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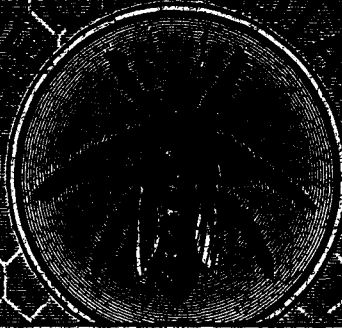
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VOL. II, NO. 21.

1886

AUGUST 18.

PUBLISHED EXCLUSIVELY IN THE INTERESTS OF THE HONEY PRODUCER



JOURNAL

APR 24 1887

THE FIRST \$ WEEKLY IN THE WORLD

ONE DOLLAR PER YEAR

THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER

PUBLISHED BY

JONES, MACPHERSON & CO.

BELTON ONT.

REV. 1887

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The CANADIAN BEE JOURNAL will be continued to each address until otherwise ordered, and all arrears paid.

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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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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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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. JONES, MACPHERSON & CO., Publishers Beeton, Ont.

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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 BEEKEEPER'S LIBRARY.

We keep in stock constantly and can send by mail post-paid the following:—

BEEKEEPERS' GUIDE OR MANUAL OF THE APIARY, by Prof. A. J. Cook. Price, in cloth, \$1.25 paper, 1.00

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QUINBY'S NEW BEEKEEPING, by L. C. Root Price in cloth, \$1.50.

THE HIVE AND HONEY BEE, by Rev. L. L. Langstroth. Price, in cloth, \$2.00.

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A. B. C. in CARP CULTURE, by A. I. Root, in paper 50c.

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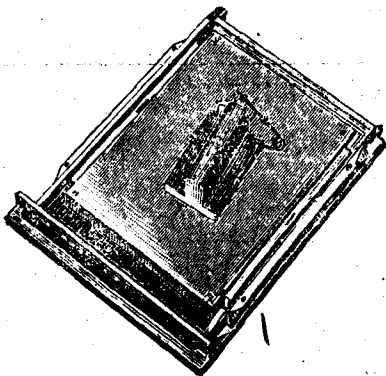
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THE MITCHELL FRAME NAILER.

Saves the cost of the machine in nailing 500 frames, to say nothing of the extra quality of the work obtained by its use.

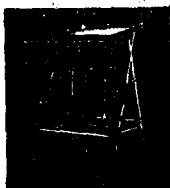


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For Jones' Frame.....\$1.25
 For Langstroth Frame.....\$1.50
 Ready to go by express or freight.

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

BARNES' FOOT-POWER MACHINERY.



Read what J. I. 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, 2000 honey boxes, and a great deal of other work. This winter we have double the amount of bee-hives etc., to make and we expect to do as much this Saw. It will do all you say it will." Catalogue and Price-list Free. Address, W. F. & JOHN BARNES, No 472 Ruby St., Rockford, Ill.

SYRIAN QUEENS

By return mail. Tested \$1.50 each, untested 75 cts., twelve for \$8; to Canada 10 cts. more each unless six or more are taken at one time.
 ISRAEL GOOD,
 Sparta, Tenn.

Queen City Oil Works!

The Highest Honors and Gold Medal For Our
PEERLESS OIL,
 Manufactured only by **SAMUEL ROGERS & CO.**
 Toronto, Ont

BEESWAX WANTED.

WILL pay the highest market price for any quantity of pure wax. Comb foundation for sale to suit any frame or section. 35 cts. for wax. Wax worked on shares or for cash. All freight to Campbellville station, C. P. R. If by mail to

ABNER PICKET
 Nassagaweya P. O., Ont.

Also agent for D. A. Jones' supplies.

SECTION CARTONS

Or Pasteboard boxes for enclosing honey sections. We sold thousands of them last season and are receiving orders for thousands of the improved for this season.

The improved Cartons are shipped in the flat all ready for the sections; all you have to do is to put on the label.

	Per 500	Per 1000
Price for 1 lb.....	\$3 50	\$6 00
" 2 lb.....	4 50	8 00

Sample by mail 5c.

Labels for the Carton 1 lb., \$1.00 per M.; 2 lb., \$1.25 per M 14 oz. Glass Honey Jars \$5.00 per gross, also tin packages of all kinds.

Honey Labels—Best assortment in the U. S.—Send for Catalogue.

Wholesale prices to dealers.

A. O. CRAWFORD,
 S. Weymouth, Mass

WHAT EVERYBODY WANTS.

—THE—

CHAMPION EGG TESTER.

PRICE, 50 CENTS.



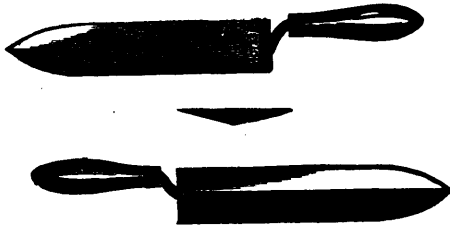
Use it at home, everywhere. Take it with you in your pocket when buying eggs. Save money and trade. Bad ones are seen at a glance. For incubating purposes they are far superior to anything out-durable, nice form and will last a long time.

THE CHICK'S HEART can be seen beating through the shell in three days, and dead ones are plainly noticeable. After eggs have been under a hen or incubator for five days, the unfertile ones should be removed. This can be done by using an Egg Tester.

We will send one of these Egg Testers free to every person sending us \$1.25, the price of one year's subscription to the "POULTRY MONTHLY," the best magazine of its kind. If you have already paid your subscription, induce one of your neighbors to subscribe, mail us the amount (\$1.25) and we will send you the Egg Tester free of charge for your trouble. Send for Price List of Poultry Supplies. Address
 THE POULTRY MONTHLY,
 P. O. Box 215, Toronto, Canada.

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... 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 35
Ebony Polished Handle, glazed polish..... 1 15
Wood Polished Handle, glazed polish..... 90
If by mail, add 18c extra for each knife.
THE D. A. JONES CO., LD., Beeton

ESTABLISHED 1855.

BEE SWAX HEADQUARTERS

We have constantly on hand a large stock of Domestic and Imported Bees-wax in original shape, which we offer to manufacturers of Comb Foundation at lowest prices. We guarantee all our beeswax absolutely pure. Write to us for prices. Address,

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Beeswax Bleachers and Refiners. **Syracuse, N. Y.**

THE YUCCA BRUSH!!
BY MAIL SIX CENTS EACH.

I also manufacture a first-class article of Comb Foundation, and keep in Stock Sections, Honey Knives, Cane, Smokers, etc. Write for particulars.

W. W. BLISS,
Duarte, Cal.

A YEAR AMONG THE BEES.

A new bee-book of 114 pages, cloth bound. Price 75 cents. Sent postpaid by the aut or.

C. C. MILLER Marengo, Ill.

EARLY • **QUEENS BY MAIL.** • **ITALIAN**

In May, \$1.15 each; \$12.00 per dozen
In June, \$1.00 each; \$10.00 per dozen.
Tested in May \$2.50; in June and after \$2.00 each.

Safe arrival and satisfaction guaranteed. Special rates to dealers.
W. J. ELLISON,
STATEBURG, SUMTER CO., S. C.

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

CRYSTAL JARS

Self-Sealing. Cover and Jar of Flint Glass, Neatest, Best and Most Reliable.

1 Pint Jars.....Per Gross, \$10 00
1 Quart Jars..... " 12 00
Half-Gal. Jars..... " 15 00

Cash with order, and Goods shipped next day.

Address

TYGARD SONS.

2119 S. JANE ST., PITTSBURG, PA.

Mention C. B. J.

ITALIAN QUEENS 1886.

For Italian Bees and Queens in their purity for beauty and working qualities they are equal to any in the U. S. or Canada. Comb foundation 40c per lb. Untested queens \$1 each, \$11 per dozen; tested \$3.50 each. Queens reared in full colonies from egg; safe arrival and satisfaction guaranteed. Send for circular

T. S. HALL,
Kirby's Creek, Jackson Co., Ala.

ITALIAN - QUEENS - 1886.

Reared in full colonies. Satisfaction guaranteed. Untested, \$1; Tested, \$2. Queens also exchanged for colonies of black bees.

