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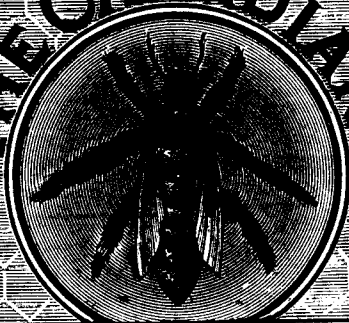
VOL. III, NO. 11

1887

JUNE 8.

PUBLISHED EXCLUSIVELY IN THE INTERESTS OF THE HONEY PRODUCER

THE CANADIAN



JOURNAL

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WEEKLY

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Vol. III. No. II.

BEETON, ONT., JUNE 8, 1887.

WHOLE No. 115

EDITORIAL.

THE British *Bee Journal* says a Swiss bee-keeper cures foul brood by thyme. This common herb is dried, put into the hive by the entrance. After doing this eight evenings, he found the larvæ, which had died from the disease, quite dry, and the new brood in a perfectly healthy condition. He continued the fumigation another eight days, which ended in a complete cure of the disease.

We have received from Mr. Ivan S. Young, the editor of the *Norwegian Bee Journal*, a copy of a little book on bee-keeping, of which he is the author. It is printed on a nice quality of paper, is well bound and handsomely illustrated. Further than this we are at the present time unable to go, not being able to read a word of the little volume. If any of our readers are versed in this language we shall be glad to forward the little work to them for inspection.

A correspondent of *Gleanings in Bee Culture*, writes as follows in regard to the use of honey in curing erysipelas: A neighbor lady tells me that she completely cured a case of this disease with honey, after the doctors had given her child up and said it could not possibly get well. The way she applied the honey was by saturating a sheet with honey, and wrapping the patient in it; but it was a very bad case, and the dis-

ease had spread all over the child's body. I suppose all that would be necessary would be to cover with a cloth the parts affected, saturating it with honey.

A correspondent of the *Indiana Farmer* writes: "What little experience I have had in Alsike clover has been entirely satisfactory. For honey my bees prefer Alsike clover to anything else while it is in bloom. My cows and horses prefer Alsike clover hay to any other for winter food."

The Viceroy of India (Lord Dufferin) and his staff had a singular experience at Dehra Doon recently. His Excellency and suite attended service at the church—or, to put it more correctly, went to church for the purpose of attending service—and soon after entering the sacred edifice were alarmed at hearing a great commotion outside. The disturbance arose, it proved on inquiry, from the fact that a swarm of bees had attacked members of the Viceroy's bodyguard and others outside the sacred edifice. The Viceroy and his party had, fortunately, got into the church, and the doors were closed. The bodyguard escort outside fled. A horse belonging to an officer of the Goorkhas was so badly stung that it lay down, and the bees would not leave the poor animal till they lighted a fire round it and drove them away. Ladies and children shrieking, horses plunging and

bolting—the confusion was immense. The bees chased the church-goers for a quarter of a mile down the main road. A correspondent hears, but cannot vouch for the fact, that the Viceroy himself on leaving the church, did get one stung in the back of his neck. I saw the party retreating in a closed carriage, not attended by their bodyguard. When the harvest moon arose, shedding her mild beams over the walls of the Dehra church, one window was still in the occupation of the enemy who had inflicted so serious a defeat on the Supreme Government itself.

The writer had occasion to go to Gravenhurst a few days ago, and while there called upon Mr. J. P. Cockburn, who is a bee-keeper on a small scale. It seems to be a rule that all bee-keepers have a fancy for visiting each other, and when travelling, make it a point to see as many as possible, and of course we are no exception. Mr. Cockburn has only a few colonies, all in the ordinary Jones hives; in fact he keeps bees more for the sake of supplying himself with honey than for the sake of profit. It would be hard for him to look after many colonies with the amount of business he has in other lines, as he is Postmaster, Central Telephone agent, agent of the G.N.W. Telegraph Company, Town Treasurer, has a stationery and seed store and is a florist and gardener. We had much pleasure in going through his greenhouses, in which were almost every imaginable flower, besides many vegetables. Another special feature in this portion of the business is the sending out of plants, 6 or 8 inches long, through the mails, so put up that they will go any distance with safety. To give us an insight into the method, Mr. C. went through the work of putting up a number of plants as he would arrange them for the mail. As he is probably the only florist in Canada who does anything in this line it might be interesting for the readers of the BEE JOURNAL to know just how it is done. First let us say that in the green-houses are thousands of plants from six to eight inches high, which are the sizes suitable for mailing, and these are all in little pots containing probably 2 or 3 inches of earth. When an order comes in for certain kinds of plants, they are

taken to the work table and taken out of the pot, and the greater portion of earth is shaken from the roots. Then a piece of ordinary paper is laid on the table, on top of this another piece of oiled paper is laid, and on this a quantity of moss called Spagnum is laid which has been previously soaked in water. The plant is then placed with the roots and a portion of the stem in the moss, and rolled up quite tightly and tied with string. The roots are thus kept moist for days, and this moisture is the same to the plants as the food which we place in the small shipping cages is for the bees. The parcel is then taken and placed inside of a wooden casing. The material in this casing is similar to that in the small baskets ordinarily used for berries, and is made of such a shape that two of the pieces properly scored will make a little case having four sides and two ends. The package containing these plants is placed in this case, and the bottom portion of it, next where the roots are, is tied to the bottom of the case to prevent the leaves and stem from being jammed by being thrown around. Another sheet or two of paper is tied around the box with a strong twine, the label is addressed, placed thereon and the parcel is ready for the mail. Hundreds of dollars worth of plants are sent out in this way and with great success. We enjoyed the visit very much and were sorry that our time was so limited.

OUR OWN APIARY.

