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NEW SERIES
Vol. 2, No. 2, 1895. February.

 The
Practical

Bee-Keeper

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the REVIEW and the book "Advanced Bee Culture" will be sent. I am yet receiving weekly shipments of young laying queens from the best breeders in the South. These untested queens I will sell at

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three late but different issues of the REVIEW will be sent. The May Review contains an article from M. M. Baldridge in which he tells how to get rid of foul brood with the least possible labor — no shaking bees off the combs, they transfer themselves to a new hive at a time when their bodies are free from the spores of the disease. He also tells how to disinfect hives with one fourth the labor of boiling. B. Taylor tells how to secure as much white comb honey as extracted.

W. Z. HUTCHINSON, Flint, Mich.

A NEW DEPARTURE

The Bee Keepers' Quarterly

Will be issued April 1st, 1894, and be largely devoted to editorial review of apicultural literature. It will contain not only all practical methods of management and devices found in Bee Journals but many points not given elsewhere. Earnest efforts will be made to eliminate the impractical theories and claims so often met with in bee literature, giving only practical information which may invariably be relied upon. There is some who make a financial success in those hard times and to show you how they do it will be Quarterly's mission. Price 25c per year.

JAMES HEDDON, Dowagiac, Mich.

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The Practical Bee-Keeper.

NEW SERIES
VOL. II.

TILBURY, ONT., FEBRUARY, 1895

No. 2.

The American Bee Journal in its new dress is vastly improved—typographically. As for any other improvement we fear that is impossible as it seems now so near the beau-ideal of a real live bee-keeper. May its shadow never grow less.

For some time we have felt that the reports of the Michigan Experimental Apiary should be submitted to the "boiling down" process. The reports fairly bristle with figures, and as examples of apianian statistics are no doubt valuable. But the greater number of bee-keepers feel that life is too short to experiment along the same lines themselves and their thanks will be due the Rev. W. F. Clarke who in the American Bee Journal has so happily furnished bee-keepers with a digest which contains the salient features of the reports. We publish his extracts on another page.

We will send "The Practical Bee-Keeper," twelve months free to one bee keeper in each locality where bees are kept who will send us the names of at least fifteen of his acquaintances who are bona-fide bee-keepers. Our object in this is to send a sample copy of our journal to every bee-keeper in Canada, with a view to getting his subscription. You can help us in this and at the same time secure your own subscription free. The first to comply with this request in each locality will be credited with a full twelve months' subscription. Write plainly and give the post-office in each case.

Notes from Florida, an interesting article on bee culture in the Sunny South, by Mr. C. D. Duvall, is crowded out this month.

Mr. T. E. Abbott in the "Review" advocates the representation of bee-keepers at Farmers' Institutes. In Missouri the State furnishes the speakers at these Institutes, a certain number of which are held annually at different points throughout the State. These speakers of course, are thoroughly poetted in their respective subjects and are supposed to answer all proper questions asked by the audiences they address. Mr. Abbott's idea is that the bee-keepers as a body should try by every means in their power to have the importance of apiculture brought before these Institutes and should secure some good man to represent the industry at all Farmers' Institutes. It may be said 'en passant' that these Institutes are not attended by farmers only, but as they are generally held in some centrally located town and village a large number of the citizens attend. That this is true we know for we have ourselves attended the meetings of Farmers' Institutes where the farmers were in the minority. Failing the appointment by the government of a speaker on apiculture—for he should be a government appointee and receive a salary. Mr. Abbott suggests that local bee-keepers in each community where institutes are held, attend all of its meetings, and when an opportunity offer, talk bees the best he or she knows. Here is proper subject for thought and above all action on the part of Canadian bee-keepers.

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ONTARIO BEE-KEEPERS

ANNUAL CONVENTION OF THE
ASSOCIATION ASSEMBLES IN
STRATFORD.

The Foul Brood Disease.

The Inspector Appointed by the Provincial Government Reports the Disease on the Decrease—Some Valuable Pointers From Prominent Bee-keepers.