F. A. GEMMILL.

Harmony Apiary, Stratford

ITALIAN AND CARNIOLAN QUEENS

By return mail, bred in separate apiaries away from other bees. Warranted Italians or untested Carniolan Queens, in June, \$1.10; 6, \$5.90; July, \$1.6, \$5. State which you prefer, BELLINZONA or GOLDEN ITALIANS. For full particulars and prices of bees, send for circular. Safe arrival and satisfaction guaranteed.

CHAS. D. DUVALL,
Spencerville, Mont. Co.

CARNIOLAN QUEENS A SPECIALTY

My apiary consists of 50 colonies, each with a Carniolan Queen fertilized by an Italian drone last season. I have no other bees. Untested Queens, safe arrival guaranteed, \$1 each. Carniolan queens fertilized by Italian drones August and September, 1885, 50c. each. Send money order or postal note. Queens to Canada, England, South America, 10 cts. each extra. Send for circular.

S. W. MORRISON, M.D.,
Oxford, Chester Co., Pa.

HOW TO RAISE COMB HONEY.

An illustrated pamphlet, *just out*, by Oliver Foster, describing improvements in methods resulting from 10 year's practical work and extensive experiment. Price 5 cents. Send also for free circular of Italian bees and queens, bred for honey and for sale. The "Adjustable" Honey Case, and other standard supplies for the apiary. Address

OLIVER FOSTER,

Mt. Vernon, Linn Co., Iowa.



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

VOL. II. No. 21. BEETON, ONTARIO, AUGUST 18, 1886 WHOLE No. 73

FOR THE CANADIAN BEE JOURNAL.

THE HEDDON HIVE.

NOTING your remarks in "Our Own Apiary," on page 365, wherein you mention having changed the depth of the brood cases and made the brood and surplus cases alike, making the former lighter, etc., I feel it my duty to say that I traversed this ground over and over, testing, experimenting and theorizing with my students, and it was after much reflection that we settled down upon the exact style of cases that we use and sell and sent you for sample. While I see no serious objection to altering the detail construction of the cases, I cannot think of changing the *size* of the frames or cases. But, no doubt, there is, at this time, less objection to such a change in Canada than here. I think that as many as 200 bee-keepers have the new hives in use in the United States; and having seen the trouble experienced from having two sizes of "Standard" L. frames, I waited till I had thoroughly tested the matter before I placed my hive or principles before the public. I was two summers experimenting and figuring before making my invention known to the public.

Several bee-keepers in the States have each between 100 and 200 of the hives in use already.

One reason why I want the surplus and brood cases unlike—even painting them different colors—is so that I may always recognize them at a glance, whether on the hives or off. We also paint the edges of all our honey boards bright red, so that we may always recognize their position among the cases at a glance. Of course, all who obtain the right to use the principles of my invention will have not only a legal but moral right to use them by virtue of any kind of a de-

tail in mechanical construction they may think suits them best; and I see no serious objection to your making your preferred change in your territory, because not only our separate patents but the duty line keeps our business in these hives and their parts separately and distinctly in our own respective countries.

Right here, will you allow me to prevent tedious correspondence by saying to our Canadian friends that I have no more right to sell the new hive, or any hive possessing its functions, in Canada than Mr. Jones has to sell it in the United States? I have sold the whole British territory to Mr. Jones, and I have no more right to sell property in a patent twice than to twice sell a horse.

We have in use several brood cases, made like the surplus cases as regards the detail construction, and, true, they are much lighter, and my foreman prefers them, but you may be sure their length, width and depth are the same as all that we have made, and all brood frames alike.

Now, Friend Jones, a word about completely filling the frames with foundation. You know how Friend Hutchinson and some others look upon the economy of using so much wax in the brood chamber. While I do not say that they may not be correct in their views, I yet adhere to the use of full foundation in all my brood frames; but I have found by many experiments that there is economy in using *light* brood foundation, rather than heavy. And when such is used, I find it unsafe to let it touch both long bars of the frames. I want it matched to the top bars, and lack 3-16 of touching either end-bar or the bottom bar, and I want the frame wired and supplied with a metal standard *a la* Root. These spaces are enough to take the

expansion of the sheet, and not large enough to cause the building of any drone cells. After the combs have been once inverted the frames will be as completely filled as can be.

Dowagiac, Mich.

JAMES HEDDON.

In answer to the above, we may say we have sold none of the hives mentioned as the "Jones-Heddon hive." The "Jones" part was only mentioned to distinguish it from the Heddon hives we have been selling this season. It was not our intention to sell any of the hives this season. We fancied we had made some improvements in the construction, not leaving out the valuable parts. It embodies all the principles of the Heddon invention, and could not be constructed without. Right here let us say that after one season's testing the Heddon hive and the Heddon principles, we are more fully convinced than ever that it is a great stride in advanced apiculture. We fully agree with you that it is anything but desirable to have different sized hives or frames. Your plan of painting them is a good one, and we shall change our style of painting them all white to yours. The red honey-board and queen-excluding honey-board would be more easily distinguished by their bright colour. We are convinced that this queen-excluding honey-board should be on top of first brood-chamber as soon as the bees commence storing their surplus; and that is one advantage we have with the shallow frames—not allowing the queen to occupy so much room raising a lot of bees that are not old enough to gather honey until the honey season is over. We want all the bees we can get at the commencement of the honey harvest and during honey flow. After it ceases we would prefer not to have too large a colony, especially of old bees that die off before the colony is placed in winter quarters. Any system which will prevent the queen from filling too many combs with eggs at that particular season of the year in which the brood will become consumers rather than honey gatherers, is a valuable one. We find her more under control in the Heddon hive than in a deeper frame. The "Light Heddon hive," as we might term it, is so light, that when we first made it we thought that it would blow over, and wondered how we could keep

it in its place without putting on a heavy weight. Experience has proved that there is no more danger of its blowing over than there would be were it constructed of much heavier material—the weight of colony, honey, etc., proving sufficient ballast, aside from the fact that the propolis about the cracks holds it as firmly as is needed. We are, however, having a light clamp of the Vandusen style, made for use in exposed localities. We did not intend to convey the idea that we fill the frames with foundation, both bottom and top. We leave nearly as much space as you mention, especially if the foundation is light. Foundation running six and seven feet to the pound, and hiving large swarms, in our hottest weather, without wire, has not broken down one comb. Where the frames are wired, the split top-bar would not be necessary.

FOR THE CANADIAN BEE JOURNAL.

THE CHAPMAN HONEY PLANT.

THE committee appointed by the North American Bee-Keepers' Association to investigate the merits of a honey-producing plant now being cultivated by Mr. Hiram Chapman, of Versailles, New York, met at that place the 28th ult., one member of the committee, Mr. Manum, of Vermont, being unavoidably detained at home.

Mr. Chapman exhibited a specimen of this plant and made representations concerning its value to bee-keepers at the Detroit Convention in December last, which led to the appointment of a Committee which was instructed to investigate and report at the next annual meeting of the Association.

This plant, which Dr. Beal, of the Michigan State Agricultural College, tells us is *Echinops Sphaerophalus*, and a native of Central France, is by common consent beginning to be known as The Chapman Honey-Plant, thus designated on account of Mr. Chapman being the first to cultivate the plant in this country, and first to call the attention of those engaged in bee-keeping to its value as a honey-bearing plant.

The appearance of this plant has been very well described by Mr. T. P. Bingham, on page 487, current volume of the *American Bee Journal*, where he says: "It grows from three to four and a half feet high, each root or crown bearing from six to sixteen buds, or heads, from one to one and three-fourth inches in diameter. These heads all stand upright; are round like a ball and the entire surface is covered with small

white flowers having bluish stamens."

The stalks and leaves so nearly resemble those of the thistle that were it not for the head this plant might easily be mistaken for the thistle. There is, however, in this particular a very marked difference, the appearance of the head being aptly described by its botanical name—round-headed and in appearance like a hedgehog. The flowerets on the top of the sphere open first, then they open later along the sides, continuing in the order of nature around the entire surface of the spherical heads. Near to the stem the last flowerets open after the blossoms on the top of the heads have faded and the seed capsules of the first blossoms have hardened. Unlike the thistle the seeds are provided with no balloon by which they may be borne by the wind. The seed is in weight and appearance very like a small grain of rye, is inclosed in a capsule, and falls directly to the ground, not spreading more than oats would, if allowed to fall without harvesting.