GLORIOUS weather for bee-keepers. All engaged in the business this year, if the weather continues as favorable, should reap a rich harvest. In fact within our recollection we have not seen such fine weather before. Since the bees were placed on their summer stands there has probably not been one week that they have not gathered more or less honey during the day, and the refreshing showers which just began when needed have seemed to increase the honey flow since fruit bloom, which is now from dandelion, Hawthorn, mountain-ash, horse chestnut and ground maple, in the locality of our apiaries. The clover bids fair to be in splendid condition, as the winter has not killed it or injured it with us. We

find in favored localities an occasional head of white and alsike which indicates that in about two weeks, all being well, we will be able to commence extracting. Now, are we all ready with our implements and storage? and by the way, we think that storage should be provided in abundance. Right here a word of caution to new beginners might not be amiss: The first extracting must be done before the combs are filled with new honey, as the old, which has been in the comb during the winter, and any sugar syrup which has been fed to the bees should be extracted and put away in reserve for feeding or stimulating nuclei for queen rearing. As honey, when gathered in the hives, is usually dark and not nearly as fine flavored as that freshly gathered, we now extract clean just as honey flow begins and save it for feeding purposes. The second extracting is usually all right. Care should be taken also to keep separate the different qualities of honey. After the clover yield is over the linden may be kept separate, unless the yield of clover should continue as long as the linden, then the honey should be marked mixed clover and linden. Those who have not already secured their sections and prepared them with foundation ready to set in the supers should do so at once as the yield will probably be earlier than usual this year, and those who have sections filled or partially filled with comb from last year should exercise care in setting them on their colonies.

We have just had a very pleasant visit from a friend who is one of our largest comb honey producers, in fact has just informed us that he has placed the largest and most successful. He has just informed us that he has placed on sections, partially filled or entirely filled with comb and without perforated metal or division boards between supers and brood-chamber, and the result was that in almost every section more or less pollen was stored. Although the bees commenced to store honey early yet he found when removing his sections that they were spoiled for the market by the pollen, causing them to look dark or spotted. Giving it in his own words, he says: "I have been caught quite often enough, and do not attempt to use 'pollen catchers' until the honey season has thoroughly set in, without the use of perforated metal." Of course the

perforated metal queen excluders would obviate the difficulty.

Some of our friends are beginning to ask if we do not think they had better make some artificial swarms as their bees are getting too strong. To such we would say, better have too many than too few bees in your colony, and early artificial swarming means less honey crop and a lot of weak colonies in the fall. Sound advice would be to see how strong you could keep your colonies, even though you have to add two or three extra supers for extracting. Or tier up your supers to an unusual height and give your bees room according to their strength. In the early part of the season as fast as your supers are partially filled raise them up, placing empty ones under and by judicious management in this way of tiering up large crops of comb honey can be secured and nearly double the extracted honey may be had by preventing too much increase. Those who think of using starters in their sections should reconsider and secure full sheets of section foundation, and those who contemplate shipping honey to market in the supers or the frames, as some put it, should abandon the idea, as our experience has proved fancy packages made of light material and yet sufficiently strong holding very few sections, not more than twelve or one-half or one-third that number are best. The small packages cost very little more in proportion to the number of sections they hold.

While at the Colonial we found that Mr. Corneil's section cases, holding two sections, would sell at three shillings each and two shillings and sixpence, and the purchasers preferred them to a larger package. The demand was so great for these small packages that we were forced at times to hide them away from view in order that we might have some later on in the exhibition. Many people would be perfectly willing to take a small package from your county or township fair, your retail store or any other place at which they may be favored with an opportunity of purchasing.

A gentleman from Scotland who is now with us has invented and is completing a device for cutting sections and brood foundation with wire instead of a knife. Thus far the scheme appears

feasible and in fact already without the machine being completed we have succeeded in doing some very fair work.

For the Canadian Bee Journal.

The Heddon Hive for Winter.

YOU ask for my experience in wintering bees in the Heddon hives. I left five or six of them out of doors last winter, packing them in dry saw-dust, and the bees wintered splendidly. I have no better colonies in the yard. I think those spaces between the upper and lower frames are just the thing. The cluster can enlarge or contract so readily, in any direction, making all the stores easy of access, and preventing any loss by a few adventurous bees being caught and chilled behind some outer comb. I wintered one colony out of doors in a single section of the hive, and it came through all right. It was packed the same as the others.

W. Z. HUTCHINSON.

Rogersville, Mich., May 25th, '87.

For the Canadian Bee Journal.

PRIORITY OF LOCATION.

ONE MAN WHO IS BOUND TO HAVE IT BY FORCE IF HE CANNOT HAVE IT BY LAW.

MY bees seem to be doing remarkably well this season. I have the most of them on twelve frames already. Now, I have been bothered as are other bee-keepers about here, with a man who formerly kept bees about two miles from the village. Some four years ago he sold out what bees he had, and went into the cattle business, but he has lately rented his farm and moved into Granby, and it seems his idea is to keep bees again. But before doing so he declares and swears that he will clean all the bee-keepers out of their bees, and he claims that as he was the first one to keep bees in this section *the location is his*. He has begun to carry out his threats already by setting a trap and laying a bait of full combs of honey to catch them. It has not affected my yard as yet in the least, but a Mr. Long a short distance from me, who keeps about twenty-five colonies is suffering heavily by it, and he declares that his bees are not half so strong as when set out in the spring. Can you advise us in this matter? I have good proof of his setting these traps and of his having boasted of having buried gallons of bees at a time. I should like to have the opinion of some of our principal bee-keepers and you will oblige me if you will take up this

matter in the CANADIAN BEE JOURNAL. Is there any law to protect us?

WM. NIXON.

Granby, Quebec, May 30th, 1887.

We are satisfied that there is a law by which you may be protected. In Ontario no man is allowed to destroy the property of his neighbor, and if it can be proven that he has done so he can be properly punished therefor. Your bees are just the same to you as another man's cattle and sheep would be to him, and if you can prove he has set a trap whereby your bees have been destroyed, you will easily be able to recover damages. Difficulty might probably arise from the fact that unless you had the bees marked in some way you would be unable to prove your property; however, since it seems that all of your neighbors are bothered, it might be well if you were to enter into a combination and ask for an injunction restraining him from setting traps or from killing your bees in any way. All that would be necessary in that case would be to prove that the bees had been destroyed. This seems to be our understanding of the law; perhaps it would be as well to have some of the legal lights in bee-keeping furnish us with full particulars.

From Gleanings.

Swarming, Etc.

SOME SEASONABLE HINTS FROM G. M. DOOLITTLE.

PICKING up a bee-paper lately I found this statement given by quite a prominent apiarist, regarding swarming: "If we allow bees to swarm they will cast their first swarm on or about the commencement of the honey season, and in about twelve days we may expect the second, and in four days more the third. I think this is the average time of swarming; therefore it is sixteen days from the time the old queen leaves the hive until the third swarm issues." Having allowed natural swarming in my apiary during all of my 18 years of bee-keeping, and believing that the above is not correct, also knowing that much of the interest of bee-keeping hovers about the natural swarming of bees, I thought I could please the readers of *Gleanings* no better at this time, just as swarming is about to commence in the Middle and Northern States, than to tell some facts as I find them, relative to when swarms may be expected.