The annual convention of the Ontario Bee-keepers Association opened in the city hall Stratford Jan. 22, President A. Pickett of Nassagaweya in the chair. There were present L. F. Holtzman, Vice President, Brantford; Wm. Couse, Secretary, Streetsville; Wm. McEvoy, Woodstock; Allan Pringle, Selby; R. McKnight, Owen Sound; W. Z. Hutchinson, Flint, Mich.; S. T. Pettit, Belwood; J. K. Darling, Almonte; J. E. Frith, Princeton; Prof. Fletcher, Ottawa; D. S. Smith, St. Thomas; John Meyers and F. A. Gemmill, Stratford; D. Chalmers Poole, Wm. Goodyear, J. B. Hall and John Newton, Woodstock; A. E. Sherrington, Walkerton; Dr. Duncan, Embro; J. H. Shaver and C. Edmonson, Brantford; A. Tolton, Walkerton; C. A. Onellette, Tilbury Centre; A. W. Brown, Chard, A. E. Hoshuall, Beamsville; J. Pierie Drumquin, F. A. Ross, Balmoral; M. B. Holmes Athens; Sam Smith, Listowel.

The president in a short address reviewed the work of the past year from the bee keepers' standpoint and which

upon the whole had been rather discouraging. The bees wintered well and came out in spring with few losses, but the cold and wet weather following drove them back to their hives and compelled them to live on their winter stores with the result that they were exhausted before the weather became favorable for the gathering of a fresh supply and in consequence many died of starvation. The survivors gathered but little clover honey and other blooms being cut short by the drought, the result was little more than half a crop. He made feeling reference to the death of the late Secretary of the Association, Mr. S. Corniel. He was pleased to notice that their annual meetings were increasing in attendance and also that the Provincial Government had taken an active interest in promoting the honey-making industry by appointing a foul-brood inspector and in other ways. He hoped that in the near future assistance financially for the association would be forthcoming from the same quarter.

A. E. Sherrington, of Walkerton, contributed a paper on "Conventions and how to make them successful." He advocated that papers presented should deal with practical live questions such as would interest every bee man and evoke general exchange of opinions. Prof. Fletcher, of Ottawa, addressed the convention on the subject of spraying fruit trees in bloom and its bearing on bee culture. He also read a paper dealing with the same question by Prof. Webster, of Wooster, Ohio. The reader agreed with Prof. Webster that bees are in danger of being poisoned by spraying the bloom of fruit trees and that the danger remains until the bloom has fallen.

In the evening Wm. McEvoy, foul brood inspector, presented his annual report, showing that the disease was on the decrease and was now to be found more in the newer settled parts of the

province than in the older localities. He had destroyed fifteen hives of diseased bees since last meeting.

Then followed a paper on the subject, "Will the bee keeping of the future differ from that of the past?" by W. Z. Hutchinson, of Flint, Mich.

R. H. Smith, St. Thomas, took for his subject, "How are the bees wintering?" Proper preparation was necessary to successful wintering. He recommended clamps packed in chaff, but favored cellar wintering in extreme climates. With proper attention brooding will go on all winter, unaffected by changes in temperature.

SECOND DAY.

PRESENTATION OF REPORTS AND ADDRESSES ELECTION OF OFFICERS.

The eleventh annual report of the directors showed a deficit of \$52.63. The president and vice-president were appointed a committee to endeavor to secure a grant from the Dominion Government.

Mr. Pettit presented the report of the deputation which went to Ottawa to promote the passage of a bill prohibiting the sale of imitation or impure honey. The measure passed the Commons, but was thrown out by the Senate.

J. K. Darling gave an interesting paper entitled "Some difficulties," and F. A. Gemmill one on "Experience in marketing comb honey." Prof. Fletcher gave an account of some experiments made at the Ottawa Experimental Farm, showing the advantages of using good wax over poor for foundations.