The length of time from the first appearance of blossoms upon the top of individual heads until the fading of the last blossoms on the lower half of the head near the stem is about eight days, the continuance of the bloom depending somewhat upon the season and the nature of the soil; but the heads or buds sent out from each individual shoot and forming each individual cluster vary in age and size so that the natural term of blooming and honey-bearing may safely be reckoned at from twenty to thirty days.

The term of blooming may, however, be prolonged very considerably by cutting back a portion of the plants causing them to shoot and bud again, and the facility with which the honey harvest may thus be prolonged, constitutes an important feature when estimating the value of this plant.

The plant is hardy, easily propagated and perennial, appears to flourish in all kinds of soil, and there is no danger of its becoming a pest or noxious weed. It does not bloom until the second year, and, as it does not spread readily, its extirpation would be easily accomplished. It may be planted in waste places, or it may be sown in drill or in hills like onion seed.

It seems to be characteristic of this plant to root out all other vegetation and take entire possession of the soil. No weeds and but very little grass was seen growing in the three acre plot in bloom.

As to the value of the plant to the honey producer there appears to be no room for doubt, whether quantity or quality or both be considered. Within reach of Mr. Chapman's apiary

of 149 colonies, no other resources for honey gathering were accessible, the severe and prolonged drought having apparently destroyed all other honey-yielding blossoms, and yet in some instances the bees were making an excellent showing in the hives.

The number of colonies—about 200—foraging upon the three acres in bloom was, however, so great that no definite conclusion could be reached as to the probable returns in pounds of honey from any given area. That the return would be altogether satisfactory is evidenced by the fact that the entire area in bloom was "alive with bees," and they visited the flowers from daylight until dark, and sometimes eight or ten bees were observed upon a single head at one time. Mr. Hubbard, who is cultivating some of these plants obtained from Mr. Chapman, reported that he had counted the number of visits made by bees to a single head, from five o'clock a.m., to seven o'clock p.m., he reported the number of visits to this single ball as being 2,135, actual count.

In order that the committee might have some idea of the quantity of nectar secreted by the flowerets of a single ball, the day before our arrival, Mr. Chapman had wrapped a thin paper about a head, half of which was in full bloom, tying the paper around the stem with tape thus preventing the bees from appropriating the nectar secreted for 24 hours. I cut off the tape and, removing the paper, held up the ball before A. I. Root, L. C. Root and others, the flowers were dripping nectar and the drops sparkled in the morning sun, and their eyes sparkled with delight and astonishment.

I have made similar tests with like results, using the plants which I have grown here at this station.

Mr. Chapman has distributed this plant over a wide extent of country, from Vermont to Nebraska and each member of this committee has been furnished with two year old plants for cultivation and observation during the present summer.

All the facts obtainable will be given to those interested when the formal report is made to the Association at the next annual meeting.

N. W. McLAIN.

U. S. Apicultural Ex. Sta.

August 6, 1886.

We are indeed pleased to have from Prof. McLain, such a glowing account of this plant, the more so because of our misfortune with the plants sent us for testing purposes. On their arrival our teamster put them away in our packing room, and there they were left for several weeks, so that when planted

they came to naught. We believe that friend Clarke, of Guelph, has some of the plants growing at his place, and we shall have to depend on him for a report as to their adaptability to Canadian soil.

From the Canadian Live Stock Journal.

BEE NOTES DURING THE HONEY FLOW.

SIR,—As I am frequently asked by those commencing bee-keeping, how I do, under various circumstances, while managing my bees, I have come to the conclusion, as well as I can, to describe a few operations just as they took place.

Commencing, then, with the 1st of June, at which time my bees were not in what I considered a strong condition, but rather what might be called fair. On the other hand the season was early; and I began to fear that the honey would come and go before my bees were sufficiently numerous to gather it. I therefore studied and schemed how I best could keep them together, having learned from experience that it is the populous colonies that pay. I had evidence of the importance of this while the soft elms were in bloom this spring. I weighed four colonies about eleven o'clock; three of them were among my best, one was only middling. They were again weighed at night; the three good colonies had increased in weight $3\frac{1}{2}$, 4 and $4\frac{1}{2}$ lbs., while the weaker one only increased $\frac{3}{4}$ of a pound. Now there was nothing like this difference as regards number of bees. It is therefore evident that there is great gain by having a large number together in one hive; and although that very desirable condition cannot be obtained as we would like, still we can work in that direction.

I should have said that out of 82 colonies, which wintered in the cellar, under a temperature of from 45° to 50° , six were silent when put out about the middle of April, and a number more were weak. Why was this?

The winter before over 50 colonies came out in splendid condition from the same cellar, the average temperature being a little lower, the winter being colder. I account for the difference from the fact that last year my colonies were very strong in bees at the close of the honey season, about the last week in July. The queens stopped laying almost immediately. The consequence was the bees were old, and died in the cellar in larger numbers than usual. If I am right in this, the remedy would be to feed a little every day for about two weeks immediately after the flow ceases.

I wish the reader also to understand that when I state my methods of manipulation and opinions

on bee-keeping, I do not say they are better than those of other men. I know from experience that it is very confusing to the beginner, when he tries to learn from reading, to find that hardly any two writers will agree on any single feature. In fact, bee-keeping cannot be learned by reading, however useful it may be; practice must go with it.

One question that is sometimes asked is, "Can more honey be obtained by allowing them to swarm, or by keeping them together?" If the bees are strong and the honey late, better results may be obtained from dividing or allowing them to swarm, but if the bees are weak, and the honey early, it is better to keep them together. Desiring honey rather than increase, my efforts, as before stated, were directed to prevent division. As soon as I saw the bees becoming numerous, and building new comb between the frames, I placed a super on top to give room. In this super I placed empty combs or full sheets of foundation, and generally selected the whitest comb with the whitest honey from the brood-chamber, and placed it in the centre of the super. Strong, dark honey should never be placed where, in extracting, it would become mixed with honey intended for market. If it be necessary to use such a comb to entice the bees to the super, it should be put back after it has answered its purpose. If work in extracting supers or section boxes can be commenced before swarming is thought of by the bees, they will very likely not swarm through the season. But some will swarm apparently without reason, and other means must be used to prevent increase. I practise largely and succeed satisfactorily by lifting the hive that has swarmed, turning the entrance to one side, placing a new hive on the stand. I should mention that my queens are clipped, and when she comes out she is caught in a wire cage; this cage is then placed at the entrance of the new hive. As soon as the swarm begins to return she is liberated and allowed to run in with the returning bees. This is all done with very little trouble, and free from the risk of swarms absconding. In the evening the old hive is turned and set close to the swarm with the entrances as close as possible. If increase is wanted, five or six days after, this old hive should be lifted to a new stand; all its flying bees will enter the hive containing the swarm, and it is from this that honey may be expected. The old hive will not likely swarm again, the number of bees being thus too much reduced. But if increase is not wanted, as it was in my case, I used this old colony, by first brushing the bees from its combs in front of the swarm that came from it, and took off all queen cells

from its combs, then set it on the stand of the next hive that swarmed, so that instead of a swarm going into an empty hive, it went on to combs of brood. The brood combs of this second swarm may be used in like manner for the next hive that swarms; but care must be taken not to use it if a young queen has been hatched, which may be known by queen cells being torn down. Many swarms treated in this way will swarm again in about a week, but many will not, and upon the whole it is the best method I know of to keep bees together, which must be done to get a large surplus when the honey season is early.

I have also formed nuclei of the combs after a colony swarmed, if the queen was such as I desired to breed from taking care that good queen cells were in each. These are frequently used to raise a queen close to the side of a hive that has not a good queen. After the young queen is laying, the poor one may be destroyed, and the colony and the nucleus united, which may be done by placing the nucleus combs at one side of the hive where they will be the better able to protect their queen if the others are not friendly.

In several instances I united weak colonies by moving one or the other a short distance at a time till they were side by side. This was done more particularly when I found a queen defective—that is, not filling the combs with brood as she should. As soon as the bees were located with the entrance of their hive close to the other, having a good queen, I killed the poor queen and alternated her brood combs with that of the other. In this way colonies that were too weak to accomplish work separately made a very satisfactory surplus by being united.—COR.

