warmth.

Our feeder would do on box hives just as well as on frame hives, the only difference is that you would have to bore a couple of augur holes in the top to let the bees up to the food. The feeder would protect itself from outside bees. You will see instructions for "transferring," in back numbers of the CANADIAN BEE JOURNAL or in any of the latest editions of the various valuable works on bees. We would prefer not to transfer until fruit bloom next spring.

ABEL GRESH.—My bees have filled their combs with honey from Golden rod and fall bloom, and have it capped down to bottom bars of frames. Is it safe to go into winter quarters in this condition, having no empty combs to cluster on, and is such honey a safe winter food.

If you raise the combs sufficiently high from the bottom board to allow the bees to cluster under them and pass up as they consume their stores, or if the combs are far enough apart to allow the bees to cluster on the bottom board and part way up the comb, all will be right.

THE CANADIAN BEE JOURNAL

D. A. JONES.

F. H. MACPHERSON

D. A. JONES & CO.,

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BEEON, ONTARIO, NOVEMBER 18TH, 1885.

The bee-keeping friends around Simcoe are holding a convention; we will have a report of it for the JOURNAL.

British bee-keepers are bound to have a weekly journal and their wish is likely to be gratified soon, as the *British Bee Journal* has the matter under consideration.

ANOTHER KIND OF CEMENT.

A cement that will attach labels to metals can be made by taking ten parts of gum tragacanth mucilage, ten parts of honey and one part of flour.

On page 501, in friend Corneil's article on "Problems in Connection with the wintering of bees"—the words "of sugar" should have been written after "ten pounds" on the third line. In reading it please add these words.

We learn that Mr. T. B. Blow, Welwyn, Herts Co., Eng., has just returned from a visit to Friend Benton, at Munich, Germany. Probably he may give us a short account of his trip. It would be interesting to all.

GLEANINGS FOR 1886.

Friend Root is not content with *Gleanings* at present size and will add next year several pages every other issue. It is with pleasure we note this fact, because we can't any of us have too much of a good thing, and we can say that *Gleanings* is always overflowing with "good things." We hope Friend Root will excuse us for saying just what we think, and we hope too that *Gleanings* may reach away beyond its present good circulation during the coming year.

CORRIGENDUM.

On page 505 in issue of Nov. 5th, the types made Prof. Cook say that "Bees should never go into winter quarters with less than 'fifty' pounds of food, etc." It should have read "Bees should never go into winter quarters with less than *thirty* pounds of food, etc." The error was unintentional. Will Friend C. kindly excuse it?

" BEES AND BEEKEEPING."

Through the courtesy of the author we have received the first three monthly parts of this new publication under the above caption. That Mr. Cheshire has given the matter a most careful study, none who read what has already been written will deny. The portions of the work thus far received treat principally of the anatomy of the honey-bee and the well executed engravings representative of the different parts of the structure, highly magnified, will prove of much value in the better understanding of the subject treated. The letter press is highly creditable to the publisher. The whole volume will be completed in about nineteen parts, and if each part is as full of interest as those already received, Friend Cheshire may well feel proud of the mission he has undertaken, and the best thanks of the beekeeping public will be his just due. The price of each part is 7d., equal in our currency to 14 cents. We will shortly be able to supply those who would like to receive them.

HONEY MARKET.

CINCINNATI.

There is no material change in the market. Demand is slow for manufacturing purposes, while trade is fair in comb and extracted honey for table use. Arrivals are good. Extracted honey brings 4 to 8 cents on arrival, according to quality. Choice comb honey 14 to 16 cents in the jobbing way. Home demand for beeswax is fair, which brings 20 to 22 cents for choice yellow on arrival.

C. F. MUTH

Cincinnati, Sept. 12, 1885.

BOSTON.

Honey is selling very well but prices are very low, and we are often obliged to shade our prices in order to make rates. We quote 1 lb. comb, 14 to 16 cents. 2 lb. comb, 12 to 14 cents. Extracted, 6 to 8 cents.

BLAKE & RIPLEY.

Oct. 21, 1885.

ADVERTISEMENTS.

In purchasing articles advertised in the "Canadian Bee Journal" please mention in what paper you saw the advertisement. Advertisers always wish to know which advertisements are most effective.

Five Per Cent. Discount.

Of all goods which may be ordered now for use next season we will give the above discount. This is to induce early orders and in case you need anything for this season, you could save freight charges and the discount by ordering ALL TOGETHER. Will be given till further notice.

D. A. JONES, Beeton, Ont.

COMB HONEY PACKAGES.

THAT HOLD SECTIONS OF HONEY 4 1/4 x 4 1/4 IN.



We call these in our price list "Honey Boxes for Sections." Each box has a nice tape handle, and when adorned with labels "A" or "B," which are made to fit this package, they look exceedingly attractive. The price for boxes is: per 1000, \$20.00; per 500, \$12.50. The price of labels will be, extra, per 1000, \$3.50; per 500, \$2.00; per 100, 45c.

In the blank space at the bottom of label (see cut) is room for name and address of producer, and these may be printed in at the following extra charge. Per 100, 30c.; each subsequent 100 to 1000, 12c.; per 1000, \$1.25. Sample boxes, labelled, sent on receipt of a 3c. stamp.