Allan Pringle delivered an able address on "Education," after which the election of officers took place as follows: President, J. B. Hall, Woodstock; Vice-President, J. K. Darling, Almonte; Directors, W. J. Brown, Chard; J. K. Darling, Almonte; M. B. Holmes, Athens; Allan Pringle, Selby; J. W. Sparling, Bowmanville; Wm. Couse, Streetsville; A. Pickett, Nassageweya; F. A. Rose, Barmora; S. B. Pettit,

Almonte; A. E. S. Herrington, Walkerton; F. A. Gemmill, Stratford; W. A. Crystler, Chatham; Hughes, Barrie; Foul Brood Inspector, Wm. McEvoy, Woodburn; Sub Inspector, F. A. Gemmill, Stratford; Auditors, John Myers, Stratford; R. H. Smith, St. Thomas; Delegates to Toronto Industrial Fair, R. F. Holtmann, Brantford; Delegate to Western Fair, R. H. Smith, St. Thomas.

THIRD DAY.

CLOSE OF THE SESSION—BRANTFORD CHOSEN AS THE PLACE OF NEXT MEETING.

Ontario Bee-keepers' Association met for the purpose of concluding unfinished business which consisted mainly in discussion of papers given the previous day by Messrs Darling and Gemmill. A general discussion on the wintering of bees furnished valuable information each member gave his experience. Mr. Pettit said it was possible to winter bees as successfully and with as much certainty as any other stock and showed how it should be done.

At Wednesday's session a resolution was passed providing each member of the association with a copy of the Canadian Bee Journal. The legality of the resolution was questioned and a motion to rescind it carried. A scenario for the judging of honey at exhibitions was adopted and ordered to be recommended to the different societies. Resolutions of thanks to the city for use of hall were passed and the convention adjourned.

The Executive Committee met immediately afterwards and reappointed W. Couse, Streetsville, Secretary, and Martin Emigh, Holbrook, Treasurer. It was agreed to call a special meeting of the association for Toronto during the time of the meeting of the North American Bee-keepers' Association next September.

Brantford was chosen as the place for the next annual meeting of the Association.

The Pleurisy Plant.

NEBRASKA BEE-KEEPER.

BY JAMES HEDDON.

Respondent to the call of your valued contributor, Mrs. Lambrigger, I will try to tell in the language of a layman, what little I know about the pleurisy plant, and throw in on the side what I have been told about heartsease and smartweed.

Pleurisy, or pleurisy root, as the plant is properly call, belongs to the milkweed family. It is not only a much greater honey yielder than any other member of its family, in this locality, but it differs from most of them in so far as no milk is found in the plant, except in the root, and besides it has no fine sticky threads to tangle the bees. It differs from the two other prominent honey yielding members of its family, in the following particulars: While the pods and seeds appear almost identical, the pleurisy plant is much shorter, more bushy, greener and more velvety than its sisters. The clusters of blossoms are very different colored, ranging from a light to a dark orange and at nearly all times during its bloom one can observe with the naked eye, nectar standing in drops in everyone of its little reservoirs. Here, our bees will not leave it for any other blossom, not even basswood when yielding most copiously. As it blooms three or four weeks after basswood it fills in a very important niche, to bee-keepers of this latitude. It seems to favor poor soil, and is so tenacious that these two characteristics, added to its splendid yielding qualities, makes it par excellence for cattering in waste places

Its being a PERENNIAL, is greatly in our favor. Its luxuriousness of growth and copious yielding qualities, seem to have no choice between wet and dry

weather. During the most severe drouth or protracted wet spell, it is always yielding honey and the bees are always at it. I would give a nice round sum to know of a more valuable honey plant.

We have a little smart-weed and some heartsease here, but not enough of either or both to ever get any surplus from it. We find the difference as follows: Smartweed is much smaller, and the juice of the leaves are full of pepper; rub a little in your eye and feel it "smart." Heartsease resembles overgrown smartweed, but there is nothing smarty or peppery about it; and in the center of the leaves we find a "heart" shaped, light colored spot.