To the beginner this is a matter of much importance; for by them, hours and days are spent

needlessly in watching bees, which a little knowledge of the matter would save, as well as to do away with much anxiety in the matter. As to when the first swarm of the season will issue, be the apiary large or small, I have never known it to fail that such a one came with the sealing of the first queen-cell, this being the rule with all swarms; but after swarming gets under headway in a large apiary, especially with the Italian bees, some swarms issue without any preparation for swarming at all; others, when eggs are laid in queen-cells, etc.; but I never knew such a case with the first swarm of the season. Understand, I do not say that a first swarm of the season never did issue without this preparation, but that I never knew one to do so. Then we have the sealing of the cell as the indications of a first swarm. Now, all persons familiar with queen-rearing know that the time the queen remains sealed in the cell does not vary much from seven days; hence in seven days after the old queen leaves with the first swarm, the first young queen is hatched. If a second swarm is to issue, this queen begins to peep or pipe when from 6 to 8 hours old. If she commences to peep I never knew a swarm to fail to issue, unless the object of the bees was thwarted by the keeper or exceptionally bad weather. This piping is kept up for from 36 to 45 hours, when, unless kept back by foul weather, the second swarm issues.

An item worthy of note is, that the weather must be very bad to keep after-swarms from issuing, for they often issue on cloudy days, or on the least streak of sunshine in a rainy day. Then, again, they come out at all hours of the day, from five in the morning till seven at night, while the time of issuing of first swarms is usually between 9 a.m. and 4 p.m. Then, as a rule, all second swarms may be expected in 9 days after the issue of the first swarm, instead of 12, as our friend quoted tells us. If the bees conclude to swarm still further, after the second swarm has issued, another queen is allowed her liberty, while the rest are kept confined in their cells, being fed through holes in the cells, so they are virtually of the same age and strength as the one which has her liberty. The queen let loose at once begins peeping, keeping it up for about the same length of time the others did, so that the third swarm comes two days after the second or 11 days after the first. If a fourth, fifth, or sixth swarm issues, they come out the next day after the third, and each other, so that, should the sixth swarm issue it would come on the 14th day after the first. Five swarms is the highest number I ever knew cast from one colony during our swarming period; but I believe as high as six have been reported.

As I believe all after-swarms are a disadvantage, I wish to tell the reader, before closing, what I consider the simplest way of stopping them when the first swarm is hived on a separate stand, instead of on the Heddon plan. If the first swarm issued according to rule, the first young queen will be hatched in 7 days, and unless prevented, lead out a second swarm on the 9th day. Taking advantage of this fact 8 days after the issue of the first, when the hive is opened and all queen-cells are cut off, when we have a sure thing in the matter, which can not be said regarding any other plan dependent upon the cutting of queen-cells. Where a person has not too many hives I find it as good a way as any to listen for peeping in the evening after it is thought that a young queen has hatched; and if the queen is heard you are certain of her presence among the bees. If not heard, then listen the next evening, and so on till she is heard, when you know you are safe in cutting all cells. In cutting these cells it is well to shake the bees off the combs or else you may fail to see all of them, in which case, if one remains a swarm is sure to issue.

This article is written mainly for beginners, for all of the older heads have established plans of one kind or another, which—ahem!—are probably any of them better than the above. If so, won't they tell us about them?

G. M. DOOLITTLE.

Borodino, N.Y., May, 1887.

From the New England Homestead.

THE SWARMING OF BEES.

SWARMING is the result of a natural instinct of the bees to increase and multiply. When colonies are populous and bees vigorous, it occurs early in the honey season, soon after settled warm weather. This desire to depart for a new home is usually brought on by an over-crowded hive with lack of room, either for brood-rearing, or storage, or both. It may also be caused at other times by lack of ventilation, an offensive hive, an entire lack of food or by the sun heating the hives so hot that the bees depart without even stopping to build queen cells.

In a state of nature the surplus honey of a colony is used in the spring to produce bees, resulting in swarms; the more honey the more swarms. The bee master changes the conditions, appropriates most of the surplus and has few or no swarms. He allows the honey (with other food) to be turned into bees, or causes his bees to expend the greater part of their energies to produce honey, as he chooses. A surplus honey crop is always produced at a great cost of bee

life. When swarming is excessive, very little surplus honey will be secured, and the colonies being weak, are less able to repel wax moths and robber bees. If they issue late, or the season be poor, they may not gather enough to last them through the winter, and if given sufficient stores are many times (unless united) too weak to survive the cold.

Various plans are followed to prevent natural swarms, but in most cases it has not been found profitable. When allowed to swarm naturally, great energy and industry is shown, evidently from the excitement of swarming and the building of new combs. Therefore comb honey producers generally allow one swarm to issue from each strong colony and prevent after-swarms by destroying or removing all but one queen cell, or none are left and a laying queen is furnished. The boxes on the old are given to the new swarm at the time of hiving, and work on them is continued. As soon as the brood matures in the old hive, they are again populous and are furnished with boxes. By this plan, all colonies are kept strong and are both prosperous and profitable.

It has been found that if sufficient room is added as fast as required, both for brood-raising and storage, a colony having a good yearling queen will not have the swarming impulse; but where an old queen has early in the season laid a large number of eggs, there comes a time when she is exhausted by the tax and needs a rest. Swarming relieves her, for a time, of excessive egg-laying, while the new combs are built and honey stored. There is a point against giving full sheets of foundation or finished combs to first swarms and in favor of the use of starters in brood-frames with boxes above and queen excluding honey-boards between.

Producers of extracted honey, by giving as many combs as can be used and extracting often, entirely prevent swarming and keep an enormous lot of bees in a hive. By this means great yields are obtained from one colony. If this can be accomplished when working for extracted honey, why cannot the same thing be secured by giving similar conditions when working for comb honey? So thought a prominent English bee-keeper, and the result is we are offered a new non-swarming system by which plenty of room, both for egg-laying and storage in boxes is given as required, and swarming prevented and its benefits secured (part of them) by having a new set of brood-combs built from starters. It is claimed that this plan is sure, and it will, no doubt, be tested in many apiaries this season. The management is as follows:

Early in the season, before the bees get the desire to swarm, a hive containing empty frames

(not combs) or those with starters only, is placed under the brood nest. As the harvest comes, boxes are given, and as fast as occupied the boxes are raised, and others placed underneath. As the top ones are finished, they are removed and more boxes are placed under the second set, which are then at the top. Boxes should contain drawn-out comb and be given as often as required to occupy all the bees and prevent much work below. If comb is built in the lower frames it is removed when but two-thirds finished, and is never allowed to be completed. The principle is to always have unfinished combs in the brood-chamber nearest to the entrance. If the space is farthest from the entrance or at the back of the hive, there is a possibility of swarming.

