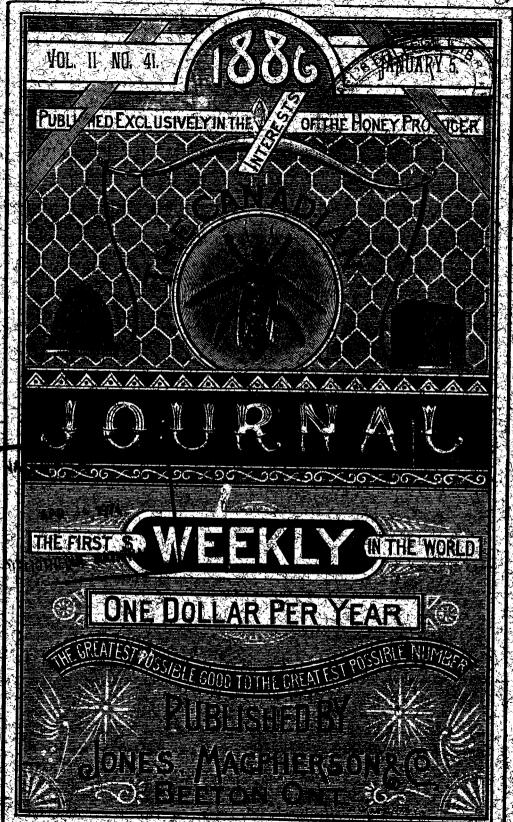
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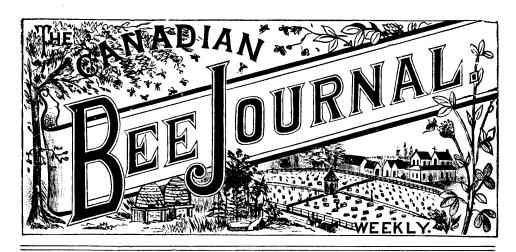
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Vol. II. No. 41. BEETO

#### BEETON, ONT., JANUARY 5,1887

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#### THE DEFENCE FUND.

E shall keep standing in type the names of those who have aided in the best interests of bee-keeping by subscribing to the defence fund in the "McIntosh-Harrison" case. There is no time to be lost. Our action must be prompt and decisive.

A. I. Root, Medina, O.....

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FOR THE CANADIAN BEE JOURNAL.

FERTILE WORKERS VS. STERILE QUEENS

SOME INTERESTING FACTS IN THIS CONNECTION FROM A. L. SWINSON.

N reply to Mr. G, M. Doolittle's query, page 713, C. B. J., "Will Mr. S. explain what a "fertile-layer" is? I shall say that the term "fertile-layer" would properly apply to any queen which was properly fecundated, after she began laying and so long as her eggs were fertile and no longer, as after a queen's eggs prove unfertile, she would then be an unfertile layer and not a fertile-layer.

The term fertile-layer as used by me in my answer to my own query, No. 117, in the C.B.J.,

is a misnomer, by a failure to prefix the "un." The query itself is correctly asked. I desire to say to Mr. G. M. D. that I agree with him in his answer to my query No. 117, in that part of it where he says: "The cheap methods employed by some breeders have something to do with poor or unfertile queens as well as the mailing of them whether chilled or otherwise." My practical experience and personal observation during the past few years, bear me out in substantiating Mr. G. M. Doolittle's assertion as quoted above. Queens which will early become unfertile or sterile layers are often produced by insufficient heat or warmth of the larvæ, after the cells are capped over, when or after they are distributed in the nucleus colonies or lamp nurseries to hatch out. Insufficient heat or too much heat will very seriously affect the developments of queens while they are still in cells, even a few hours before they are hatched out. I take this to be the greater cause of inferiorly developed queens, those which soon die, are poor layers, soon become sterile and have to be replaced, are but seldom of much profit to the purchaser after he gets them, rather then the fact that they are bred out of the natural swarming season, as G. M. D. would have us to think. The very best of cells built under and during the "natural swarming season," may and will produce the very poorest of queens, if not given the proper attention, so as to have the required warmth and heat up to the very hour of hatching out, just as much so as those built after the "natural swarming season" is over, would under identically the same treatment and conditions two days previous to their hatching—or even twenty hours previous to their hatching out.

Everyone who answers my query in reference

to "unfertile layers" appears to think that I mean none but drone layers. In this they are all wrong. Is it possible (?) that none of those gentlemen have never had a queen nor heard of those which are unfertile, but those producing only drones; certainly it is to be supposed so from the answer they have given to the query. There are sterile queens just as much as there are "drone layers", and of course they are more of an "unfertile layer" than those are that produce only drones.

Sterile layers are queens which have never had any fertility, or have lost it from some cause, those are the queens I had reference to, as being caused by being chilled in the mails, rather than to drone layers, the difference between the sterile layer and the drone layers is this: the sterile-layers are queens which lay their eggs as regularly in their combs as a fertile queen does, the eggs of such (sterile layers) are about twothirds the size of eggs from a fertile laying queen. I specially call Prof. Cook's attention to this fact since he asked the question in Gleanings, when speaking of the test he had made of the weight of eggs a queen would lay in twelve or twenty-four hours compared to her own weight, if all queen's eggs were of the same size? (No. they are not, even of fertile queens). And are never used by the bees, except to eat or carry out of the hive, as I have kept several of them, sterile-queens, for thirty to fifty days after they began laying-kept them till the workers would begin to lay eggs themselves, when I would kill the sterile-queen and give another.

I received a queen from H. Gray, Elwin, Ills., September 24th, 1886, with two others; this queen,-No. 3,-when received was just alive, all the workers in the cage with her being dead, and she very much fatigued. I introduced her safely and she layed well, was a large, fine, welldeveloped queen, but proved a sterile layer, as the bees never used her eggs. April 25th, 1886, I sent Rev. J. R. Black, Belwood, Ont., Canada, a queen by mail, which he received April 27th, and kept for over one month. After she commenced to lay, he wroteme, and none of her eggs were used by the bees, so I replaced her free of charge. By reference to my records I find I sent him a fine selected tested Italian queen, bred of No. 44-one of my finest breeding queens -hatched out July 23rd, 1885; laying August 5th 1885; tested, Aug. 22nd, 1885., this shows she layed her first eggs about August 1st, or she could not have been tested by Aug 22nd. queen had layed from Aug. 1st, 1885, to April 25th when I started her to Canada, as well as any queen need to do, and was at the time I took her from her colony, No. 64, but after her arrival

in Canada, two days later, she never layed a fertile egg. She was undoubtedly chilled in transit.

I have received from Mr. McLean, of Tenn., over 30 queens and he sends me the best I ever got of any breeder. In October, 1884, he sent me nine at one time; these, when received, would with the accompanying bees rattle in their cages when opened, and were so chilled as to appear perfectly dead; they were all-the queens-revived by carrying them into a warm room and placing them near the fire. I safely introduced the nine queens after they revived, two of the nine proved to be sterile layers, from their chilling and their eggs were never used by the bees, the other seven proved very good and one of those nine chilled queens proved to be a fine Albino-Italian queen and is the mother of my "American Albino Italian" strain of bees, from which cueen and her daughters my 60 colonies of "American Albino" are all bred, as were also all the queens of that strain that I sold during 1885 to 1336, and that one Albino of the nine chilled queens is to-day, or was the 1st of November, when I last looked at a hive, as prolific as any queen is desirable to be.