Some years ago, when duck hunting in Iowa, I found acres of it all of five feet tall, growing around the edges of slews, bearing a black seed which the gamey old mallards considered a rich repast. It was just the plant to hide us so completely from view that the plump old fellows would fly so close to us that we could see their eyes. The natives there, called it heartsease, and some called it bergamont.

You may rest assured that I knew just what I was advertising and selling and knew of its great value, before I sent out seed of the pleurisy root plant.

Dowagiac, Mich., Jan. 2, 1895

How Bees Live During Winter.

CONTINUED.

BY TSESELSKY.

Translated from the Russian.

We know by physics that air will retain in suspension only a certain quantity of water. This quantity is determined by the degree of heat in the air; the warmer the air the more water vapor is absorbed, the colder the air the smaller the quantity of water which is held in suspension. If then the air

which contains a certain quantity of vapor is cooled to such a degree that it is no longer capable of holding the vapor, the excess becomes separated from the atmosphere under the form of liquid drops. In like manner the air at a certain height of temperature, but not yet saturated with vapor, and presenting the appearance of dry air, will be found at its greatest degree of saturation, and will present an appearance of dampness if it is cooled to such a degree that the quantity of vapor which it already contained should suffice to saturate it. This latter case but rarely the former, is met with in the case of bees which are wintering successfully. The bodies of bees taken individually, contain a heat of 35° Cen. In the immediate neighborhood of, and even in the group, so long as there is no laying, a heat is maintained of from 10° to 12° Cen. The air breathed out by the bees, having in their bodies, 36° Cen. is already partially impregnated with water, but on the instant that it meets with the fresher air outside it becomes cool which causes it to attain its point of saturation. If however it comes in contact with a body very hygrometric (absorbing water with great avidity) such as unsealed honey, it is clear that this body will take from it an appreciable quantity of vapor or even will dry it up to such a degree that even if it becomes more cool, this air in striking the still colder walls of the hive would leave there only a minimum quantity of watery vapor. A colony of bees having these conditions will winter regularly, that is to say successfully; the walls of the hive will produce as little dampness as the material of which the hive is conducted is a poor conductor of heat, or that the heat produced in the hive will be better maintained there, on condition, naturally, that the interior dimensions of the hive, as also its entrance, will be such that the bees will be able to maintain a heat in the centre of the group of from 10 to 12° Cen. But

if the interior space be too small, if the hive be too full of bees, if the ventilation be imperfect, if the entrance be too narrow or too low, if the water stand be placed in too warm a place, the conditions will be such that the bees will be unable to keep, even around the group a temperature of from 10 to 12° Cen. Then the heat in the hive will be increased, and the uncovered honey will not be able to absorb in a warm, non-saturated air the quantity of water necessary to the bees. Then the bees become a prey to a thirst which cannot fail to have harmful consequences. A colony of bees having these conditions will winter irregularly that is to say non-satisfactorily.

It is proved by common observation that the honey absorbs from the air, more or less water according as the air is more or less charged with watery vapor. If on the contrary the air contains too little dampness it happens frequently that the honey itself loses a part of its water. This latter case is found in summer, when the bees after having stored a quantity of freshly-harvested honey, which contains much water, endeavor, by a swift movement of the wings, to send into the hive, the greatest possible amount of warm and consequently relatively dry air, which in depriving the honey of a certain quantity of water, renders it more dense, and permits them to seal it in the cells.

The experiments made by me in this direction have shown that 3 grammes of honey taken from sealed cells, have in 24 hours in an atmosphere, heated to 30° Cen. and partially charged with vapor, absorbed an average of 58½ grammes of water only, whilst 3 grammes of the same honey, in the same air, charged with the same quantity of water, but cooled during the experiment to 10° Cen. have absorbed in the same space of time 1.527 grammes of water, which I have verified by weighing the honey with the greatest care.

Boiled Down.