SAMUEL CUSHMAN,
Pawtucket, R. I.

For the Canadian Bee Journal.

Mr. Pettit Replies to Mr. McKnight.

THE END OF THE CONTROVERSY.

ASK the privilege of replying to Mr. McKnight's letter on page 172, C. B. J., lest some of his unfair statements might pass for truth. And so Mr. McKnight has at last discovered that "there is no written law to prevent it (the grant) being so used." What a pity he had not looked into the matter just a little sooner. And now he tries to hide behind "custom makes law." Would it not have been better to have owned up frankly that it was a mistake to suppose there was a law to govern the matter?

Mr. McKnight says "the Board decided it was not competent for them to expend it as Mr. Pettit desired to see it expended." I answer that the Board did nothing of the kind whatever. It did not even discuss the propriety or impropriety of so using the grant. If anyone doubts my assertion please ask the secretary; we all know that he is a careful painstaking officer, and will be in a position to give correct information. That is one.

Again he says "some of those members doubtless never paid a dollar to the Association funds, and flourish their resolutions in the face of the Board." Now, as the Board never took any action whatever relative to the grant nor the manner in which it should be expended, the above accusation is all untrue. That makes two.

"In thus ignoring the decision of the Association's executive body, and declaring the voice of unaffiliated local bodies as of more value and weight in his estimation than the deliberate decision of the Board."

This also is all untrue. I have never done

anything of the kind in any way. That makes three.

"But takes refuge in the assumption that in having done that which he was not authorized to do."

I must also deny the truthfulness of this statement. It evidently has found its origin in his productive imagination. Not in a single instance, to my knowledge, have I ever since occupying the presidential chair, disregarded the expressed wish of the board or of the executive committee. That makes four.

Mr. McKnight inquires "what greater back-down from a positive position could any man make?"

Now, I fail to see any "back-down." I simply wished to state in a general way what the Government expects of associations in general in spending their grants.

Well, if Mr. McKnight wishes me to bag a bigger backer-down than he imagines he has caught, just come with me and see if I don't catch him one. On page 131, C. B. J. Mr. McKnight says: "I have not 'urged' so because of any opposition on my part to see it so applied. I have simply expressed my opinion that such an application of it would be illegal and that the illegal use of a public grant is only calculated to bring under censure, and into contempt those who use it."

Now please notice how tenaciously Mr. McKnight clings to the law, and insists that we may lose the grant by expending it contrary to law.

On page 172 he says: "I presume there is no written law to prevent it being so used."

New light, you see and consequently the back-down process begins.

Now, on the same page, near the bottom of the next column, Mr. McKnight writes: "Yes, I know the prospects of the English market better than Mr. Pettit knows them, and it is because I know them so well that I am reluctant to see his wild-goose scheme carried into effect and the funds of the Association lost to it." Now has not Mr. McKnight backed all the way down from his exalted contention for the dignity of the law to something altogether and entirely different, and now objects simply because *he fears the loss of the grant* on my "wild-goose scheme." Well, well! Really!

Talk about backing down, why, I am nowhere in comparison. Judge ye who read:

Dear Mr. McKnight, I am so sorry to spoil your esteemed epistle, but then it is your own fault, and no blame of mine.

There are other prints that should be cor-

rected, but we are all busy now, and correcting these reckless statements make me tired.

Doubtless you could give us a great deal of useful information about the British market. Why in the world then don't you do so?

S. T. PETTIT,

Belmont, May 31st, 1887.

Perhaps we should have explained as a foot note to Mr. McKnight's article, where he says: "The board decided that it was not competent for them to expend it as Mr. Pettit desired to see it expended." The board did not in so many words decide it one way or the other, in fact the meeting was rather out of order inasmuch as it is customary at such meetings to speak to a resolution, and there was no resolution before the meeting. Perhaps Mr. McKnight supposed that the meeting was carried on in the regular way and that it was necessary first to have a resolution of some kind, and took it for granted that the effect of the resolution was, as he has stated, and that the board opposed any such method of using the grant. The subject was discussed as to whether the Association should undertake the marketing of the honey of its members, and it was decided, even though there was no resolution put to the meeting, that the board should take any such action, and when Mr. Corneil stated that he felt satisfied that the Association could not become a trading body the subject was dropped with a tacit understanding that nothing be done in the matter, and of course it followed that the grant should not be used, so that Mr. McKnight was wrong in the "letter" but was right in the "spirit." One of the members of the board spent a day with us this week, and in conversation on the subject this also was the view taken by him. It seems to us that this matter has been ventilated sufficiently and as the disposal of the grant is practically settled by the letter of the Hon. A. M. Ross in the last issue of the BEE JOURNAL, we decide that the controversy shall cease. We have endeavored to give both sides a fair hearing with no desire to see anything but right prevail.

UNBOUND VOLUMES OF C. B. J.

Only a few of those unbound volumes advertised are left. Write at once if you desire one with as few numbers missing as possible.

QUERIES AND REPLIES.

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

INFLUENCE OF CHLOROFORM ON BEES.

QUERY No. 154.—Please inform me if bees fall from their combs when put under the influence of chloroform. For instance, if I were to place chloroform under a box hive would all the bees fall from the combs. (2) How long would it take them to recover from its effects.—R. L. C., Lyndhurst.

S. T. PETTIT, BELMONT, ONT.—Never tried chloroform.

H. D. CUTTING, CLINTON, MICH.—Cannot say from experience.

G. M. DOOLITTLE, BORODINO, N.Y.—Have never used chloroform.

M. EMIGH, HOLBROOK, ONT.—I never used chloroform, so can't say.

O. O. POPPLETON, HAWK'S PARK, FLORIDA.—Have had little or no experience with chloroform.

ALLEN PRINGLE, SELBY, ONT.—I have never used chloroform on bees. Mr. Jones is the man to answer this question.

S. CORNEIL, LINDSAY, ONT.—Don't know. Never tried it but once, and that time I failed to introduce a five dollar queen.

PROF. A. J. COOK, LANSING, MICH.—They do fall. The length of time for recovery varies according to degree of anaesthesia produced, from a few minutes to hours. I should not recommend profound coma in such cases.