Isent Mr. Geo. H. Knicker bocker, Pine Plains, Dutchess Co., N.Y., two queens, April 17th, 1886, that were received and safely introduced by him; he afterwards wrote me that one of these queens layed eggs that were never used by the bees, although he kept her for a month or more—they were sterile of course. Just as two queens—Syrians I think he wrote me—that he had received from Mr. Frank Benton, Munich, Germany, had done for him in 1885.

So all queens that become unfertile, or are unfertile, are not drone-layers, not by any means, as drone layers and sterile laying queens are very distinct—the worker bees never supply the necessary saliva to sterile layers' eggs as they do to fertile eggs layed by a fertile or drone laying queen.

ABBOTT L. SWINSON,

Goldsboro, Wayne Co., N.C.,

Dec. 6th, 1886.

## Read at R. I. Bee-keepers' Association. CURRENT NEWS FOR BEE-KEEPERS.

E who follow this pursuit must keep posted and up with the times, or in these days of invention and progress we shall soon be left in the rear. If there is to be only the survival of the fittest let-

there is to be only the survival of the fittest letus make ourselves fit to survive in this our chosen occupation. There are improvements continually being made in hives and methods of management, and those who can appreciate and adopt a good thing as soon as seen, will have an advantage over those slow to take up new ideas. It is better to be slow and sure and hold fast to well proved methods than to rush blindly into those new and untried, yet should we not take pains to find out the merits of all improvements as soon as possible and lose no time in adopting those which save labor or make success more sure. Since last March there has been much brought forward, ideas both old and new, that are of interest to bee-keepers.

The feeding of sugar for winter stores has been much discussed in the bee journals. While many advocate selling the honey and giving bees sugar syrup for winter, claiming that it can be done at a profit and that bees will winter better than with honey, the majority favor that management by which plenty of natural stores are left in the hive. The question as to whether it pays to use full sheets of foundation in the brood-chamber when working for comb honey has also been under discussion. The theory is that when foundation is given in full sheets the bees make nice even combs and do not build drone comb as is usually done, and that fifteen or more pounds of honey are saved for every pound of wax or foundation furnished. This is generally admitted to be the case, but on the other hand it is said as bees are able to draw out foundation in about three days, they then store honey in the brood-nest and the queen has all the room she requires to deposit eggs, the result is that boxes are neglected, honey stored below, and a large amount that should go in boxes, used in rearing useless brood. That in working for extracted honey or increase full sheets are profitable. When comb honey is the object, if narrow starters are used in frames and boxes containing finished combs or full sheets of foundation given at time of swarming, they at once store honey in them instead of in broodnest, and as queen can only deposit eggs as fast as brood-combs are built, less brood is reared, little or no honey is stored and they are used for brood and pollen. This gives more honey in marketable shape. Drone comb will be built in some cases, but with right conditions this can be avoided. These conditions are a hive set level with a limited number of frames closely spaced, a young queen, the right kind of bees and a medium sized swarm. An extra large swarm, an old queen, frames spaced too far apart, or too many of them, will favor the production of drone comb. There is another reason not generally considered which favors the use of starters. When bees hang in festoons, secrete wax and build natural combs they are carrying out a natural instinct, its gratiScation stimulates their energy, and a colony so managed will gather

more honey than if not allowed to build natural combs. The suppression of this instinct in a measure lessens energy or prevents development of activity and affects the future usefulness of the bees. I think this idea is one worth attention, it will affect our methods considerably. It is said that in many cases when swarms are furnished with sheets of foundation or finished combs, the wax scales secreted by the bees are not used, but fall to the bottom and are lost. There are several prominent apiarists who claim that it does not take fifteen pounds of honey to make a pound of wax and that we go too far in the use of foundation. I believe this opinion, and the one that sheets of foundation are used at a loss in brood-chamber is growing among those who give the subject careful thought.

That natural swarms do better than those artifically made is admitted and this may be one of the many reasons. It may be possible to so perfect artificial swarming that we may get the benefits and avoid its disadvantages.

Another point for those who work for comb honey, although it is not new and has been tollowed by many bee-keepers for many years, yet is not well understood or its importance realized by bee-keepers generally.

It is that bees breed or cap over brood in shallow cells and store honey in deep ones. This natural law of the hive can be used to get nearly all the honey in sections. By placing frames so near together that bees can not lengthen out the cells for storage, these combs will be used for brood and pollen and the honey will be stored in wide boxes above. Brood combs that are already built out for storage should be shoved down to the right thickness and placed just beespace apart. In the fall when boxes have been removed they are spaced wider that they may be used for store combs for the winter supply of honey. The majority space their frames one and one-half inches from centre to centre, about onehalf inch between combs, in this case combs are about three-eighths or one-quarter inch apart, or one and one-quarter or one and three-eighths inches from centre to centre. This is too close for winter. Mr. Pond has ably advocated this plan of late and it is well worth following. I commenced bee-keeping in 1879 with the Hoffman frames and have used them almost entirely since. These frames have shoulders which keep them spaced one and three-eighths inches from centre to centre. They may be crowded together and when hives are shipped or handled the frames do not swing or slide. When a hive is opened several can be shoved back in a body and the required frame at once taken. I have tried some of the ordinary style, both with and without metal corners, and much prefer these. It may be because I am used to them. I can open hives and handle them as readily or quickly I think. With the late improved methods frames are not handled or hives opened as much as formerly and I expect to see these frames more generally used.

In my paper read last spring I called attention to the Heddon hive and the new system of management and to the use of shallow hanging frames. I have used these frames in shallow cases for brood chamber the past season (frames four and three-quarter inches deep) and they have fully met my expectations.

We are learning more each season in regard to the importance of formic acid in ripening honey. Now those who extract as a general thing do not do so funtil combs are capped and contents well ripened in the hive. As a result extracted honey will give better satisfaction than it has in the past when green, unripe nectar was removed as fast as gathered. Such honey soon fermented and lost its flavor. It has been lately claimed that the legitimate use of bee-stings and poison is not for self defence, that stinging is a mere side issue so to speak, that its principal use is to inject the formic acid into the cells of honey and to pierce the cappings of sealed honey for the same purpose. From what is already known this looks reasonable. We know formic acid is a preservative, that it changes natural sugar to its inverted form. That honey is partly digested by it, that many of the medicinal effects of honey are due to its presence and that in its nature it is similar to carbolic and salicylic acid. Had I time I would also like to describe Simmin's new non-swarming method, which may be of great value; the new Chapman honey plant which has been approved by the committee appointed by the American Bee-keepers' Society to test its merits; the exhibit of honey lately made by the Canadian bee-keepers at the Intercolonial Exhibition held in England; the new Solar wax extractor now used and praised by prominent apiarists, also to call attention to other topics of equal importance.

SAMUEL CUSHMAN.

Pawtucket, R.I.

For the Canadian Bee Journal.

INFLUENCE OF THE PRESS.