BY REV. W. F. CLARK, In A. B. J.

I notice that no reports from the Michigan Experimental Apiary have appeared in the American Bee Journal since May 31, 1894. This does not greatly surprise me, for most of what has been published since is so overloaded with figures as to bewilder the ordinary reader. But why should not a brief statement be given of the results arrived at? The publication of the reports in full is rendered less necessary by the appearance of a special bulletin issued by the Michigan State Agricultural College, giving a detailed statement of the experiments for a year. I presume similar bulletins will appear annually. Pending their publication, why not boil down each report as it comes out, and give the essence of it? Suppose I constitute myself cook, and try my hand at this boiling-down process?

SUGAR FOR WINTER STORES—This is the first of the topics that have been reported on since May 31. In the fall of 1893, Mr. Taylor selected 24 colonies for cellar-wintering, as nearly equal in all respects as possible, one-half of which were to be fed sugar syrup for winter stores, and the other half to be fed with honey for the same purpose. The necessary feeding was done the last of September. The amount of stores consumed was very small, but the important point brought out was the economy of feeding sugar stores instead of honey. The average consumption of sugar was but $3\frac{1}{2}$ pounds from the 15th of Nov. until the first days of April, while that of honey was $6\frac{1}{2}$ pounds, or nearly twice as much.

SPRING PROTECTION AND STIMULATIVE FEEDING.—This report is very difficult to boil down, being almost all

figures, and must have cost a large amount of labor and patience. The results can be given almost in Mr. Taylor's own words. They were a great surprise to him. While he had long been doubtful whether spring packing and stimulative feeding repaid the work and expense, he fully believed there was considerable advantage in them. But he found that in every way in which comparison can be made, the unpacked colonies had the advantage both in increase of strength and in weight. It should be said also that out of 13 two-story hives packed there was a loss of four colonies against none among those not packed, while of the one-story hives the loss among the packed ones was more than twice as great as among the unpacked ones. For stimulative feeding it is to be said that it showed a very trifling advantage in a fourth case. The history of these hives, packed and unpacked, fed and unfed, is continued through the season in a subsequent report, which embodies a mass of figures almost as puzzling as logarithms. The season was not favorable and continued experiment gave no satisfactory results. Mr. Taylor is inclined to draw some inferences in favor of small brood-chambers, but admits himself that the premises are slender for so doing. But all through the season, the unpacked colonies maintained the superiority over the packed ones.

FOUNDATION FOR SECTIONS.—The next report is really a continuation of an earlier one in which the superiority of the Given style of foundation had been shown, only the sample of Hunt foundation excelled the Given by 6½ per cent. while the Given excelled the best of all the others by 18 per cent.

FOUL BROOD.—The latest report which has come to hand contains a very important experiment designed to ascer-

tain whether the germs of foul brood would retain their vitality when contained in beeswax that had been manufactured into foundation. The late Mr S. Cornéil stenuously took the affirmative of this much debated question, and Mr. Taylor's experiment, while not positively conclusive, nor absolutely final, affords strong presumptive evidence that Mr. Cornéil was right, and that unless care be taken to bring the beeswax at least to temperature of boiling water, it is possible to convey the germs of that dread disease in comb foundation made from it.

Guelph, Ont., Dec. 12th.

The Other Side.

BY PETER BUSSEY.

The object of this article is to state a few of the many difficulties met with by practical bee-keepers and the man who tries to make an honest livelihood by keeping bees.

In my humble opinion there is no other industry the follower of which meets with so many obstacles as in bee-keeping.

Let me take my own case for example because a man can pen his own experiences better than those of others I think I have had as much and as long experience as any man of my age. I know by acquaintance the greater part of the bee-keepers of Ontario and I think they will agree with me that their experience has been similar to mine.