QUERIES AND REPLIES.

UNDER THIS HEAD will appear Questions which have been asked of, 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.

HOW TO FERTILIZE YOUNG QUEENS.

QUERY No. 103.—Have failed to get young queens fertilized. Out of some fifteen or so raised in queenless colonies not one has mated. Hives are exactly alike, no trees in the yard and plenty of drones. What is best to do?

DR. A. B. MASON, WAGON WORKS, O.—“Trust in Providence till the britchen breaks.”

O. O. POPPLETON, WILLIAMSTON, IOWA.—Buy

queens of some reliable breeder. It will pay better to do so, than to raise them in *full* queenless colonies even if successful.

DR. DUNCAN, EMBRO, ONT.—If your queen failed to get fertilized, as you say, it is something very unusual. In all probability your queens will be laying in a few days, if you have a little patience.

DR. J. C. THOM, STREETSVILLE, ONT.—Try again, have your hives as diverse in appearance as it is possible to make them, by setting up boards, bushes, &c. Some seasons are more unfavorable than others in this respect.

H. D. CUTTING, CLINTON, MICH.—Keep trying until you succeed. If no bees are in your vicinity put two or three of your colonies about half a mile from your apiary. Select those with plenty of drones.

J. E. POND, FOXBORO, MASS.—The only thing to do is to keep trying. The queens may be caught by birds, and probably such is the case; too small data are given on which to base an answer that would be more than a mere guess.

G. M. DOOLITTLE, N.Y.—Put a wide board in front of one hive, a stick of wood at another, and so on, so the queen can have some object to mark the hive by. If the trouble is, they do not fly to meet the drone. I have had no such experience.

JAS. HEDDON, DOWAGIAC, MICH.—I would not try to advise at this range, I never heard of such an instance, and have never experienced anything like it. Our 1886 success in hatching, introducing and fecundating queens, has been unprecedented.

PROF. A. J. COOK, LANSING, MICH.—I know of no way only to keep on trying. We have not lost one this season. Are there many birds? They might catch the queens. Birds are not very thick about our College campus and we rarely lose a queen in her flight.

DR. C. C. MILLER, MARENGO, ILL.—Perhaps birds get them or perhaps they get into wrong hives. Place objects about at different places so they may mark location. Probably the best thing is to move the hives together in pairs, having two as close as they can possibly stand, then a space of three or more feet, then another pair.

H. COUSE, THE GRANGE, ONT.—Have had very little trouble except in cases where bees have been queenless for some time and fertile workers have started operations. Where hives

are exactly alike and nothing else to mark the location, it would be well to place a piece of board or something against the front of hive until after the queen is mated.

ALLEN PRINGLE, SELBY, ONT.—Break up the monotony in your bee-yards, either by irregularity in position of hives, planting trees, variegated colors in painting hives, or some other way. My hives have more colors, I suppose, than the renowned and antique Joseph's coat. I have, however, noticed this season that the young queens have taken about one-third more time than usual in mating.

GAS FROM STOVE IN CELLAR.

QUERY No. 104.—Is there any danger of gas in a bee cellar if a coal stove is used to warm it?

DR. DUNCAN, EMBRO, ONT.—I don't think there is.

O. O. POPPLETON, WILLIAMSTOWN, IOWA.—I have no experience.

DR. A. B. MASON, WAGON WORKS, O.—Yes, unless draught is all right.

G. M. Doolittle, BORODINO, N. Y.—Not if the pipes worked as they should.

H. D. CUTTING, CLINTON, MICH.—Yes. If you burn coal have the best of ventilation.

ALLEN PRINGLE, SELBY, ONT.—That will depend on the way the stove is fixed and managed.

PROF. A. J. COOK, LANSING, MICH.—I should have no fear. I would trust bees where I would trust myself.

DR. J. C. THOM, STREETSVILLE, ONT.—If a coal stove be properly attended to in a cellar there ought to be no danger. It is not desirable nor necessary, however, in a properly constructed bee cellar.

JAS. HEDDON, DOWAGIAC, MICH.—I have no experience; but in heating a bee repository by fire, as I have done with wood, I keep the stove in an adjoining room, to avoid using up the oxygen in the bee room.

DR. C. C. MILLER, MARENGO, ILL.—I keep a steady fire of anthracite, or hard coal, all winter long, and have never discovered any evil effects. The door of the stove stands wide open and there is a good draught. I should not want a close stove or base burner in any bee cellar, any more than I would in my living rooms.

J. E. POND, FOXBORO, MASS.—It will depend wholly upon the ventilation given the stove and the cellar. A little gas would do no harm in a well ventilated cellar, while it would were there no ventilation. The stove might be so run by closing draughts and dampers as to produce gas enough to kill the bees in most any cellar, no matter what ventilation was used.

H. COUSE, THE GRANGE, ONT.—I should think there would be if the stove is not gas proof. Why not have your cellar frost proof and do away with the stove, as a temperature of 42 to 50 degrees seems to give the best results? Such a repository, filled pretty well, according to size, will, with attention to ventilators, give about that temperature.

BEE LORE

FOREIGN AND OTHERWISE, BUT ALL INTERESTING.

The other day a horse was stung to death by bees, at Arcola, N. J. At first one bee stung the animal, which made a spring into the air and landed upon a stand on which were several hives. In a moment the horse was literally covered with bees, and despite the efforts of his owner to rescue it, he died in one hour. The owner was stung so severely as to need medical treatment. There is no doubt, I believe, that the recipes for bee-stings, published from time to time in the *Bee Journal*, have cured those by whom they have been recommended, but they (particularly ammonia) have no more effect on me than so much water. It must be that the remedies have different effects on different systems. Perhaps some will find the following as sure a cure as I have: Dissolve a table-spoonful of salt in a half-goblet of vinegar, and make it tepid; apply to the sting with a rag. Since using this remedy a bee-sting has lost all its terrors to me. A lady told me, the other day, that an onion cut in halves and rubbed on the sting was a sure cure. I shall try it the next time I get stung.—Cor. A. B. J.

This season so far shows that the Palestine bee has come to stay in California. With us they were the first to swarm by six days, and as honey gatherers they are equal, if not superior, to the best of any other sorts. The drones are beauties, and are both ornamental and useful, appearing before any other sort of drones by at least a week.—California Ex.

We find in the advance sheet of the *Canadian Gazette* printed in London, Eng., the following:—We are glad to learn that the Ontario Bee-

keepers' Association has arranged to send to the Exhibition a large supply of honey, as soon as the season's crop comes in. Inquiries are already frequent at the Exhibition for some representation of the products of Canadian bee-keeping, it being known to occupy an important place among Canadian industries. It is thought that the exhibit will arrive in England about September.

At the late show of the Royal Agricultural Society at Norwich, Eng., it was required that all sections shown for prizes should be of a uniform size—4½ x 4½—thus showing that they were desirous of establishing a standard size in England. This is one of the ways of doing it, and a very good one.

The value of honey imported into the United Kingdom amounted as follows:—May, 1886, 1,541l.; June, 1886, 2,900l.; as taken from the Statistic office Returns, supplied through E. H. Bellairs, Esq., Wingfield House, Christchurch, Hants, to the *British Bee Journal*.

A cor. in the *British Bee Journal* says of strawberries and cream:—At this season of the year this is one of the most delicious dishes one can have. Sugar is generally used to sweeten and bring out the flavor of the strawberries, but if new honey is used instead of the sugar, it will be found a great improvement.

The Christian church at Harmony, Ill., has been inhabited by bees for a number of years. The bees took up their abode in the wall behind the pulpit and became so numerous that the church had to be closed. A crowd collected the other day, and ripped the siding off from foundation to roof, and found that the bees had deposited their honey in the wall between the studding, which were two inches wide and six inches apart, that space being completely filled with honey to the height of sixteen feet. The honey was carried away in wash tubs and pails and divided among the neighbors.

The following original paragraphs are contributed to the C. B. J.

Where did the be-stow its honey?

Did the honey comb the bee's hair?

In dividing a colony, where does each division board?

Give a writer but a small section of a story as a starter and he can frame an ap(i)arently superior tale from that foundation.

Does a bee pay his debts when he wax up?

It's warm work for bees clustering on a tree.