DR. J. C. THOM, STREETSVILLE, ONT.—Never gave the chloroform to the point of complete insensibility. The bees would mostly fall on the bottom-board; in eight or ten minutes they would revive. Why, do you ever want to use chloroform in any operation about bees? It is never necessary.

BY THE EDITOR.—Chloroform is very heavy, and that would not be a good way to administer it. It should be blown in by a smoker. Some of the bees would fall, while others would remain on the combs. We have frequently, when experimenting, given them so much that they would be attached to the combs in every conceivable position.

(2) From five to ten minutes after the hive is opened, unless a very large dose was given them, then it might take longer.

WILL BEES CEMENT WOOD TO TIN WITH PROPOLIS.

QUERY No. 155.—Where wood is laid on tin in the hive will the bees use propolis on the tin to such an extent as to stick them all together?—R. L. C. Lyndhurst.

O. O. POPPLETON, HAWKS PARK, FLA.—Yes.

G. M. DOOLITTLE, BORODINO, N. Y.—Should say they would if they had free access to it.

S. CORNEIL, LINDSAY, ONT.—Don't know. They do not put much propolis on tin.

DR. J. C. THOM, STREETSVILLE, ONT.—Yes, very little propolis is necessary to cause them to adhere.

H. D. CUTTING, CLINTON MICH.—In this locality they will, but not quite so much as wood on wood.

M. EMIGH, HOLBROOK, ONT.—Yes but propolis don't stick so solid to tin as it does to wood.

DR. C. C. MILLER, MARENGO, ILL.—I don't know but they will put just as much propolis on the tin as on the wood.

S. T. PETTIT, BELMONT, ONT.—Propolis does not adhere as tenaciously to tin as it does to wood, but the bees will use it all the same.

ALLEN PRINGLE, SELBY, ONT.—Yes, bees will use propolis wherever they want to and can, whether on wood, tin or any other metal.

BY THE EDITOR.—If the wood so rests on the tin that it leaves much of a crack, the bees will usually place a little propolis along the crack. A little grease on the tin will prevent them from sticking propolis.

SUNDRY SELECTIONS.

An Indiana farmer, who told his boys to burn every bumble-bees' nest they found on the farm, and who was complaining at the failure of his clover seed crop, was surprised when Maurice Thompson, the naturalist, said: "That is why your clover seed fails you. Bumble-bees make your clover seed." It is a fact that a strong nest of bumble-bees in a big clover field is worth \$20 to the owner; for these insects are the chief agents in fertilizing the blossoms, thereby insuring a heavy crop of seed. In Austria there are no bumble-bees of our kind, and they could not raise clover seed until they imported some.

BEES WINTERED WELL ON FOUR TO SIX COMBS.

CALVIN BOYD.—I went into winter quarters with nineteen colonies, fifteen of which were in double-walled sawdust hives on their summer stands, with six inches of loose, dried, pine sawdust thrown in on top of the cotton quilt, first placing sticks under the quilt for winter passage over the combs. Six out of the fifteen thus treated came out strong, two dwindled to mere nuclei but will recover, the balance are medium to good. Four colonies in Jones' hives were packed in clamps with ten inches of sawdust on the sides and fourteen inches on top. All of these came out in good condition, and I have to-day seventeen good colonies and two weak ones. All of them were wintered on fall honey gathered chiefly from golden rod, and after September 1st. The entrances on all the hives were left wide open $8\frac{1}{2}$ inches. Four to six combs were the average number on which the bees were wintered, and the consumption for each averaged fifteen pounds of honey. Wishing the CANADIAN BEE JOURNAL, in its third volume the success it so richly deserves.

Petrolea, May 18th, 1887.

A CASE OF TRANSFERRING IN WINTER.

GEORGE COOK.—I put away eight colonies in the fall of 1886, packed in chaff. I find that two of them died with plenty of honey in their hives, having consumed less than a pound. One box hive, which I had purchased, did not have sufficient stores and they appeared to have "passed away." On a warm day I took the honey board off and let the sun shine in on them, when to my surprise they began to flutter and show signs of life. I brushed them into a moveable frame hive, covered them up warmly, placed them behind the stove and in about an hour they came to. I now have a good colony, perhaps as good as any of the eight. From what I can learn, there are a good many dead bees in the vicinity, a great many having lost all they had.

Collingwood, May, 1887.

It is more than probable that you removed the colony just in time to save it. Had you let the matter stand a little longer it is likely that they would have starved, so that perhaps the hibernation theory of brother Clarke is not very much strengthened after all.

BEES IN MUSKOKA.

R. H. SMITH.—My report of wintering is rather late, but I have purposely delayed it to see how my bees would come out by June 1st, as I consider spring is as trying a time for bees as winter. I put away forty-seven colonies in the cellar and packed six outside in chaff; the cellar was rather cold, seldom above 42° . I neglected to set the mouse trap, the consequence was, mice destroyed four colonies, and worried four others so that they were almost depopulated. One energetic colony overpowered their mouse, stung it to death and glued it to the bottom of the hive, and have now fully recovered. Pollen was very late in appearing this year; the first came in on April 29th. On May 2nd we set bees out of the cellar. Those that the mice had not disturbed

were in fine condition, one was queenless, two showed a little dysentery, the rest were very clean and strong, some unusually so. On examining them I found very little brood, much less than at the same time other seasons. The six packed outside wintered well and had large patches of brood. This has been a very favorable spring for bees, the continued warm weather has helped them along very fast. Honey has been coming in nearly every day since they were set out, so much in fact that the queens in some instances have been crowded with twelve frames in the hive. I was almost tempted to extract some, but the change has come. Last week we had heavy rains, followed by cooler weather, when little honey was to be got. On looking them over I find they have used considerable of their stores, and with the large quantity of brood to feed, will not have too much to keep them going till clover blooms. This is now the 30th of May and the bees are as strong as we have ever had them at this time, most of the hives have from ten to twelve frames solid with brood and honey with the queens laying at a great rate. Two would have swarmed by the 20th but were prevented, but we expect swarms every day now that several have queen cells sealed.

Bracebridge, May 30th, 1887.

BEES TOO DEAR BY THE POUND.