HE press of to-day occupies a far more important and powerful position in society than did the orators of Greece simply because its influence is more durable and extensive. The voice of the speaker, though it may carry conviction and sway the feelings and minds of the crowd, has only a

momentary effect, but let the reporter transfer the hot thought to paper and a permanent impress is conveyed to the minds of millions. The words and thoughts of the orator die with the occasion, but the reader carefully engraves them on his memory in the recess of his reading room Verily might Wendell Phillips exclaim to the angry mob, "howl on I speak to thirty million here," turning to the reporters. The Professor Wiley lie, circulated throughout the extent of our land through the medium of our powerful dailies, is yet accepted as gospel by a great portion of people with whom I have come in contact. Some of them say, "What cannot human ingenuity now accomplish in the way of imitation?" Others, again, who know that Wiley has confessed it to be a pleasantry, say that the honey men brought pressure to bear upon him to write the confession. The merest tyro in apiculture is struck at the lamentable ignorance displayed in the conversation of those unacquainted with the profession. It simply illustrates the saying that "there is no royal road to learning." The influence of this "scientific pleasantry" is far more widespread and injurious in its effect than most of our apiculturists will admit. Newspapers are always on the hunt for items of sensational interest and an experience on the staff of one of the New York dailies disclosed to me the fact that a reporter without a lively imagination was out of his element. When an item appears in any newspaper detrimental to our interest it would seem to me that our duty is to contradict it immediately in the same. About three years ago a chemist named Norton, attached to one of the grape sugar works in the city of Detroit told me in an hotel on Michigan avenue of an apparatus which he claimed to have used successfully in the manufacture of artificial comb honey. He claimed great results from it and said that one party in Chicago made the small sum of \$4,000 by its operation in one year. He asserted that starch, glucose and honey, were, if I remember, the ingredients which were inserted into the artificial comb. The moulds and everything necessary for successful manufacture of the artificial comb honey he said he would sell for the small sum of \$100.00-a little smaller amount than A. I. Root offered for a similar invention. Mr. Root can easily find out Mr. Norton's address, but probably the latter may want more than \$100 if he hears of Mr. Root's generous offer of \$1,500 for a comb honey manufacturing apparatus. Mr. Norton appeared to me to have been deeply affected with the Wiley sensation, and therefore fancied that the operation really could be performed, but it seemed strange to me that Mr. N. did not avail. himself of the benefit of his discovery as well as the Chicago man who made the \$4,000 clear. The chemist's full address was in the Detroit city directories three years ago, and if he is now residing there the curious, no doubt could easily obtain an interview.

G. J. Moloney.

We have added to the offer of \$1000 by A. I. Root another \$500, and we are prepared to pay that amount for such a machine, or machines or if the process alone, can be shown us, and proven a success by actual experiment. While exhibiting at the London Exhibition last October a reporter on the Advertiser of that city, came along, and began talking about the artificial honey which was on exhibition. wanted to "write us up." To some of the exhibitors he made the statement that there was any amount of this spurious article made down in Montreal and he could furnish the recipe if necessary, getting it through a friend. Coming along just at this time we were asked our opinion, and we gave it substantially as tollows: That if he could furnish us with a recipe, even whereby we could make comb honey, that should look and sell like that then before us, we would give him \$1000. This offer did not shut him up, and he went away satisfied that what he has said was true, and assuring us that he could get the recipe. It has not, however, came to our frands as yet. Needless to say, a man coming to us with such stories on his lips, did not get the opportunity of "writing us up."

## 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.

#### STIMULATIVE FEEDING-BUILDING UP-ROBBING.

Query, No. 122.—In spring management, is it profitable to feed strong colonies with plenty of honey—for stimulating them to increase brood rearing?

(2.) The best way to build up weak swarms without injuring strong ones,—best way to prevent robbing?

JUDGE ANDREWS, MCKENNY, TEXAS.—(1) I do not think it is. (2) I do not think there is any

- best way. If you can do it at all, you beat me. (3) Have no weak stocks nor expose any honey near your stands.
- H. D. CUTTING, CLINTON, MICH.—(I) No. (2) By a judicious selection of frames of brood and feedging a little every day when no honey is coming in. (3) Use caution in all you undertake. Care prevents robbing in many cases.
- G. M. DOOLITTLE, BORDDINO, N.Y.—(1) Have not found it so after repeated trials. (2) Wait till warm weather, when brood can be easily spared from the strong, and a few bees in the weak can care for it. (3) Keep only strong colonies.

James Heddon, Dowagiac, Mich.—I have entirely abandoned stimulative feeding at any time of the year, after giving it, what satisfies me, a thorough trial. The best way to build up weak colonies in the spring, (supposing they have plenty of honey and pollen in the hive) is to keep them as warm as possible.

PROF. A. J. COOK, LANSING, MICH.—(I) The feeding will certainly stimulate most bees to harder effort. (2) Stimulate as suggested above, and give capped brood cautiously as other colonies can spare it and the weak ones care for it. (3) Keep only strong colonies. When bees are idle only work with them under bee tent.

- DR. A. B. MASON, WAGON WORKS, OHIO.—
  (1) Not generally. (2) It will not injure strong colonies as much as it will benefit weak ones, to use brood from the strong ones to build the weak ones up with in the spring. If the building up is to be done during a honey flow, give weak colonies only as much room as they can occupy and let them do their own building up. (3) Adjust the entrance to the strength of the colony.
- G. W. Demaree, Christianburg, Ky.—(1) It does not pay me, and I think it will not pay any one. (2) Keep them as warm as possible. To prevent robbing, don't let them get a start. But if they do get to robbing a hive, cover it over with some rubber cloths, or sheets, and if the case is a bad one, keep the cloths drenched with cold water till the trouble is over.
- J. E. POND, FOXBORO, MASS.—(1) I think not. The better way is to uncap a few cells each day, till the honey yield begins. (2) By using the nucleus plan, which can be found in any of the recent works on apiculture. Allow no cause of robbing to exist; be careful not to open hives when no honey is being gathered; keep all colonies queened, and give weak colonies contracted entrances.

DR. C. C. MILLER, MARBIGO, ILL.—(1) I believe it very profitable for bees to have abundant stores in spring, and if not left from previous fall they should be fed. (2) Contract the broodchamber, tuck them up warm, but don't draw from strong ones until they have so much that they will still be left very strong. Practically this leaves it that very little drawing from strong colonies can be done. (3) Keep Italians and strong colonies.

A. L. SWINSON, GOLDSBORO', N.C.—Yes, I think it is, if done in time to get the young bees reared in time to make workers for the honey flow. (2) Begin feeding every few days, just as early as the bees will take it. You will get plenty of bees inside of two months. (3) Shut up the entrances to the hives, but be sure to give plenty of ventilation at the top, by putting on top story and removing the quilt or ducking (covers) for say twelve to twenty hours, then give but small openings at entrances for a time.

ALLEN PRINGLE, SELBY, ONT.—(1) If the strong colonies are deficient in stores in spring, supply them with plenty, and if the queens are good the brooding will be attended to without any artificial stimulation. If the queens are rather poor layers supply plenty of stores and in addition feed regularly. (2) Keep them rearing as much brood as they can care for. (3) Judicious management is the recipe for the prevention of robbing. Do not tempt robbers by careless feeding—contract the entrance.

O. O. POPPLETON, HAWKS PARK, FLORIDA.—
(1) No, stimulative feeding in the spring was not profitable with me in the latitude of northern Iowa. (2) Just baby them all you can by such means as confining them on as few combs as possible and keeping them snug and warm by the use of chaff packing or its equivalent. When they get strong enough to need them, give extra combs one at a time in centre of brood-nest. (3) Don't give them any inducement to get started is the best remedy, but if they do get at it, I find the use of a bunch of wet hay or grass at the entrance of the hive being robbed, to be the simplest and best remedy I have tried.

H. COUSE, CHELTENHAM, ONT.—(1) Yes, if they have not got plenty of honey in their hives. (2) Crowd them on to as few frames as possible and keep them warm; but in case they are apt to dwinule to nothingness, then shake hatching bees at the entrance and let them run in, this will not injure the strong colony as much as taking a frame of brood from it, and besides the weak one might not be able to care for a frame of brood. (3) Use great care when bees are apt

to rob. If they get started pile wet grass against the entrance after closing the entrance to one bee-space.