Candydy speaking, it is a Good thing for a Cook to have a massive Heddon his shoulders,

so as to get at the Root of the questions. A New-man can Doolittle but follow the Quinby (queen-bee) in her Gallups.

When assistants are putting cotton on the hives, are they attending quilting bees?

The bee was the original honey extractor.

Does the editor of the BEE JOURNAL give his bees a free puff when using the smoker?

High bred bees are generally cross customers.

A medical bee-master has declared that wax is cellular tissue.

When feeding sugar, bees get their stores syraptitiously.

Speaking of covers for the Langstroth hive, the editor says in the *Bee Hive*: If the sheet-iron covers were painted white, they would not absorb quite so much heat, although they would, even then, draw more heat than wood covers; but it is worth all the extra trouble and expense to have them tight. Two years ago we had two combs melt down, and for no other reason than having the hive painted brown. Dark colors absorb more heat than light ones.

The lofty wooden spires of the churches in Mattoon, Ill., have been pierced in hundreds of places by woodpeckers looking for food or for places for nests. The holes in the Methodist church steeple became so unsightly that a man was employed to shoot the birds. Then beet took up their abode within, and their honey drips from the holes and smears the steeple. The Congregational church steeple is well filled with honey, and so are steeples in neighboring towns. Six swarms of bees were seen to quit the spire of a Paxton church in one day.

Turpentine is highly recommended as a cure for bee stings. One thing is certain, its application will do no harm, if it does no good. It is also used to drive away ants from about the house, and has this in its favor that bees do not seem to dislike it as they do coal oil.

W. O. Brockham went to guard his hives from robbers. His son did the same. Each thought the other a thief and both fired. Each was probably fatally wounded. This took place at Huntsville, Mo., Aug. 8.

Death from bee stings is an unusual incident. At Ludlow, however, on Tuesday, Mr. John Adney, formerly Mayor of that place, was stung so severely by a swarm of bees in his garden that he died almost immediately. It is a curious fact that perhaps the most formidable attack by bees on record, and one which attracted considerable attention at the time, occurred in Prussia on the same day of the same month 65 years

ago—namely, on the 20th July, 1820. According to the *Berliner Zeitung* of that date, M. Eulert, a merchant, was travelling in a carriage with his wife from Wittenburg to Berlin, when, on the high road between Kropstadt and Schmogelsdorf, a huge swarm of bees suddenly covered the carriage, horses, travellers, and coachman. In a few minutes the horses, overpowered by stings, lay down on the ground. The coachman, while endeavoring to aid the horses, lost his hat, his head became covered with "a matted mass of bees, hair, and blood," and he fell down insensible. M. Eulert, whose mouth was filled with bees, rushed off for assistance. On returning to the spot with a woodman whom he met and some laborers, Mdme. Eulert was found lying face downward on the ground, happily not much injured. The coachman was still insensible, and for 48 hours his case was precarious. The bees being at last driven away by burning hay and straw, the suffering horses were examined and were discovered to be in a frightful condition. One died the same day from the effect of the stings it had received, and the other was taken to Schmoglesdorf and placed under the care of a veterinary surgeon, but succumbed to its injuries on the following day. There were at the time no fewer than 2,000 hives of bees in the commune of Schmoglesdorf, where not only regret, but also no slight anxiety was caused by M. Eulert's unpleasant adventure.—*St. James's Gazette*.

SUNDRY SELECTIONS.

DIVISION BOARDS—CLAMPS, ETC.

JNO. WESTON.—As I am a beginner in bee-keeping, I should like to ask a few questions. 1st, Dividing boards which are used in contracting a hive, are they made to fit closely to the sides and bottom of the hive or are they made the same dimensions as the outside of a frame, and, how many do you use to one hive? 2nd, Is clamping bees that which Langstroth describes in his work on the bee as clamping? what has been your experience and decision as to clamping? Our cellar is very large and light but rather damp, caused by surface water running in and the cistern adjoining the cellar leaks; how high from the bottom of the cellar shall put the hives? Is it not better to feed every day a little than in a large feeder, for breeding. I have a weak swarm in a ten frame Langstroth hive, what shall I do to strengthen it?

Burnett, Dodge Co., Wis., Aug. 12th 1886.

We use but one division board. When entrance is at end of frame, two are

sometimes used. Our boards are made to fit closely at sides of hives with a bee space at the bottom. As our frames run parallel with entrance, the bees and brood being in front, the division board can be adjusted leaving bees and combs behind if desired, they can then crawl under and go forward with the queen. If the division board was made to fit closely to the bottom there would be a liability of crushing bees, and all behind it would have to be got out before closing the hive, besides combs containing a little food may be placed behind the division board and bees passing under will carry the food forward into the brood chamber. (2) The clamping system when properly carried out has given good satisfaction to the majority of bee-keepers. We think you had better place your hives at least one foot above high water mark in the cellar. If you would try half in the cellar and the other half in clamp you would then, from personal experience, be able to judge which is the better. That portion of cellar in which you place the bees must be kept dark. You can feed a small quantity in a large feeder as well as a large quantity, they are adapted to stimulate brood rearing and too valuable to be dispensed with. Where feeding is practised, for brood rearing light feeding is best, if you desire a large quantity of brood. We would prefer to feed now that the combs may be filled and sealed early in the season. You may strengthen them by adding sealed hatched brood, or if carefully done, it is better to shake young bees in front of the hive and allow them to pass in as described in the back numbers of the JOURNAL.

SPREADING COMBS FOR WINTER.

OMAS. HAMILTON.—What is the object in spreading combs preparatory to wintering bees?

To allow the bees more room for storing honey above and for clustering between the comb thus requiring less food.

When is the right time to commence feeding weak or late stocks?

You May commence feeding your weak colonies any time now. They should all be fed up wintering as soon as the first frost appears which will destroy the honey flow. Say about Sept 1st.

QUEENS REARED IN STRONG COLONIES VS. QUEENS REARED UNDER THE SWARMING IMPULSE.

J. W. GARBER.—I would like to ask a couple of questions through your valuable paper. 1st, Are queens reared in strong colonies and containing bees of all ages—inferior to those reared under the swarming impulse?

When queens are reared, not under the swarming impulse, but by simply taking away the queen and allowing the bees to raise the other queens we find that the bees do not care for them or feed them as well as when reared under the swarming impulse. If the colony was made very strong and a swarming impulse could not be brought on, by judicious feeding they will sometimes raise very good queens. When removing the queen and allowing them to raise others, care should be taken that there are eggs of suitable age or larvae just hatched to start them from, if old larvae is taken the queens will not be so good.

ABOUT DRONES.

Are drones from a pure queen that is mated equally as good as those from a queen that is purely mated?

Rockwell, Iowa, July 31, 1886.

We have never been able to detect any impurities in drones from mismated queens although we have had ample opportunity and have examined from time to time Blacks, Italians, Syrians, Cyprians, and Carniolans.

R. McLEAN.—Enclosed you will find a small vial containing a sample of the surplus honey I got this summer. Would you kindly explain through your journal the cause of color and taste? The bees did not work on Alsike clover this summer as usual. There is a field of what we call "stinking Willie" handy to our beeyard. Could this be the cause of inferior quality? We lost all our bees last winter except two colonies. They were in the cellar. Cause—house being locked up for three months, and frost got in. I purchased eight colonies this summer. The colony in your double-walled hive was the first to die; they had too much upward ventilation. The two which lived were in box hives sealed solid above. They seem to stand the cold better than those in movable frame hives. Winter of 1884 I lost all I had in the L. hives, while those in box hives were all right. I forgot to mention we had six weeks of the driest weather here that has ever been known by the oldest settler. The clover withered almost as soon as it came to bloom. The fall prospects for a honey crop are good. I am very

much pleased with your JOURNAL. If you can find room in it, please answer my question about honey.

Pictou County, N. S.

We have never found any honey exactly the same as sample sent; most of it has doubtless been gathered from the source you mentioned. We can find no trace of linden or clover in it. No doubt the ventilation you speak of, allowing the heat to escape when your cellar was too cold, was the partial cause of your loss, but perhaps it would be more correct to say that the low temperature was the direct cause. Never allow the temperature in your cellar to go below 45° if you can possibly prevent it by banking or otherwise, but do not use artificial heat unless all other means fail, as it is liable to make the temperature irregular.