ROBERT KENNEDY.—Will you kindly inform the readers of the CANADIAN BEE JOURNAL how the bees which you wrote about last fall as coming into your hands late with little or no stores, and that you proposed feeding them sugar candy, wintered? Did they come out strong this spring? You said at the time that it would be a good chance to test this kind of winter feed. My bees were fed on candy in your winter feeder, but before I got the feeder I had been feeding syrup, in which I put acid as recommended by Mr. Heddon, and although my cellar was damp and rather cold (never going above 40° , unless when I lit up my coal-oil heater, and sometimes down to 32°) I did not see the least sign of dysentery. The Heddon hive I moved on its stand right on the floor, and they were the strongest in the spring, and did not consume as much food. One of my colonies gave up after being set out for a week; robbers finished them. I have another on which they are operating, and on opening the hive I found that the queen and a few bees had as much brood as would cover a circle two inches in diameter. I closed up the entrance to one bee-space and put on the wire gauze over the balance of the entrance, leaving three combs in the hive closed up with the division board, and I put some food over the combs, but the robbers are still around. What should I do, or did I do right as one who is a novice? If I had a pound of bees; but your figures per pound say stop. Buy a colony, or take away the combs and let the weaker colony go? Which do you think will be best for me to do?

Bethany, Ont.

The colonies which we wrote about as belonging to an estate, page 685, C.B.J., Volume II, were given sufficient stores to carry them only two or three weeks ahead at the time, but we could not con-

vince the executors that they would have no bees in the spring if they did not replenish the stores before they gave out entirely. This they did not feel inclined to do and the consequence is that this spring all the bees were dead, and nothing remained but the hives and combs, so that we did not get the chance that we thought we were going to have. In reply to your last question, we should say that perhaps it would be as well if you were to double up the colony with the next weakest one. We have no great desire to sell bees by the pound, and at the price which we ask we would not make a fortune. Just at the present time, a pound of bees is to us worth more than we ask for them and the bee-keepers who sell bees by the pound less than the prices quoted by us in Canada are doing so at a loss, especially at the present time. A little later on we could afford to take less figures and on reference to our price list it will be found that prices are much reduced.

WINTERING AT A LOW TEMPERATURE.

J. C. ELLIOTT.—In sending for a few goods I think that perhaps it would be as well if I were to let you know how my bees came through the winter. I have been very unfortunate, and am ashamed to send my report to the BEE JOURNAL. In the winter of 1885 and 1886 I lost forty-seven out of 100 colonies, last year I lost forty-eight out of ninety-one. It is now about six years since I was with you, and since then I have worked hard and persistently to make a success of the business. I have a fine stock of nearly everything necessary for carrying on the business, which cost me \$750, all of which I made out of them as I went along, but what is the use of all this without bees, and bees I must have as long as there is a ray of hope. I have bargained with a man near here, who has a lot of colonies in box hives, to fill up a lot of the empty hives with swarms. I can manage bees in the summer, but the winter beats me entirely. I have a bee-house with sawdust walls twenty-two inches thick, but somehow I cannot make it warm enough, and it oftentimes goes as low as 6° or 7° below freezing point during cold and windy weather. I am now building up my bees for next winter in packing behind the division-board. I had twelve put up this year with sawdust cushions, shavings, etc., and these all came out clean and dry with no signs of dysentery, while nearly all the others (although some of them had cushions on top) were in a very bad state and the bottom-boards were covered with dead bees and the combs dripping with moisture, while great numbers left their hives and died on the floor. Had twenty-seven colonies in your combination hives, and I lost all of them but four, and three of the four are weak. I am almost afraid to put bees in them again. Did you winter any in them, if so, how did they come

out? I had mine covered with clean quilts but I think perhaps they should have had cushions to keep in the heat. A man near here, who keeps a few bees in box hives, buries them every winter, and he generally takes them out in good shape. Last year he put up seven in this way and five of them came out in good condition. I tried five on the same plan and had one come through alive with but a few bees and queen, and this hive was affected with dysentery. I intend tightening up the doors and ventilators of my bee-house and making it warm, if possible, for next winter, and pack behind the division-board on top and give them another trial. If you can give me any advice it will be thankfully received.

Carleton Place, May, 1887.

Truly you have had hard luck, but the main trouble seems to have been that your repository has been too cold. If you can by, any means, arrange your house so that the temperature can be kept at between 42° and 45° right through the winter. You had better put a small oil stove in the house and temper the atmosphere in that way. There are quite a number of bee-keepers who have had to try this plan and all have reported it as favorable. By arranging a tin tube from the stove to the outside air, any gas which might be generated by the coal oil stove, would be carried off and would not affect the bees injuriously. We would not guarantee that bees in our combination hive will winter satisfactorily in the temperature you mention. If you will refer to the report of Mr. Laing in a late issue of the JOURNAL you will ascertain how his bees came out in the combination hive, and where he tells us that all the colonies which were wintered in the combination hive came through in good shape.

THE CANADIAN BEE JOURNAL

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

— PUBLISHERS, —

WEEKLY, \$1.00 per Year, Postpaid.

BEEON, ONTARIO, JUNE 8, 1887.

BUSINESS DEPARTMENT.

We have at Plantagenet, Quebec, two thousand sections 4½x4½x1½ with slots top and bottom only. We will sell them at \$4. per thousand F. O. B. cars there. They are not the size which should have been sent our customer hence the reason for our offering them for sale.

CIRCULARS RECEIVED.

Charles Stewart, Sarmonville, N. Y., foundation, extractors, etc. His circular is printed on one of J. Martin's chromatic cards.

Dr. J. P. H. Brown, Augusta, Ga., 18 page circular, apiarian supplies, bees, queens, etc. A day or two after the receipt of this circular we learned with regret that the Doctor's house and office were burned to the ground, causing a loss of some \$4,000. All the orders were destroyed and he requests those who had orders with him to send the same in duplicate and he will see that they are filled as promptly as possible. Should any readers of the CANADIAN BEE JOURNAL be among them they will please make a note of this.

PRICES CURRENT

BEE SWAX

Beeton, June 8, 1887.

We pay 35c 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....57c
 Section " over 50 lbs. "48c
 Section " in sheets per pound.....55c
 Brood Foundation cut to fit 3½x4½ and 4½x4½ per lb.60c
 Brood Foundation, starters, being wide enough for
 Frames but only three to ten inches deep....38c

EXCHANGE AND MART.

WANTED—Young man, experienced in Bee-keeping, to assist in taking charge of apiary. State wages. Address, JAMES W. MILLER, Fingal, Ont.

15 COLONIES of Hybrid Italians and Black Bees for sale at \$7.00 each. Frames 11½x11½. 12 in each hive. W. J. HONEYFORD, Avening.

15 COLONIES of Italian Bees for sale. Complete Jones hive. 10 frames with each hive. Good queens. Price \$8. Apply to ERNEST SCHULZ, Kilworthy, Muskoka.