S. T. PETTIT, BELMONT, ONT.—(1) Most emphatically no. Give your bees plenty of water with just a very little salt in it, in some sunny, warm place and they will do their "level best" at breeding. Bees' watering troughs should be cleaned once a day. (2) Give weak stocks in spring a few young bees from very strong stocks and they will work wonders in a short time. (3) Hard to say, circumstance has so much to do with it. I think we often lose more time in fussing over very weak stocks in spring than they are worth. To prevent robbing when the honey season closes, give large entrance say six inches long by three-eighths, for full stocks. I think ten inches safer than two.

DR. DUNCAN, EMBRO, ONT.-I find the best way with strong swarms that have plenty ofhoney, is to let them alone. Build up weak swarms by taking a card of brood and the adhering bees out of a strong swarm, a card where the young bees are coming out of the cases, shake them all in front of the weak swarm, returning the card to where it was; the old bees will return home, but all the young ones will remain. Feed them, keep them warm with cushions; repeat the same from another strong hive in a few days. To prevent robbing, be careful that they do not get the taste of any honey that may be left out, and feed at night. If they commence on any weak swarm it is likely they have no queen, but if there is a queen, put the weak one in the cellar for a few days. Contract the doorway when put out to the space of about one

#### DRONE REARING.

Query, No. 123.—The best way to get drones early in the season and prevent the bees from killing them in cold weather when there is no honey coming in?

G. M. Doolittle, Borodino, N. Y.—Liberal feeding with plenty of bees.

DR. C. C. MILLER, MARENGO, ILL.—I should depend on feeding, but it is difficult to control.

O. O. POPPLETON, HAWKS PARK, FLORIDA.—I have never had occasion to experiment any in this matter of early and late drone raising and keeping.

J. E. POND, FOXBORO, MASS.—Force brood rearing early and supply drone cells profusely; later, remove the queen and the drones will ordinarily not be destroyed.

Dr. A. B. Mason, Wagon Works, Ohio.-To get drones early in the season, place drone comb in the centre of the brood. To prevent them being killed in cold weather, remove their queen, or feed.

JUDGE ANDREWS, McKENNY, COLIN CO. TEXAS. -Procure a maiden queen of the pest blood that is over 40 days of age, and winter her in a stock of young bees well supplied with stores.

Prof. A. J. Cook, Lansing, Mich.—By feeding a little each day, and by adding capped brood from other hives will secure very early queens. Removing queen will prevent killing of drones.

Dr. Duncan, Embro, Ont .-- Put an empty drone comb in the centre of a well bred Italian or any other kind you want to breed from, feed them a little every night and keep them warm when there is no honey coming in.

S. T. PETTIT, BELMONT, ONT.—Strong stocks will breed drones early enough for all practical purposes without any effort on your part, provided they have plenty of stores. To prevent bees from destroying them, feed liberally when there is no honey coming in.

H. D. CUTTING, CLINTON, MICH .-- Place a frame of drone comb in brood-nest of a colony containing an old queen. To keep them late in season, feed a little every day or take away the queen.

H. Couse, Cheltenham, Ont.-Select combs that have a patch of drone comb in the centre and place one or two at a time near the centre of the brood chamber of your strongest colonies. See that they have plenty of food, and, when there is no honey coming in, feed them every evening.

ALLEN PRINGLE, SELBY, ONT .-- You can get drones early by uncapping a frame of drone comb honey and placing it in the centre of a strong colony, meanwhile, feeding the colony freely. You can keep the drones in any colony in the fall by removing the queen and supplying the colony with abundance of stores.

JAS. HEDDON, DOWAGAIC, MICH.—All I desire to say regarding this subject is, that it has always been best for myself and customers for queens, not to crowd the season at either end by trying to raise queens very early or very late. It you must have queens extremely early in the season, I advise purchasing them from those who have either carried them over from the year before or raised them in an earlier latitude.

A. L. SWINSON, GOLDSBORO, N. C.--I often

done so till February. I use a colony or two to keep drones-specially, all through the latter part of a season. I keep them without any queen, but give eggs and brood, to keep off "fertile works," every 15 or 16 days, but remove all queen cells before they hatch. To these colonies, I give my best drone brood and let it hatch there with them. There they remain, through thick and thin, till nature disposes of them. 'Tis the only way I have ever been fully successful in keeping them.

G. W. DEMAREE, CHRISTIANBURG, KY .- To get early drones, insert a comb which has a patch of drone cells near its centre, right in the midst of the brood, if the comb is empty and dry, partly fill it with warm diluted honey before inserting it. After all, some colonies, not at all interfered with, may give you drones first. Last season, I had a young queen hatched in March, as cold as that month was, and while standing in the apiary watching the bees fly on a sunshiny day, I heard the familiar "whiz of a drone's wings and succeeded in tracing him to a hive. My young queen was mated in good time.

Written for the Nor'-West farmer. THE BUSY BEE.

BY THOS. COLLINS, PORTAGE LA PRAIRIE.

AVING been asked by several people in Ontario as well as Manitoba for my opinion as to the possibilities of success-

ful apiculture in this country, I think I cannot do better than to publish a snort account of my experience in bee-keeping during the past year, in your excellent journal, that those interested may draw their own conclusions and govern themselves accordingly.

On the 3rd of November last year I put away in my cellar eight hives, six being chaff-hives and two the common simplicity; the whole being as I thought well supplied with stores, and well protected by chaff cushions. On the 5th of April, the weather being favorable, and the bees appearing very uneasy, I put them out, two (one in chaff and the other in common hive) being in good condition, and the other four very weak. The weather after this turned cold and bleak, and through this and probably other causes, they dwindled down until eventually I had but one strong colony left. This I added to by purchasing four 2-frame nuclei, and thus commenced my season's operations. From this stock, after the most extraordinary vagaries in the way of swarming, and after losing at least two strong swarms by absconding, I have now ten colonies, which, however, I intend to reduce to eight by doubling up. Four of these keep bees with drones as late as Dec 15th, I have ! (in chaff hives,) I intend to bury in a clamp,

and the other (in ordinary hives) to put in my cellar. I have not fed them this year; being under the impression that however careful one may be in the matter of feeding sugar, and however economical it may be from one point of view, the honey produced will be more or less affected by it, and thus to a greater or less extent adulterated; and further that no food can be so good as that gathered from natural sources. This, of course, is simply my own view of the subject, and may differ materially from the views entertained by bee-keepers of superior experience to mine.

I have from this stock extracted 395 pounds of prime honey, and taken 129 pounds of fine comb, and have now, I estimate, over 30 pounds in each of the ten hives, leaving the yield for the present year, as nearly as I can give it, at say 860 pounds. I must observe that this past summer has been an exceptionally fine one for gathering, there having been scarcely a day that the bees could not work; still, to counteract this somewhat, the extreme dryness of the season has, I consider, had the effect of lessening the flow of nectar. And after carefully estimating the work performed by the busy little fellows, I have arrived at the conclusion that even if we have to purchase a new supply of bees every spring, they will more than repay their cost, even during the worst seasons. I notice also that the greatest stowing of honey takes place during the latter half of August and during September, which appears later than in Ontario or the northern States. The statement that the honey made here is of the finest quality, and superior to any yet imported, may appear bold; but it is warranted by the testimony of those who have tried the two, and by the higher price it commands. I can account for this only by the fact that there are no cultivated tracts of bee pasturage here, and that the honey is gathered almost entirely from the large number of wild flowers and shrubs, the product being a very superior article.