D. A. JONES, Beeton, Ont.

BEE SWAX WANTED.

We will pay 30 cents per pound in trade for good yellow Beeswax, delivered at our R. R. station. Give us a trial order and see if we do not please you.

J. B. MASON & SONS, Mechanic Falls, Me.

FOR RETAILING HONEY

Our Paper Box is The Cheapest In The World.

\$9 per 1000; printing, 50 cents extra. Large discount on big orders. Send stamp for samples and illustrated catalogue.

ASPINWALL & TREADWELL,

16 Thomas St., New York.

FEEDERS!

Those who require to do feeding will find it to their advantage to have some of our

CANADIAN BEE FEEDERS

You can feed 15 to 20 pounds of syrup in one night, and there is no danger of robbing. The price is low, and the sale is very active. Our factory is running on them at the present time.

Made up, each.....	\$ 60
" per 100	45 00
In flat, each.....	40
" per 100.....	30 00

We can guarantee that they will give satisfaction.

D. A. JONES, Beeton, Ont.

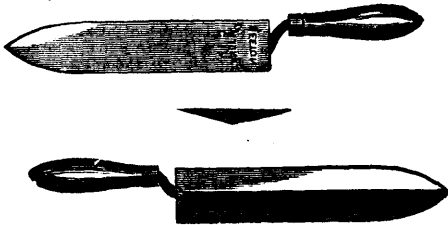
J. P. CONNELL, Hillsboro, Hill Co., Texas, can fill orders for **Pure Italian Queens** by return mail. Untested Queens, \$1.00. Tested Queens, \$2.00. Send me your order and send for my circular of Queens, Nuclei and bees by the pound.

FLAT-BOTTOM COMB FOUNDATION,
High side-walls, 4 to 14 square feet to the pound. Wholesale and retail. Circular and samples free.

J. VAN DEUSEN & SONS,
SOLE MANUFACTURERS,
SPROUT BROOK, MONT. CO., N. Y.

HONEY KNIVES.

We have just to hand a large shipment of honey knives from the makers, Lockwood Bros. Sheffield, England. These are undoubtedly the finest we have had made yet, being the most perfect in shape and neatness of manufacture.



These Knives are made of the Finest Razor Steel.

- Ebony Polished Handle, mirror polish.....\$1 50
- Ebony Polished Handle, glazed polish..... 1 25
- Wood Polished Handle, glazed polish..... 1 00

If by mail, add 15c extra for, each knife.
D. A. JONES, Beeton, Ont.



Electrotypes

We have them in stock, same as engraving, at 40c., postage 6c. They are good ones too.

D. A. JONES & CO.
Beeton, Ont.

THE INVERTIBLE HIVE

INVERTIBLE FRAMES,

- Invertible Surplus Honey Cases,
- Entrance Feeders, Top & Bottom Feeders,
- Hive-Lifting Device, Honey Extractors,
- Wax Extractors, Comb Foundation, etc.

My new Illustrated Catalogue is now ready, and will be mailed to all who apply for it. Address

J. M. SHUCK,
DES MOINES, IOWA.

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

APIARIAN SUPPLIES

MANUFACTURED BY

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

Are unsurpassed for **Quality** and fine **Workmanship**. A specialty made of all styles of the **Simplicity Hive** including the **Van Deusen-Nellis**. 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.

DOVE-TAILED SECTIONS.

Same price as one-piece. Also manufacturer of **VAN-DEURVORT FOUNDATION**. Dealer in a full line of **Bee-Keepers' Supplies**. Send for Illustrated Catalogue for 1885, Free. Prices always reasonable. Mention this paper.

Red Clover Queens by Return Mail.

I am now up with my orders, and can send queens by return mail. My queens are almost without an exception purely mated, and my bees worked just thick on red clover from the time it bloomed until the present.

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Nicholasville, Ky

—TRY THE—

BELLINZONA ITALIANS,

And see for yourself that they are the best. Warranted Queens, bred from mothers imported direct from the mountains of Italy, \$1.00 each; six for \$5.00. Satisfaction guaranteed. Orders filled promptly.

CHAS. D. DUVAL,
Spencerville, Mont. Co., Md.

MUTH'S HONEY EXTRACTOR

Is second to none in the market. **Square Gear Honey Jars, Tin Buckets, Langstroth Bee Hives, one-piece Sections, etc., etc.** Circulars mailed on application. Send ten cents for "Practical Hints to Bee-Keepers." Address

CHARLES F. MUTH,
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BEE-KEEPER'S GUIDE, OR MANUAL OF THE APIARY.

11,000 SOLD SINCE 1876,

The twelfth thousand just out. 10th thousand sold in just four months. 2,000 sold the past year. More than 50 pages and more than 50 costly illustrations were added in the 8th edition. It has been thoroughly revised and contains the very latest in respect to Bee-Culture.
Price by mail, \$1 25. Liberal discount made to Dealers and to Clubs.

A. J. Cook, Author and Publisher,
State Agricultural College Lansing, Mich

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 GLEANINGS IN BEE CULTURE**, with 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.

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