NOTE HEADS AND ENVELOPES.—We offer a special bargain just now. 20lb note heads with printed heading, \$1.75 per 1000. Envelopes, \$2.00 per \$1000. See advt. THE D. A. JONES CO., Ltd., Beeton, Ont.

WONDERFUL OFFER FOR 30 DAYS.

I will sell all in one piece sections for 30 days or while this advertisement appears here as follows:—4½x4½, \$1.00, \$4.50; 5000, \$20; 10,000, \$38. Send two cent stamp for sample. All Apiarian supplies on short notice and cheaper than ever. Bee-keepers' Advance for one year and a Cold Blast Smoker, all for 75 cents. We are offering special rates on Honey Cans. We are manufacturing the best Honey Can for shipping that is now offered. This can can be made air-tight for shipping, which is more perfect safety. Our 60 lb. square cans boxed with nice planed lumber is taking the lead. Drop a card for our special low rates the lowest ever offered.

We guarantee satisfaction. Our new Honey Extractor at the old prices. Comb Foundation a specialty.

S. P. HODGSON,
 Horning Mills, Ont.

CANADIANS

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

BEEES BY THE POUND.

	May	June	July	Aug ^{31st}	Sept.
Bees, per ½ pound	1.75	1.50	1.00	1.00	.90
" " pound	3.00	2.50	1.85	1.75	1.70
Frame of Brood	1.75	1.50	1.00	1.00	.90
2-frame nucleus..	4.00	3.50	3.00	2.75	2.50
3 " "	6.00	5.50	4.75	4.50	4.50

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

Two frame nucleus consists of ½ pound bees, two frames partly filled with brood and honey, and a nucleus hive. If wanted in either "Jones" or "Combination" hive, add price made up, and deduct 40c. for nucleus hive.

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

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

Of course the only way for the above to go is by express.

QUEENS.

	Homebred	Untested	Tested	Selected	Virgins
May	2 00		2 50	3 00	
June	1 50	1 25	2 50	3 00	0 60
July	1 00	90	2 00	2 50	50
August	1 00	1 00	2 00	2 50	50
September	1 50	1 50	2 50	2 75	
October	2 00		2 50	3 00	

FULL COLONIES.

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

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

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Forty cents per year and three subscriptions at one time to any address, \$1. Sample copies free. Also manufacturers of all kinds of bee-keepers' supplies. Address,

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We'll pay 32 cents in cash or 35 cents in trade for any quantity of pure Beeswax.

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

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One Colony Bees.....	\$7 00
Five Colonies.....	30 00
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1 untested Queen.....	1 00
3 " Queens.....	2 00
1 " Queen reared by natural swarming.....	1 50
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3 Tested Queens, 1886 rearing, each.....	4 00
Extra Selected, 2 years old each.....	10 00

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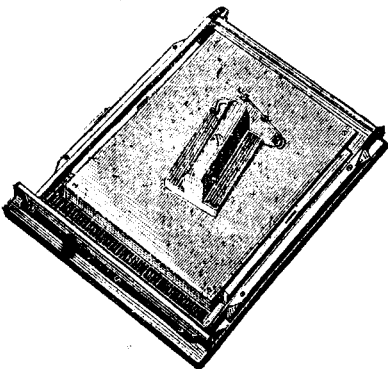
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Perfection Cold Blast Smokers, Square Glass Honey Jars, etc. Send ten cents for "Practical Hints to Beekeepers." For circulars apply

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I began the manufacture of comb foundation in 1883, and I am glad to say that I have not had the first complaint so far. Brood runs from 5 1/2 to 6 feet to the lb.; section about 11 ft.; shall commence making weather permitting, April 15th. Brood cut to almost any size. Section foundation unless otherwise ordered is made in strips 3 1/2 x 1 1/2 and 3 1/2 x 1 1/4. I will make up wax for you, you paying all freight or express charges both ways. Brood 10 cts. per lb.; Section, 20 cts. per lb. No circulars. Prices of foundation on application.

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ESTABLISHED 1855.

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Manufacturer and dealer in everything needed in the apiary. Alsike clover seed cheap and can be shipped from Windsor, Ont., if wanted in Canada. Send for free price list.

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Tested Queens before June 15th, \$1.50 each.
Untested Queens, \$1.00 each. After June 15th, 25 per cent less. Bees by the pound same price as untested queens.

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For the convenience of bee-keepers living within driving distance of Toronto, and inside the city limits, we have established an agency at the above address. All orders which he may be unable to fill promptly will be sent on to Beeton and be filled from here. He will have on hand a supply of hives, sections, foundations, knives, tins, etc.

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QUEENS CHEAPER THAN EVER!

My Queens are all bred from selected Imported and home-bred mothers, and are as good as the best. Give me a trial order.

Tested Queens \$1.00 each. Untested, 75 cts. each; 5 for \$3.00; 12 for \$6.50. Bees by the pound, same price as untested Queens.

Never had Foul Brood here.

ISRAEL GOOD,
10-2m Sparta, Tenn.

1887 QUEENS 1887

I shall continue to rear a limited number of Queens this season at \$1.00 and \$2.00 each. Pure Italian and Heddon's Strain a specialty. Fertilizing Apiaries isolated from other Bees. Can spare a few full colonies now.

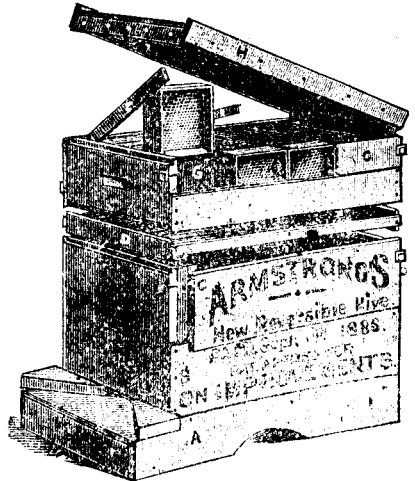
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FOR SALE CHEAP.

100 Colonies of Bees, Italians \$7.50, Hybrid \$6.50 on 8 frames. Dealer in Apiarian Supplies, Italian Bees and Queens.

Write for Prices to
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5-3mos. Cheapside Ont.

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NEW REVERSIBLE HIVE.

The cheapest, simplest, and most practical hive ever offered to the public. J. Valentine, of Carlinville, Ill., says: "I would freely give \$100 for one 190 colonies were in hives just like them." Sample hive complete and painted, \$2.50. Send your name and post office address plainly written on a postal card and receive my 32 page illustrated descriptive catalogue free. Address,

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Supply Men, Foundation Dealers,
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A large number of cuts in stock of
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HEDDON HIVES!