The question most difficult to be answered seems to be whether bees can be successfully wintered in this country. I notice that a few of my fellow bee-keepers in this Province claim to have found the secret of success. I am sorry that as yet I am not of the number. Yet I see no reason why it cannot be done as well here as in parts of Ontario and Quebec; for from what I can learn on the snbject the period during which they must be prisoners need be no longer here than in many other parts where wintering is successfully practised. I have an idea that successful wintering here will largely depend upon how late in the season we can keep our

colonies brood-raising, so that we may have a good supply of young vigorous bees to carry over the winter and populate the hives until their places can be taken by young bees in the spring; and I have no doubt that apiculture can be made not only a success but developed into an industry.

I may mention in conclusion that I have introduced the new Heddon hive into my apiary this season, and find it an exceedingly handy and desirable hive, especially for the production of comb honey, and intend in the future to adopt it exclusively.

And now hoping our friends who have successfully solved the wintering problem will give us the benefit of their knowledge through your colums, and that the bee-keepers of this Province may all meet at our next Provincial Exhibition and compare notes.

## J. W. Vance in Western Farmer, HOW TO GET BEES OUT OF A TREE.

T may be of interest to some of our readers to know how to get bees from a tree, and if so just read what a few bee-keepers of experience advise A. J. Cook says, "cut out the part containing the bees." I imagine this advice rather difficult to follow. I would rather cut the tree down first.

W. Z. Hutchinson says, "climb the tree, cut out the combs, take out the bees and transfer them to a hive." This would just be fun. Take the hive up the tree; no trouble to take a Langstroth or Simplicity up a tree, especially if the tree be a lofty oak, torty teet to the first limb. Tie a rope to the hive, attach the rope to a belt around your waist, then climb the tree hand over hand; "puff a little smoke into one of the holes (C. C. Miller) communicating with the cluster." The bees will issue quietly at the other, where you can place your hive with entrance opposite the exit hole and the bees will enter.

Some people think this more bother than they are worth, even James Heddon says it is cheaper to buy bees than to take them from trees. When he comes to look over the A. B. J. and see how many ingenious plans have been invented for capturing wild bees he may change his mind again.

Alphabet Brown, of Ga., says: "put the nozzle of the smoker in the lower hole, and the bees will go out at the upper." He dosen't tell us how we are to capture the bees when they appear at the upper hole, but I would suggest that we had best have a hive upon the top of a forty or fifty foot pole, and hold the hive in front of the upper hole, and as the bees leave

their arborial home they may enter the hive, and with ease we can let them down to terra firma. Of course it will be necessary to dig a pit deep enough to allow the pole to decend far enough for us to reach the hive. J. E. Pond, Jr. thinks it will hardly be a paying job. H. D. Cutting is not in favor of cutting the tree down if you cannot smoke the bees out, and advises that they be let alone.

We are not considering the question of letting bees alone in the top of a tree; we are showing how easy it is to get them out when you have a mind to. There is nothing, scarcely, impossible to him who is determined to succeed. Climbing the tree is the next question after you have settled the question of the presence of bees in the tree. If not too high, climb the tree, carrying with you the hive (where you do not use a pole) and all the implements necessary to drive out the colony—a smoker loaded with proper fuel a box or two of Oshkosh matches. a patch of sand paper sewed to the seat of your pantaloons, because a smoker will sometimes go out (the fire I mean). Have a wire attached to the smoker so you can hang it to a branch when not in use. You may need a veil, so you had better take one with you, for you cannot always be sure that the bees you are going to house in your "patent gum" are gentle. Don't forget to take an auger along to bore the exit and smoker holes.

I imagine now you have reached the large limb, thirty, forty, fifty feet from the ground. It leans a little and the bees are seen hovering about the entrance on the under side of the limb. You have a rope which you throw over an overhanging limb and bringing the ends down make a swing that hangs just below the part of the limb inhabited by the colony you propose to hive. You climb down upon the swing, taking with you your hive, the broodchamber only, and your auger. You set the hive across the rope, and placing your feet in the hive you have a convenient platform upon which to stand (after the manner of a rope walker.) Thus standing, you take your auger and bore a hole below and one above the cluster. Now, taking your match box and smoker you light your match and smoker and begin to drive the bees. The bees having observed your ingenious preparation for their capture at once acquiesce, issue from the upper aperture and go directly into the chamber which you hold in your left hand for their convenient entrance. while you use the smoker with your right. After the bees are all in the hive you hang up the smoker, tie a cord about the brood-chamber and lower it carefully to the ground; then sett.

ing down upon the rope you swing back and forth a few times and turn a few somersets, hang by one foot, then by another cord, let yourself down to terra firma.

How could any bee-keeper say it would be cheaper to buy bees than to take them for nothing from the tops of trees?

Another plan might be adopted, which may strike you as a little on the Hibernian order, but has been found to be quite successful, namely, to climb the tree, carrying with you a good handsaw. After you have reached the limb containing the colony, climb out beyond the cluster, and saw off the limb next to the body of the tree. The weight of your body aided by the attraction of gravitation of the earth, will cause the limb, and you and the bees to descend to the ground, where you can hive them when you "come to." I think by carefully observing the foregoing directions any of our readers will be able to capture wild bees.

#### R. I. BEE-KEEPERS' SOCIETY.

MEETING of the Rhode Island
Bee-Keepers' Society was held yesterday afternoon at the rooms of
the Domestic Industry Society, the
President, Dr. C.D. Wiggin, in the chair.
The first paper read was entitled:

"SOME EXPERIENCES OF A BEGINNER IN BEE CULTURE,"

by Mr. Nathan B. Lewis. The speaker related his experience from April, 1885, when he began the culture, up to the present time. His first colony were Italians in a movable frame have. He fed them with a dish of sugar syrup, supposing it perfectly safe; but in a few days he noticed other bees about, and r is own lying dead on the ground. He returned the hive to the man from whom he purchased and found all the honey robbed and that the bees had deserted. The second colony he fed inside the hive and had no more trouble with robbing. The speaker then described humorously the spread of the bee fever in his neighborhood, and his own headlong investments in all the appliances for bee-keeping. His colony sent out a vigorous swarm in May, which was successfully hived. His experience with a swarm of Albino-Italian bees was related; an ugly swarm, he called it, and as hard workers as he ever saw. But al was not success, and some of the discouragements of bee culture were depicted. The moth miller occasioned much

The death of queens, difficulty trouble. in securing swarms and winter-killing were some of the other difficulties spoken As advice to those beginning beekeeping, he urged all to save money, time and temper by first investing \$10 in the purchase of books and mastering the principles. It is very important to have all hives in an apiary of one size and style, so that parts will be interchange-He favored comb honey, as extracted honey does not retain its flavor. The chief benefit of full sheets of foundation is the preventing of building drone comb; it probably does not save the bees so much labor as claimed.

The speaker closed with an interesting description of some old superstitious beliefs about bees; the great advances in the knowledge of the habits and qualities of bees within recent years. The study of this subject is a most fascinating one; the pursuit of beekeeping of endless interest, and their product is an extremely healthful and delicious article of food.

Discussion followed the paper, on the relative merits of Italian bees and black bees. It was claimed that while Italian bees were less irritable they were also less industrious, and that the fierce bees gathered more honey. This opinion was also controverted, and it was claimed that some Italian colonies did as much work as any, and that their industry did not depend on their temper.