WILL THE PROGENY OF ITALIAN QUEENS VARY IN MARKING.

Z.—Will the worker progeny of an Italian queen vary in marking, that is, will some be light and others dark?

What is considered a pure Italian queen is expected to produce three-banded workers. Sometimes the third yellow band does not show very plainly unless the bee is filled with honey. When a queen produces bees some having one band and some two or three, they are considered hybrids, or if the queen was pure she has, doubtless, been impurely mated.

FOUNDATION MILLS.

What foundation mill do you use, or what kind do you prefer?

We have three foundation mills, one Dunham and two Vandervoort make, the latter we use almost exclusively.

SECTIONS WITH UNFINISHED EDGES.

What is best to do with one pound sections having uncapped cells around the edges?

You may extract the honey from those not capped at all, while those capped, with exception of a few cells, can be retailed at fairs for their full value. Draw a knife diagonally across the section making four V shaped pieces, then by separating the sections at the four corners one of these pieces will remain fastened to each of the sides of section; these retail readily at 5 cts. and it is a very profitable way of disposing of that kind of sections.

CARRYING DOWN HONEY FOR THE WINTER STORES.

CHAS. MITCHELL.—Can you or any of your staff tell how to get bees to take down honey out of combs in the upper stories, for winter stores. Please answer soon, as this is very important just now.

Molesworth Aug. 4th, 1886.

Honey should be placed under the brood, which may be done by setting a bottomless brood chamber over the honey which you desire to be taken out of the combs. Bees will not carry down honey as long as it is coming in from the flowers, so that it wants to be placed under, if the flow ceases and only then. By placing it above the brood chamber it will be carried down much more quickly and better by putting an empty case between the one which contains food and the brood chamber.

CLAMPS FOR WINTER.

J. C. WOODARD.—I want to make some large boxes in which to pack my bees, and thought of making them 12 ft. long, 3 ft. 6 in. wide, and 3 ft. high, and stand them north and south—that is, the first colony's entrance to go out on the west side, the second on the east and so on; I would place the hives against each other. My reason for doing this is to have the entrances 14 in. apart and to get as many in a box as possible. I have had them go out of one hive into another in the spring. I prefer out-door wintering, as the change from winter quarters to summer stands is not so great as when wintered in cellar.

We prefer to have the entrances facing south or south-east. Some have packed with the entrance to the west and been successful. As there are no queens flying out, if boards were placed between entrances and partitions, no difficulty would arise from entrance of the hives being close together.

FRAMES IN SIMPLICITY HIVES.

I am going to make 50 simplicity hives, would you advise me to have the frames run crosswise? I like them better, but all of my old ones run lengthwise.

St. George, Ont., Aug. 6th, 1886.

If you have a large number of hives with the frames running lengthwise, it would be better to have them all alike. By running the frames crosswise they would be more easily manipulated, especially when making nuclei and when queen rearing.

PLACING FRAMES ON END FOR WINTERING.

INQUIRY.—If bees are supposed to winter better in deep frames, why not set any of the shallow frames (Quinby or Langstroth) on end, it could be done with very little fixing. If done, what would be the *natural* consequence?

Springfield, Aug. 10th 1886.

The Quinby is usually considered a deep frame. Experiments of setting frames on end have been tried, and work well where bees are not disturbed late in the fall to do so. If frames are to be placed on end, it should be done early so that the bees would cluster quietly long before they were put into winter quarters. We expect to try this experiment this season, on some very shallow frames. With our improved methods and late experience in wintering there should be little difficulty in wintering bees on any frame.

SMOKER FUEL.

Dr. C. C. Miller, Marengo, Ill., wishes to change his reply to Query 82, page 230, current volume, as follows: After a very thorough trial both in the Clarke and Bingham smokers, of pine planed shavings as recommended in Mr. Heddon's book, I place them away beyond any fuel I have ever used. That one item alone is worth much more than the price of the book. The C. B. J. doesn't peter out a bit.

W. B. BAKER.—Can a stand of bees be wintered on four Langstroth frames in a chaff hive or is five better?

A stand of bees may be wintered on four Langstroth frames if containing sufficient stores as well if not better than on more.

Have Italian bees yellow stripes round them or are they simply yellow bees?

Canton, West Va.

Italian bees usually show three yellow bands.

GUELPH CENTRAL BEE-KEEPERS' CONVENTION.

THE Bee-Keepers of this district met at the new Western hotel at one o'clock yesterday for the purpose of forming a Bee-Keepers' Association. Mr. Thos. Simpson was moved to the chair, and A. Gilchrist was appointed secretary pro tem.

R. L. Mead spoke of the advantages to be derived from such an organization. The Rev. W. F. Clarke, R. F. Holterman, Brantford, and others made some remarks on the same subject.

Moved by W. F. Clarke that a Bee Keepers' Association be formed and called the Guelph Central Bee-Keepers' Association.

The following officers were then elected: Rev. W. F. Clarke, President; J. Ramsay, Vice-President; A. Gilchrist, Secretary-Treasurer.

A discussion followed on the Rev. W. F. Clarke's hibernation theory.

R. L. Mead did not believe in hibernation. He explained his mode of wintering, in which he was very successful. He keeps the temperature of his bee house at 45° to 50°.

J. Ramsay wished the Rev. W. F. Clarke to explain his theory of hibernation as he did not understand how bees could go in such a state.

W. F. Clarke explained at great length his experience and views on the theory which he claimed to be the father of.

A general discussion followed on the marketing of honey, all present taking a part.

The meeting adjourned to Mr. James Goldie's ground to see a new honey plant.

Mr. Goldie's grounds and garden looked their best. The rare evergreens, shrubs and trees were carefully inspected, but the aviary seemed to take the eye. All present were highly delighted with their visit. A vote of thanks was tendered to Mr. James Goldie for his kindness and attention. This brought to a close the first and very successful meeting of Guelph Central Bee-Keepers' Association.

CONVENTION NOTICES.

Mount Forest Bee-Keepers' Convention, in Town Hall, Mt Forest, on Sept. 2nd at 2.30 p. m. J. H. DAVISON, Secretary.

MICHIGAN STATE BEE-KEEPERS' ASSOCIATION—The next annual convention of this association will be held in Ypsilanti, Mich., Dec. 1st and 2nd, 1886. H. D. CUTTING, Sec., Clinton, Mich.

The St. Joseph (Mo.) Inter-State Bee-keepers' Association will hold its annual meeting on Wednesday evening, Aug. 1886. Program later. E. T. ABBOTT, Sec., St. Jos. (Mo.)

North American, at Indianapolis, Ind., Oct. 12, 13 and 14. F. L. DOUGHERTY, Sec. Indianapolis, Ind.

BRANT BEE-KEEPERS' ASSOCIATION.—The above association will meet at the Kirby House, Brantford, at 2 p. m. Saturday, August 28th. Fall management of bees, marketing of honey and kindred topics will be brought up. All are invited to take part.

R. F. HOLTERMANN, Brantford, Sec., Treas.

The Alvinston Bee-Keepers' Association will meet in the Council Chamber, Alvinston, on Wednesday, Sept. 1st, at 10 o'clock a. m. It is expected that a number of prominent Bee-Keepers will be present. Bee-Keepers of the county of Lampton are especially requested to attend as the members wish to extend this to a County association. J. R. KITCHIN, Secretary.

The Iowa State Bee-Keepers Association will meet on the Fair Grounds in Des Moines Tuesday, September 7th, 1886, at 2 o'clock p. m., continuing in session during that and the following two or three days. A large and substantial tent has been secured and now at hand for the use of the society. Any or all of the 6,000 bee-keepers of our State are urgently requested to be present and help make the meeting a pleasant and profitable one, and a hearty invitation is extended to all visiting brothers from other States. O. O. POPPLETON, President. A. J. NORRIS, Secretary.

SPECIAL NOTICES.

We will send Vol. I. of the C. B. J. nice y bound in cloth to new subscribers for \$1.25 or clubbed with current Volume for \$2.00.

Get your friends to take the CANADIAN BEE JOURNAL. Two names with \$2. entitles the sender to a copy of Clarke's "Bird's Eye View of Bee-Keeping" (25c.) free.

REDUCED PRICE OF SECTIONS.