We are the owners of the patent on this hive in Canada, and we are in a position to make and sell the hive gotten up in any shape to suit the purchaser—either in flat or nailed up.

A complete working hive consists of bottom-stand, bottom-board, entrance-blocks, two brood-cases, one honey-board, two surplus cases (in good seasons we often use three surplus cases on the hive at one time) and cover. So that if you order these hives in the flat this is just what will be sent you.

Sample hives we make up with the brood-frames wired and the surplus cases supplied with fifty-six 4 1/2 x 4 1/2 7 to the foot sections. These are designed for testing the complete working hive.

In quoting prices of brood-cases and surplus cases, the set-screws, brood-frames and wide frames with their tin separators are always included, both in flat and made up. We quote the prices of sample hives made

up, and of the various parts made up, so that should there be any portions of the hive you do not wish you can easily ascertain what deductions to make.

Sample hive, made up.....\$2 90
Add ten per cent if you wish the hive painted.

PRICES OF PARTS.

	made up flat	made up
Bottom stand.....	12	09
Bottom-boards.....	15	11
Entrance blocks (two).....	03	08
Brood case, invertible, including set screws and frames wired when made up or punched for wiring in flat.....	60	48
Honey Board (wooden) slotted, invertible.....	10	07
Honey board, metal and wood, invertible	30	25
Surplus case, invertible, including wide frames and separators.....	60	50
Cover, half bee-space.....	15	13
Sections, full set of 28 in flat.....	15	15
Tin Separators, seven to each.....	10	10

The cost of one hive such as you would receive, in the flat, would therefore be (without honey boards of either description) \$2.15. Add the cost of whichever style of honey-board you prefer, and you get it exactly. If you do not designate either we shall always include the wooden-slotted one.

DISCOUNTS IN QUANTITIES.

For 5 hives or more, 5 per cent. ; 10 or more, 7 1/2 per cent. ; 25 or more, 10 per cent. ; 50 or more, 15 per cent. These discounts are off the prices quoted above, either nailed or in flat.

INDIVIDUAL RIGHTS.

We will sell individual rights to make for one's own use, and to use the new hive or any of the special features of Mr. Heddon's invention at \$5. We do not press the sale of these rights, believing that the hives cannot be made to good advantage by anyone not having the proper appliances. We will sell however to those who wish to buy, and for the convenience of such we append a list of prices of what we would likely be called upon to furnish in any event:—

Woodscrews per 100, boiled in tallow.....	\$1 25
Tap bits for cutting threads.....	1 50
Tin Separators, per 100 proper width.....	1 50
Brood Frames per 100.....	1 25
Wide " " ".....	1 50

Heddon's 1887 Circular.

NOW READY.

ALL ABOUT THE NEW HIVE.

Canadians who wish my circular to know about the new Hive, ONLY, should send to the D. A. JONES CO. for theirs, as I have sold the patent for all the American British possessions to them, and have no more right to sell the hive in their territory than have they to sell them in the United States.

Address,

JAMES HEDDON,
DOWAGIAC, MICH.

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HAMMERS.

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

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

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

SCREW DRIVERS.

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

TWO-FOOT SQUARES.

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

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

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

TWO FOOT RULES.

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

HAND SAWS

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

PANEL SAWS.

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

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

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

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

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

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and numbers of other dealers. Write for SAMPLES FREE and Price List of Supplies, with 150 COMPLIMENTARY and UNSOLICITED TESTIMONIALS from as many bee-keepers in 1885. **We guarantee every inch of our Foundation equal to sample in every respect.**

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ELLISON'S SPECIAL PRICE LIST OF

ITALIAN QUEENS AND BEES.

	WARRANTED FERTILE.			each.
	APRIL.	MAY.	JUNE.	
Single Queen	\$1.25	\$1.00	\$1.00	"
6 to 12 Queens	1.00	90	75	"
1 TESTED Queen	2.50	2.00	2.00	"
6 to 12 Queens	2.00	1.75	1.00	"
1 Two Frame Nuclei Untested Queen,	\$2.50.			

Special discount to dealers, and 10 cents 8 oz postage to Canada.

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

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Positively the best, most practical and easiest of manipulation of any hive made (takes the "L" frame) also his extracted honey have much improved.

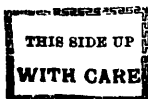
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His new Honey Cloth a perfect success, cheap and easily made goes with each hive. Each hive all complete including sections. The A. I. O. P. Sections, Frames, Smokers, Foundation, Honey Crates, Honey Knives, Extractors &c., &c., made and kept constantly in stock, sold at current prices, all first class.

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Are those that produce the best bees for gathering honey and are gentle bees. These are the Queens I purpose breeding from and believe they are superior to imported queens. I have selected three out of over 200 as producing bees famous for honey gathering, and originally bought from

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MR. G. M. DOOLITTLE

one selected by him from over 600 which I also will breed from. The value of Mr. G. M. Doolittle's Italians as honey gatherers is well known. Those who have tried the Heddon strain require no recommendation from me. A customer last season took over 1900 pounds of honey and increased to 27 from 14 colonies purchased from me last year. Another nearly 150 lbs. from one colony and increased to five. Another 140 lbs and increased to four colonies. These were all the bees I sold last year, or no doubt could give more recommendations.

Prices for 1887 as follows: Tested queens on June 5th or after, \$2; Hybrid queens on June 1st or after 60 cents each. Dollar queens after June 15th from Doolittle's Italians or Heddon's strain \$3; 10 per cent off to any person ordering one dozen during the season of 1887; 15 per cent off to any one ordering one dozen at one time (can have them sent three at a time if desired). Will endeavor to be prompt in shipping. In ordering please state whether from G. M. Doolittle's selected Italian queen, or from my selected Heddon strain. Address,

G. A. DEADMAN,

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Italian bees and queens in their purity, for beauty and working qualities are equal to any in the United States or Canada.

Comb Foundation, 30 to 40 cents per lb. Untested Queens \$1 each or six for \$5. Tested Queens \$2.50 each and bees by pound same price as untested queens. Frames of brood same price.

Our Queens are reared from the egg in full colonies. We use imported and choice homebred Queens to breed from. We are within half a mile of two railways—one direct line to Cairo, Ills. Four daily mails, we can fill all orders next day after they arrive, or by return mail. **Satisfaction and Safe Delivery Guaranteed.**

For further information write

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

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