The next address was that of Mr. A. C. Miller. He spoke of spring manage. ment of bees. Some of the points advanced were as follows: Care of bees in spring is second in importance to successful wintering. The boxes should be overhauled the first mild day in April, empty combs removed, honey supplied if needed, and brood chamber contract-Stimulative feeding at this period is not safe, as it induces bees to fly out on days when they would be chilled. As the season advances it may be commenced. As a substitute for pollen use rye meal. To get as large a force of bees as possible by the time of the honey harvest is the object. The foregoing methods have been proved safe.

Mr. Samuel Cushman next spoke, his subject being "Current News for Beekeepers," which will be found elsewhere in this issue.

### SUNDRY SELECTIONS.

A BEE ROOM IN CELLAR.

Rop. McLean.-Would you kindly answer a question through your valuable JORRNAL? I built a bee-room in centre of cellar 10x14 feet, floored and lined with sheathing. I got a five inch tin pipe connected to stove pipe above. Will I require any more ventilation? I only have ten colonies this winter; lost all last winter except two; bought eight this summer. The fall crop was the best honey I ever saw (for fall honey) and the first extracting, the worst of which I sent you a sample in August to analyze. What do you think of my bee-room? I intend to make bee-keeping a business after this. The colonies I bought more than paid my expenses, although half of them did nothing, being late swarms. I like your BEE JOURNAL better every week.

Hopewell, Picton Co., N.S., Nov. 27, '86.

You would be the better of underground ventilation, but with the draft you will get from the stove, we think that your cellar should be all right. You will, of course, have a damper in the pipe which runs up to meet the stove pipe, to enable you to control the draft. We are pleased to note your success, and trust that it may long continue. We thank you for the kind words you say of the Canadian Bee Journal.

#### KILLING OFF DRONES.

MRS. JOSEPH FARR .- In the spring of this year I bought one hive (California patent) of bees in May they swarmed, on the 31st of July the spring swarm swarmed and on the 17th of August the bought ones swarmed again. I have not taken any honey from them and think I shall not ,either this winter. I do not know anything about bees. My husband went to work in August and killed every drone that came out of the hive, about the hours from one until three in the afternoon, since that I see the bees have hauled out hundreds of small bees. They were a trifle darker than the worker bees and did not seem to have any hair on the shoulders. I send you a sample of the small bees also of the workers to know what the small bees are and what my worker bees are called. The bees in the bought hive never made any hency in the frames above, all the summer; is there any way of making them do so? Would inserting one of your patent guards at the entrance of the hive prevent the bees from swarm. ing and keep them working all summer? Would it be wise to do so, as next year I want to get some honey as I have one swarm in a barre's and thought I would let them increase? What fuel do you use in the smokers?

Farrs Ranche, C.P.R., B.C.

Killing the drones would, we should say, have nothing to do with the bees which were being hauled out of the They were probably young bees which had died in the cells. Putting on a bee guard would restrain the swarming impulse, and if the colony is strong and there is not too much room in the lower story the bees will go to work in the upper compartment and up surplus honey-providing Youcan there is any honey coming in. easily get them to do this without the continual use of the drone guard. We would suggest that you get one of the many manuals on bee culture and give it careful study during the present winter. You will then have a better understanding of the process by which a crop of honey may be got than now. We use "punk" or dried rotten wood in our smokers and find it about as good as anything that we can get cheaply and handy in this section.

#### A NEW KIND OF CLAMP.

F. MEHLENBACKER. -- Although my report of the season is not as good as it might be or has been other seasons, I will send it in correctly, which, I think, is a duty every bee-keeper ought to perform, otherwise, reports are not of much value. It is true we have good and bad reports and no doubt many of them are correct. Associations send in reports all in a line, saying, so many colonies, and so many increase, so many pounds honey, but, in many cases, what does it signify? It is not mentioned how they are provided with winter stores, nor what number of pounds were fed back either in honey or sugar to make them safe. For the above reasons, we often have little knowledge of a bee-keepers true success. tainly, it is sometimes hard to judge whether the season, locality or bad management was the cause of a poor report, or perhaps the bees were in such a bad shape in spring that all efforts (even with a good season and locality) could not secure a good crop. It is true bee-keeping has a bright and a dark side, but has it not often good reasons for showing its colors? At the present time, I think other callings have no brighter side than bee-keeping. I know, in this vicinity, farmers are not so very well pleased with their crops or prices either. Then, why, if such things are ruling and all are complaining of hard times, should it be expected that bee-keeping alone would be

bright and blooming? Here, the spring was very favorable for bees, and alsike clover yielded well but as soon as it was over the entire yield made a sudden stop, still, I thought my colonies all had abundant stores for winter. I was a little disappointed in looking over them in the fall.

I commenced in the spring with sixteen colonies increased to thirty-four. In swarming time sold one first swarm and three in the fall. One of these had plenty of stores but the other two I sold with bees and empty combs only. Have taken 1,400 lbs extracted honey but had to feed back 150 lbs. to have them sufficiently strong to carry them through. All my hives are the Jones, one-storey, single-walled, and by actual weight, were made to go 65 lbs. each on the 1st Oct. My bees are all packed in chaff in clamps. This fall, I have made a new clamp, something different from what I have seen. I will describe it, and should you find any objection, please tell me through your valuable Journal. It is 5\(\frac{1}{2}\)x6\(\frac{1}{2}\) feet square. and holds eight colonies, all in a compact block I have three entrances south, three north, one east and one west, giving 11 inch space between hives and ten inches all round outside for packing. The two from east and west are put in last and are between the others, leaving just room enough in the centre to slip in the last hive. The roof is two-sided, not a great deal of pitch, and is shingled. Both sides of roof can be taken off or put on in almost a moment. For several reasens I like it better than a long clamp, but of course I will not say I like it or call it good unless bees come out all right in the spring.

Fisherville, Dec. 6th, 1886.

As long as the chief principles connected with wintering are observed, the shape of the clamp does not matter much. We shall be glad to have a report in the spring of how your clamp worked.

## THE CANADIAN BEE JOURNAL

BEETON, ONTARIO, JANUARY 5, 1887.

While this issue is winging its way to its readers the O.B.K.A. convention is in full swing.

On Tuesday last 45 new names were added to our list—since that another 89 have sent in their subscriptions. One and all are thanked by us for these tangible appreciations of our efforts.

Now that a rousing meeting is to be the tribute to our English Commissioners, why not turn the amounts held for that purpose over to the "Defence" fund account. Let us hear from those interested.

We are advised by an attorney in Sherburne, N. Y., that Thos. Horn is "played out," in other words, he hasn't anything for anybody to take so there is little use incurring additional loss over the matter. Perhaps, he may come around all right yet. Let us at any rate hope for the best. If it is any consolation to those who were losers, let us say that the publishers of the C. B. J. are losers to a greated amount than any others individually so far as we have heard of.

OUR COMBINATION OFFER CONTINUED—WITH A BIGGER
CHANGE THAN EVER.

Our offer of the Bee-Keepers' Magazine and Canadian Bee Journal for \$1 expired with the old year. We have decided, however, to continue this combination till February 1st. Last month our offer extended only to New subscribers. For the coming month we will make the combination offer to ALL subscribers, who send in a sufficient amount to cover their arrears of subscriptions and pay ahead to the end of volume III or April 1st 1888,—15 months from January 1st, or \$1.25 to new subscribers. This is the "biggest" combination offer yet made, and everybody should take advantage of it.