We have a good many thousand sections cut and stacked up in boxes ready for shipment, and if there are any who feel like laying in a good lot of sections for the season of 1887, we will give them a specially low quotation, so that after counting the interest on the money for eight or ten months, there will still be a good margin of profit in their favor. Of course these quotations will only apply to regular stock, unless where orders are for over 10,000 in odd sizes. Regular sizes are 3½x4½ and 4½x4½ and in widths of either 1½ or 1¾ inches. The prices we quote are, per 1,000, \$4.25; 10,000 or over, \$3.75. By the way, we didn't mention that these prices are for one-piece Linden (formerly Basswood) V groove sections. Dovetailed and spruce sections, we will furnish at 10% off price-list rates.

HONEY MARKETS.

CHICAGO.

Since my last quotation honey has come forward very freely and from information now at hand it would appear that the Middle States will have all the Honey produced at home this season that can be marketed or consumed, and that we shall not be apt to draw upon the Eastern States as we did last year. Best grades of white comb to-day at thirteen cents, Extracted six cents. and beeswax 25 cents.

R. A. BURNETT.

Chicago.

CINCINNATI.

No change in the market. Demand is slow for all kinds and shapes of Honey. Prices are nominal. Extracted honey ranges between 14x 15 cts in a jobbing way. Demand for beeswax is good and arrivals are fair. We pay 20 ct. per lb. for good yellow.

CHAS. F. MUTH & SON.

DETROIT HONEY MARKET.

Honey is selling slow. Fruit seems to occupy the attention of buyers. Best comb in one pound sections put up in attractive crates sells at 13 cents per pound, occasional sales at 14 cents. We pay 23 cents for fair average wax.

M. H. HUNT.

Bell Branch.

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.

NEW YORK.

The honey market is almost devoid of interest, more particularly in comb honey. We find quite a large stock in dealers' hands, carried over, although our stock is light; what we have is dark and off grades. It is difficult to tell what prices will be on the coming crop, but from reports received from nearly every section of the country we infer the crop will be heavy, and prices will rule accordingly. Present quotations are as follows:—Fancy white comb 1 lb. sections, 10 to 12c.; fancy white comb, 2 lb. sections, 8 to 10c.; buckwheat comb honey, 1 & 2 lb. sections, 5 to 8c.; extracted white clover, 6c.; extracted California honey, 4½ to 5c.; extracted southern, per gal., 45 to 55c.; beeswax, 23 to 25c.

McCAUL & HILDRETH BROS.

EXCHANGE AND MART.

FOR Bees, Queens, or Honey, we will not be undersold. Bees, full colonies, by the pound or nuclei. Queens, tested or untested. Address, ILA MILCHENER, Low Banks, Ont.

PRICES CURRENT

BEESWAX

Beeton August 18th 1886

We pay 30c. in cash (30 days) or 33c 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...50c
 " " over 50 lbs. " "48c
 " " cut to other sizes " "51c
 " " over 50 lbs. " "49c
 Section " in sheets per pound.....60c
 Section Foundation cut to fit 3½x4½ and 4½x4½ per lb.65c
 Brood Foundation, starters, being wide enough for Frames but only three to ten inches deep...45c

ADVERTISEMENTS

W. Z. HUTCHINSON,

ROGERSVILLE, GENESEE, CO., MICH.

Is rearing Italian Queens for sale again this season, and can furnish them by mail, safe arrival guaranteed, as follows:—Single Queen, \$1; six queens for \$5; twelve or more, 75c. each. Tested Queens \$2 each. Make money orders payable at Flint. Send for price list of bees (full colonies or by the pound.) Given foundation, white popular sections, hives, cases, feeders, etc.

Do You

Want to Buy some First-Class Colonies of Bees

• ❁ NOW? ❁ •

Owing to our largely increasing supply-business and the difficulty in securing trained labor for our bee-farms, we will sell for the next month colonies (up to 200) at unprecedentedly low prices. We offer them at once, so that purchasers may have an opportunity of deriving some benefit from them yet. Prospects here are in favor of a first class flow from fall flowers. The bees will be shipped in the Jones' single-walled hive.

Prices will be:

Colonies, including hive and 5 or 6 frames of comb (balance of 12 empty) with good queen\$5 50
 Over four colonies..... 5 25
 Ten and over..... 5 00
 Colonies including hive and 7 or 8 frames of comb (balance of 12 empty) with good queen..... 6 50
 Over four..... 6 25
 Ten and over..... 6 00

The combs are nice and straight and each one measures about one square foot. The queens are, in most instances suitable to breed from—all will produce good honey gathering progeny. Nearly all of them are last year's tested queens.

TERMS—Cash with order—Delivered F. O. B. car to go by express—and safely packed.

THE D. A. JONES Co. Ld.,

Beeton.

July, 30, 1886.

THE Winter Problem Solved!

After twelve years of experimenting I have succeeded in solving this great problem of wintering bees without loss. I have also overcome Spring Dwindling so perfectly that with me it is a thing of the past. Four years ago I built my first underground clamp and since that time I have each year wintered a large number of colonies without the loss of one. It is positively the only perfect system of wintering and springing bees. See Canadian Bee Journal, Nov. 18, 1885, page 531.)

I Am Making Models of this Clamp in Cardboard

with three hives packed in it as I prepare them for winter, with printed directions for using, for the

Small Sum of One Dollar.

The Model Is so Complete and Simple that a child can understand it.

MODELS SENT BY MAIL.

SAMUEL BRAY,

ALLISTON P.O.,

ONT.



Flat Bottom Comb Foundation.
High side-walls, 4 to 14 square feet to the pound
Wholesale and retail. Circular and samples free

J. VANDEUSEN & SONS,
SOLE MANUFACTURERS,

SPROUT BROOK, MONT. CO N. Y.

RAY'S 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.

Feeders.

The demand for feeders seems to be growing. We offer three different styles suitable for different seasons :

ENTRANCE FEEDERS.

Double the usual size, each..... 15c
" " " per 100.....\$12 50c

THE CANADIAN FEEDER.

This is for fall feeding and enables you to feed 15 to 20 lbs. at once with no danger of robbing.
Made up, each.....\$ 60
" " per 25..... 12 50
In flat, each..... 40
" " per 25..... 8 75
" " 100..... 30 00



THE D. A. JONES CO.

A BIRD'S EYE VIEW OF BEE KEEPING

—BY—

WM F. CLARK,

*** IS * NOW * READY. ***

The Price is 25c., five for \$1.

Special terms to the Trade. It is Interesting, Readable and Practical

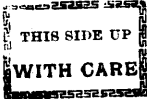
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PUBLISHERS, BEETON, ONTARIO.

OUR PAGE FOR SPECIALTIES.

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



Show Cards.

Size 12x18 in. each..05
 " " " per 10..40
 These are just the thing for hanging in the stores where your honey is placed for sale.

Lithographed Labels for Tins

We have lately reduced the prices of these very much. They are now

	Per 1000	Per 500	Per 100
5 pound labels.....	\$8 00	\$4 25	\$ 90
2½ " " ".....	5 00	2 75	65
1 " " ".....	3 50	2 00	50
1½ " " ".....	1 75	1 15	30
1 " " ".....	1 75	1 15	30
Labels for tops of tins.....	90	55	15
Printing name and address, first 100.....			30
Each subsequent 100 up to 500.....			12
Printing name and address, per 500.....			75
" " " " " 1000.....			1 25

Shipping Labels for Comb Honey

CAUTION.

COMB HONEY.

Handle with Extra Care.
 Do not Move it on Hand Trucks.
 Do not Drop it. Lead with the finger pointing to the
 Do not Dump it.
 Set it Down Easy.
 Haul only on Vehicles with Springs Bow, Locomotive or Horses

These are 7½ x 5½ inches, printed in red ink, in large bold faced type, on heavy paper and are invaluable to all shippers of comb honey. Keep them in stock and can furnish them by return mail. Shipments to England should have these on. Prices: 25, 12c.; 50, 20c.; 100, 35c.; 500, \$1.50; 1000, \$2.75.

PRICES.

25, 12c.; 50, 20c.; 100, 35c.; 500, \$1.50; 1000, \$2.75.