Mr. J. A. Abbott, the elder of the firm of Abbott Bros., Southall, Eng., (son of C. N. Abbott, the originator and for many years, editor of the British Bee Journal) has been with us at Beeton for some days. He has severed his connections with the firm and contemplates opening up a business for himself in London, (Eng). His present trip has been mainly for the purpose of seeing American and Canadian supply-dealers, and gathering such new ideas as he can put to use in his new business. He is a young man, but is thoroughly up in his business, and his visit here has been mutually profitable with him. He has brought samples of several inventions, some of which are unique and novel as well as useful. Mr. Abbott will be present at the meeting of the Ontario Beekeepers going on while this issue of the JOURNAL is reaching you.

#### A VISIT TO JOHN MCARTHUR

On our way home from Ypsilanti Convention, we called on Mr John McArthur, of Toronto, who has been a large bee-keeper for some years past, and now devotes his time almost exclusively to that pursuit. He has a nice situation on the side of the Don valley, when the improvements Mr. McA. intends putting on the property are finished, it will indeed be a picturesquespot. The hives used in this apiary are all the Jones single walled, the system of wintering pursued, we may

describe as follows:—Each colony is packed in sawdust in the fall, the frames turned lengthwise in the hive and the division boards used for inner walls; over the top, nothing but the ordinary cotton quilt is used. In the spring, the entire apiary consists of colonies on three to five frames and his arrangements for protection are so complete there is soon sufficient bees to make the strongest kind of a colony and no danger of spring dwindling. Mr. McA. does not extract from the brood chamber, all the extracting is done from the second storey, which is simply an ordinary Jones hive minus the bottom board. To give you an idea of the strength of the colonies when ready for the honey flow, we may say, the brood chamber is filled to overflowing with bees. If we remember rightly, Mr. McA. gave us his yield as being something over 150 lb per colony and from one colony we think he said he had taken 240 pounds. All the honey is thoroughly ripened before being extracted, so that the ideas of this bee-keeper coincide with those of Mr. Bingham, as expressed at the Ypsilanti convention. If you want to get a taste of real nice honey call on Mr. McA. first time you visit Toronto, it is so thick that it can be cut out with a knife and it has never been granulated or re-liquified. By the way, will honey thoroughly ripened in the hive, granulate as soon as honey which has been artificially ripened? Mr. McA. will be next season our agent at Toronto for sample supplies, so that customers in that vicinity may be able to procure anything they may require in the way of hives, sections and foundation at Beeton prices. Mr. McA. stock will be kept as replete as possible.

#### CONVENTION NOTICES.

YORK STATE BEE-KEEPERS CONVENTION.

We, the bee-keepers of York State, will be pleased to meet you at our State Convention at Albany on the 11, 12 and 13th, of January next. We expect to have the largest and best convention ever held by bee-keepers in United States and hope our Canadian brethren will be on hand in goodly numbers. W. E. CLARK, President.

The bee-keepers of the western part of Ontario will hold a Convention at Tilbury Centre, January 12th and 13th, 1887. Everybody and their friends are invited. Arrangements for reduced fares at the Grand Central Hotel have been made, also for a free hall. SMITH & JACKSON, Tilbury Centre, Dec. 16th, 1886.

Great United Convention.—The New York State, Eastern New York also the New Jersey and Eastern Bee-Keepers Association will hold their great united Convention in Albany, N. Y., January 11th, 12th, and 13th. This Convention will be one of the largest, if not the largest, ever held anywhere in this country, and it behooves every bee-keeper to attend—a grand exhibit of aplarian fixtures is promised—An unusually brilliant programme will be prepared and announce-

ed later. Joint Secretaries.-Geo. H. KNICKER-BOCKER, JOHN ASPINWALL, F. E. JOHNSON.

### SPECIAL NOTICES.

The prices as quoted for honey in our market report are in exchange for supplies at catalogue prices.

Discounts on all supplies (as advertised in our catalogue for 1886) till February 1st will be five per cent. We are crowded up pretty with work in all our departments. We have busy at work no less than 27 hands, and we shall increase to about forty in another week.

Mr. H. Chapman, of Versailles, N. Y., has appointed us his Canadian agents for the seed of the Chapman honey plant. We have now in stock, ready to ship from this office any quantity of seed that may be desired. Canadian customers will please make a note of this. Prices same as Mr. Chapman's.

#### REDUCED PRICE OF SECTIONS.

We have a good many thousand sections cu 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 3\frac{1}{2}x4\frac{1}{4} and 4\frac{1}{4}x4\frac{1}{4} and in widths of either 1½ or 15 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 onepiece Linden (formerly Basswood) V groove sections. Dovetailed and spruce sections, we will furnish at 10 % off price-list rates.

### HONEY MARKETS.

EXTRACTED. Quantities have arrived, nearly all of which has been disposed of, at about the same prices as were paid. For A 1 clear, clover or linden, 9 cts. is paid; Mixed flavors 8½ cts.; Amber colored 8 cts.; Fall honey 7 cts.; Buck-wheat 6 cts. Comb.—Demand is thus far light, a market can at once be found for 500 to 1000 pounds of nice plump one-pound sections, 14 cts. is the best price; No. 2 12 cts. There is very little left in this country.

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.

DETROIT HONEY MARKET.

Best white comb honey in one pound sections 11 to 121 cts. with a large supply in commission houses. Extracted 7 to 9 cts. in 60 lb. tin cans. Beeswax 23 cts. M. H. Hunt.

Bell Branch.

NEW YORK

The market for new crop comb honey is just opening. We note an improvement in sales and Most of the comb honey that has arrivprices. ed is badly colored, which makes it second grade, and we suppose is due to a poor season and long finishing. We quote 1886 crop as follows:—Fancy white comb, I lb. sections, clean and neat packages, 15 to 16c., ; fancy white comb, 2 lb. sections, clean and neat packages, 12 to 13c., ; fair to good, 1 and 2 lb. sections, clean and neat packages, 10 to 14c.,; fancy buckwheat, 1 & 2 lb. sections, clean and neat packages, 9 to 12c., ; extracted white clover, kegs or small barrels, 6½ to 7c., ; extracted California honey, 60 lb. cans, 5 to 5½c.,; California Comb, 10 to 11c.,; beeswax, 22 to 24c.

McCaul & Hildreth Bros.

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 sesaon that can i., marketed or consumed, an 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.

HONEY OUTLOOK FOR SEASON OF '86.

The new comb honey coming in shows good quality. There was but little old comb held over, and consequently new arrivals sell well. Fancy white comb in i lb. sections, in paper boxes or glassed, commands 12 to 14c. and 2 lb. sections, glassed, 10 to 12c.; while lower grades of both sizes go at 8 to 11 c. Dark pungent flavored Buckwheat Honey will probably be a good crop and go lower. The crop in N. Y., Pa. and Vi. is reported fair, while Ill., Iowa, Kas., Wis. and N. W. are said to have yie'ded well. A small quantity of Southern strained irregular Honey comes here, and sells as low as 50c. per gal. The crop there is large. Eastern Honey in barrels, sell at 5 and 6c. The California crop is reported heavy, and the 5 gal cans (two in a case,) finds ready sale in the East. In consequence of the big crop of this splendid Cal. Honey and low freights, there have been a number of cars disposed of here already at 41 and 5 c. per lb. and much larger sales are expected in cooler weather.

PANCOAST & GRIFFITHS. 242 South Front Street, Philadelphia.

## PRICES CURRENT

BERSWAY

## EXCHANGE AND MART.

OB LOT OF HIVES.—See our advertisement of a job lot of hives in another column. The D. A. JONES CO., Ld., Beeton, Ont.

**NOULTRY** keepers and others give your hens bone meal, crushed oyster shells, Royal Egg Food, etc., and get eggs in winter when prices are high. Send for price list of supplies. CHAS. BONNICK, Box 184, Toronto.

SECTIONS.—We have a lot of dove-tailed sections—No 2—which we will sell at \$2 per thousand to clear them out. Size 3½ x 4½ and 4½ x 4½. Widths 1½ to 1½ inches. Terms cash. THE D. A. JONES CO., Beeton, Ont.

MOKERS.—A job lot—those which have been discarded from regular stock—in Nos. 1, 2 and 3. We will sell at \$1.00, 75 and 50 cts. reappetively as long as they last. We have only about 50. THE D. A. JONES CO., Beeton, Ont.

OTE HEADS AND ENVELOPES.—We offer a special bargain just now. 201b note heads with printed heading, \$1.75 per 1000. Envelopes, \$2.00 per \$1000. See advt. JONES, MACPHERSON & CO., Beeton, Ont.

### ADVERTISFMENTS

QUEENS.

t.f.

QUEENS.

My Italian BEES and QUESTS cannot be excelled in beauty and working qualities. I make a specialty of rearing fine bees and queens.

PRICES REDUCED FOR 1887.

Be sure to send for my new catalogue before buving. Address.
FRANK A. EATCN.
Bluffter, Ohio.

## BEE-KEEPERS' ADVANCE.

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

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

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

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AT BEETON PRICES. 

### MR. JOHN MCARTHUR,

845 Yonge Street, Toronto, Ont.

Is our authorized agent for Toronto and vicinity for all supplies manufactured by us. He will have constantly on hand a supply of staple goods such as hives, section, foundation, knives, tins, etc., etc.

THE D. A. JUNES CO., Beeton.

FOR SALE, GROUP OF 120 AMERICAN BEE-KEEPERS' photographs, 10 of them Canadian, got up by E.O. TUTTLE, Vermont, almost all the leading bee-keepers of America in it. Supplied by R. F. Holterman from Frantford, Ont., who is the authorized agent for Canada. Price, post paid \$1.55. is a VIV. in post paid, \$1.35; size 11X14 in.

#### 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..... " 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.....\$ " per 25...... 10 00 In flat, each..... 35 THE D. A. JONES CO.



PAT.APPLIED-FOR

## PERFECTION BEE FEEDER.

The "PERFECTION" having been thoroughly tested, and proved of inestimable value in bee culture, the undersigned, a practical apiarist, is prepared to furnish the same at reasonable prices, and the usual discount to the dealers. Among the many points in which this feeder excels all cthers are the following.

The supply of food can be perfectly regulated.
The food will not become rangid, nor sour, and is strained before it reactes the bees.

reactes the bees.

The same method is used in feeding as provided in nature.

The "PERFECTION FEEDER" is simple in construction, well made readily cleansed and durable.

It is most admirably adapted to the use for which it is intended, and will give entire satisfaction to those who will give it a trial, as its merits are unquestionable.

Prices for Sumple Feeder, by mail, postage paid, 4 lb. Feeders, 50ets. 6 lb. 60ets. 10 lb. 70cts.

For one dozen PERFECTION FEEDERS F.O.B., 4 lb. \$3.50, 6 lb. \$4.50 Address, M. E. HASTENG, New York Mills, Oneida Co., N.Y.

## TOOLS For BEE-KEEPERS HIVES

#### HAVIMERS.

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.

Ve 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 makeusually 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 The 18 inch are of with two lines in these. good steel (Shirley and Dietrich) and can be sold by us at 50c.

The 20-inch are finer steel-same makethat money.

#### PLANES.

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

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

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

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

BEETON, ONT | 3-103

## NEW AND SECOND HAND.

We have about 500 hives all made up—some of them painted, which are just as good as new, having been used for storing combs in, a few have also been used one season, coat of paint will make them all as nice as new. We have no room to store them, and will sell them at less than regular figures.

We will sell at...... 1.00 .95

These prices are for the painted ones, deduct 10 per cent. for the unpainted ones. The terms will be CASH with order, and these will be nett figures.

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

## 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.

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CHAS. DADANT & SON.

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### THE CHAPMAN HONEY PLANT.

Having expended thousands of dollars in bringing before the people one of the most wonderful honey producing plants known in the United States, or even in the world, and testing it honestly and fairly. wish to say through your valuable Journal, that the seed contains so much oil that nothing but fresh seed will grow, or by thrashing if the seed the bruised or broken it will not grow, for this reason, and by the advice of many prominent bee-keepers, I have decided to sell the limited amount of seed I have raised this season at the following prices, and will seed due them at this low price: seed due them at this low price:

Half Ounce..... Onc Ounce ......\$1 00 Half Pound...... 3 00 One Pound..... 5 00

One ounce contains from 1600 to \$1800 seeds. One pound of seed is sufficient for helf acre if preperly thined out and reset. Write all orders plainly and given your Post Office in full E. CHAPMAN.
3-103 Versailles, Cattaraugus Co., N. Y.

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

Are unsurpassed for Quality and fine Workmanship. A specialty made of all styles of the Simplicity Hive." The 'FALCON' that 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 "PALCON" BRAND FOUNDATION. Dealer in a full line of FRANCONTER. Supplies. POUR (4) per cent discount in January. Send for libratrated Catalogue for 1887, Free.

W. T. FALCONER.

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MANUAL OF THE APIARY

SINCE 999 S@LD 1876.

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

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

A. J. COOK, Author & Publisher.

## State Agricultural College Michigan

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### 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.

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Flat Bottom Comb Pourdation. gh side walls,4 to 14 square feet to the pound holesale and retail. Circular and samples free **VANDEUSEN & SONS** 

SOLE MANUFACTURERS.

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Shipping Labels.

These are for pasting on the tops of cases.

Price, per 10..5c. by mail, 6c.
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I take the Poultrv

Monthly and consider it published, by a large majority. My fowls are now the best paying stock that I own. I have cleared over \$400 thusf ar, and business is just boom-

ing. I would advise every poultry keeper to subscribe for it without delay, as it is brim full of practical information.



I do not subscribe for the Poultry Monthly but intend to do so at once. I am told it is the best poultry journal published. I said I was too poor. My hens did not lay, They sickened and

died. I had no poultry paper to tell me what to do, all because I wanted to save a dollar. I I had to sell my place under mortgage. "old woman" has gone back on me. My hair is getting thin, and the fact is I feel bad.

### Special Offer For One Dollar

We want to place the MONTHLY in thi hands of every one interested in poultry and pet stock, and will send the paper for the balance of this year free to all who subscribe now at \$1 for 1887 and mention the C. B. Journal,

Remember, the regular price of subscription is \$1.25 per annum, so do not fail to take advantage of this liberal offer. Address,

Address.

#### THE POULTRY MONTHLY.

P. O. Box 215, Toronto, Can

## **PRIZES**

Are being offered by the Magazine to the three subscribers who obtain the largest amount of comb honey during 1887. Write for particulars.

BEE-KEEPERS' MAGAZINE.

Barrytown, N.Y.

Mention this Journal.

Queen City Oil Works

The Highest Honors and Gold Medal For Our Menufactured only by

SAMUEL ROGERS & CO.