Gem Jars

	Gross.	Half-gross
"Crown" brand 1 Pint	\$14 75	\$7 50
" " 1 Quart	15 75	8 00
" " 1 Gallon	19 00	9 75

Glass Packages



The new screw top, which is taking so well we can ship at an hour's notice. They hold exactly one pound of honey and make a splendid package for jams or jellies afterwards.

Prices per gross..... \$10 00
 " half " 5 25
 " per dozen..... 90

60 lb. Tins for Extracted Honey

WE MAKE THEM.

For shipping honey in bulk, this package takes the lead. It is the most convenient size, is encased in wood so that it will stand any amount of handling. Has a large screw top so that granulated honey may be taken out as desired.

This is the package recommended by the commissioners to the Colonial exhibition. We have sufficient to store 100,000 lbs. of honey ready to ship by return freight or express.

SCALE OF PRICES.

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

The cases are made of planed lumber.

Honey Boxes For Sale.



We have in stock a large lot of Manilla Boxes, made to hold the 4½x4½ Sections, on which the Honey Comb Labels, A and B are used, (see illustration), and we can offer them at very reasonable rates. Each box has a nice tape handle, and the package is certainly a very beautiful one.

MANILLA BOXES. Per 1000. Per 100. Each
 4½x4½.....\$14 00 \$1 50 2 cents.
 Send 3 cent stamp for sample.

Dextrine.

This comes to you in the shape of a powder, and is used for the purpose of gumming honey-labels on wood and tin. Dissolve it in a little hot water, applying with a brush, and brush the gum over as well as under the label. Put up in packages of quarter half and one pound:

1 pound.....	9c.	By mail 6c. extra
1 " " ".....	15	" " 12 "
1 " " ".....	25	" " 24 "

Suitable for the Season.

THE NEW HEDDON HIVE.

We have bought out the interest of the inventor in his Canadian patent, and we are in a position to make and sell the Heddon Reversible Hive, got up in any shape to suit the purchaser—either in the flat or nailed.



The engraving gives a good idea of the hive. The brood-chamber is in two sections; also the surplus arrangement, which may be interchanged or inverted at will. The cover, bottom-board, and top and bottom of each sectional case has one-half of a regular bee-space, so that the surplus cases with the sections may be placed between the two brood chambers, or the latter may be transposed or inverted—in fact, all parts of the hive are perfectly interchangeable. The brood-frames will ALL be bored for wires.

A SAMPLE HIVE

includes the bottom board and stand; a slatted honey board; a cover; two 6-inch brood chambers, each containing 8 frames, wired; two surplus arrangements, each containing 28 one-pound sections, both with wide frames and separators, both of which can be interchanged or reversed at will. Price, nailed \$2.90; nailed and painted \$3.25. It is absolutely essential to order one nailed hive as a pattern for putting those in the flat together correctly.

HIVES READY TO NAIL.

We have arranged several different combinations in these hives, so that our customers may make a selection from the sample hive nailed without waiting for us to quote prices; in ordering ask for the number which you desire, and no mistakes will be made.

No. 1 consists of the stand, bottom-board, cover, two 6-inch brood-chambers, 16 frames with holes punched for wiring, and the slatted honey-board, price \$1.25 each.

No. 2 is the same as No. 1, with the addition of one surplus arrangement, containing 28 sections, with separators—interchangeable and reversible. Price \$1.75 each; without sections, \$1.60.

No. 3 is the same as No. 2 with the addition of another surplus arrangement, and sections

and is the same in all particulars as sample hive. Price \$2.30 each; without sections, \$2.00.

Those who wish the hives *without* the stand, or honey-boards, may make the following deductions from above prices: Stands 10 cents; honey-boards 7 cents. For extra brood chambers, with frames in flat, adds 45 cents each; and for extra supers adds 40 cents each. Separators of tin are included in these prices throughout. If separators are not desired, deduct for each super 4 cents.

DISCOUNTS IN QUANTITIES.

For 5 or more hives, 5%; 10 or more, 7½%; 25 or more, 10%; 50 or more, 15% off these prices.

THE D. A. JONES CO., (Ld).

BEETON ONT.

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,

3-t.f.

Manager, Beeton, Ont

— 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

BEE-KEEPER'S GUIDE,

OR

MANUAL OF THE APIARY.

13,000 SOLD SINCE 1876,

The fourteenth thousand just out. 10th thousand sold in just four months. 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-Keeping.

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

A. J Cook, Author and Publisher

State Agricultural College Michigan

MUTH'S HONEY EXTRACTOR.

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

CHAS. F. MUTH & SON.

Cor. Freeman & Central Avenues, Cincinnati, O.

APIARIAN SUPPLIES

MANUFACTURED BY

W. T Falconer - Jamestown, N. Y

Are unsurpassed for **Quality** and fine **Workmanship**. A specially made of all styles of the **Simplicity Hive**, including the **Van Densen-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 SECTION.

same price as one-piece. Also manufacturer of **VAN-DEWORT FOUNDATION**. Dealer in a full line of **Bee-Keepers' Supplies**. Send for Illustrated Catalogue for 1886, Free. **Prices always reasonable.** Mention this paper.

I. R. GOOD'S PRICE LIST.

Italian Bees and Queens For 1886.

HAVING again located at NAPPANEE, where I expect to devote my entire time to the breeding of **PURE ITALIAN BEES AND QUEENS**, can also procure and furnish **SYRIAN BEES AND QUEENS** bred in my Tennessee Apiary. All queens warranted pure to name and untested Queens warranted purely fertilized.

- Six Warranted Italian Queens for..... \$ 5
- Twelve..... 9
- Single Queen..... 1
- First quality Sections..... \$3.75 per rook.

I am up with my orders and expect to be able to send Queens by return mail from this on.

Bees by the pound same price as untested queens Will also furnish all kinds of sections and hives at A. I. Root's price.

I. R. GOOD, Nappanee, Ind

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
- E. KRETCHMER, Coburg, Iowa,
- E. F. SMITH, Smyrna, N. Y.,
- C. F. DALE, Mortonsville, Ky.,
- EZRA BAER, Dixon, Lee Co., Ill.,
- CLARK, JOHNSON & SON, Covington, Ky.
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and numbers of other dealers. Write for **SAMPLES FREE** and Price List of Supplies, accompanied with

COMPLIMENTARY

and **UNSOLICITED TESTIMONIALS** from as many bee-keepers in 1885. We **Guarantee every inch of our Foundation equal to sample in every respect.**

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HAMILTON Hancock Co., LL

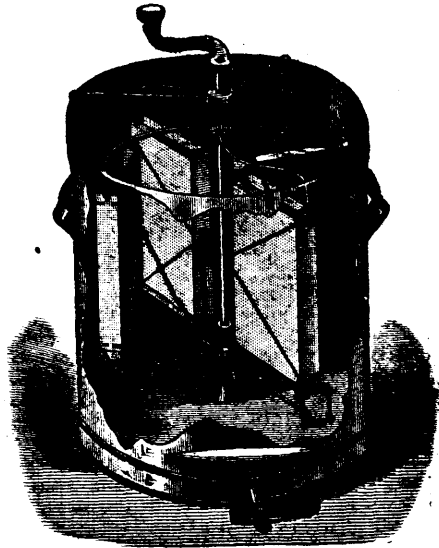
1886. **ITALIAN QUEENS.** 1886.

Six Warranted Queens for \$5. Send for circular. No circulars sent unless called for.

J. T. WILSON,
Nicholsville, Ky

Honey Labels, Cans and Packages.

We have an entirely new design of honey labels specially got up to develop the honey market, a handsome and practical lithograph. Send 5 cents for samples. We are handling the latest improvements in honey cans, the Ross pressed cover, and can supply them and other styles of can from 1/2 lb. to 60 lb., with labels at bottom prices. The



STANLEY AUTOMATIC HONEY EXTRACTOR

is supplied by us from Brantford, Ont., at about the same price as that of patentee and manufacturer, Mr. G. W. Stanley, Wyoming, N. Y., with whom we have made arrangements as his sole agents in Canada. Comb and extracted Honey wanted in exchange for Honey Extractors, Honey Knives, Hives and Comb Foundation.

Send for price list of goods.

E. L. GOULD & CO,

BRANTFORD, ONT.

FRANK W. JONES,

BEDFORD, QUE. AGENT FOR

Pelham, Vandervort and Root Foundation Mills

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