In the first place some jealous-minded person asks us, "How have your bees done this year?" Of course we humble bee men are generally satisfied with the crop we get and we answer, "Very well" or something to that effect. We state the number of pounds in hundreds or so much per colony. This to our querist sounds large and the next question comes like a shot. "How much did you feed your bees to get such a large

surplus?" Indignant we answer "None," but the next thing we know a report is being circulated that our honey is half sugar; this too often comes from bee-keepers on a small scale who ought to know better.

I have often tried to impress on the minds of my customers that such would be impossible for bees will not store syrup for surplus nor partake of it at all when there is honey to be gathered. I also try to impress on them the fact that bees do not make honey, they merely gather it and store it in the cells, so that if I fed sugar I could be detected as the bees do not alter the flavor and it would be sugar still.

Again I have been accused of mixing honey and sugar together and selling it for pure honey. Let me just relate an instance that occurred last October. For a number of years I have exhibited bees, honey, and apiarian supplies at the Fall Exhibitions. At one fair the judges on honey were two ladies and a gentleman. No one of them had ever owned a colony of bees and although they perhaps knew honey when they saw it, had no practical knowledge of the manner of its production. Mine was a beautiful basswood honey as fine a sample as ever was shown at an exhibition. Mr. McEvoy, foul brood inspector, pronounced it as fine as any he ever saw, yet the judges gave the prize to a rival exhibitor because forsooth my honey was too light in color to be genuine. My rival's honey was just a little on the dark side and this fact alone gained him the prize. I told the judges to have the honey analysed and that if anything but pure honey was found therein, I would be liable to a fine and would also give the directors of the fair fifty dollars.

Others again will buy extracted honey from you in a liquid state which afterwards becomes candied. If they are ignorant of its properties they at once jump to the conclusion that there is sugar in the honey.

In some respects bee-keeping is like other businesses, some succeed—some fail. As a rule the unsuccessful bee-man is an enemy to the industry. He sells his surplus honey at almost any price thus injuring the market for the large producer. If through his unsuccessful handling his bees fail to produce a surplus while his more practical neighbor has secured a good crop, straightway he raises the cry "adulterated honey." Almost everything depends on proper management, and it is easily seen how the careless or ignorant bee-man may blacken the character of his more successful because more practical neighbor.

"Who steals my purse, steals trash; 'tis something, nothing;
'Twas mine, 'tis his, and has been slave to thousands;
But he that filches from me my good name,
Robs me of that which not enriches him,
And makes me poor indeed."
Cottan, Ont.

The Stratford Meeting.

C. A. OUELLETTE.

Our mail frequently contains requests from our subscribers for a few words from the publisher of "The Practical Bee-Keeper." For various reasons I have hitherto refrained from writing but since my return from the O. B. K. A. meeting in Stratford I have been literally forced to offer a few comments thereon.

Thanks to Mr. Gemmel we were hospitably received and our days and evenings were spent both profitably and pleasantly.

This being the first meeting of the O. B. K. A. which it has been my pleasure to attend I am not in a position to compare it with its predecessors in this very important association, but from all reports it seems to have been one of the

largest and most representative in the history of the Association. Either the location was more favorable or the interest in the assemblies is on the increase. I trust the latter is the true reason.

The "brotherly" element was out in force. This may or may not be all right but it certainly looks queer from a business stand point. It seems to me that business should be conducted along business lines. It is not my business to call Brown a brother simply because he is growing a field of wheat across the fence from my own. He is my neighbor, he may be an acquaintance or even a friend, but he certainly is not my brother. Of course these marks of mine must be taken 'cum grano salis,' I am not a brother bee-keeper. I am a business man.

I regretted to see signs of discord among the directorate and to find that the best and most prominent men were in the minority. What is the cause of this? Drive away the best men from a community or organization and what is the result? True, I admit you must give the young and new aspirants a chance to advance but this should be done cautiously and not so as to act as a detriment to said community or organization.

In corporations, organizations, societies and associations we find plenty willing to assist who have not the ability, and others who have the ability will not act, but when we find men of acknowledged ability who are willing to act then the best interests of such community or association are preserved by causing such men if possible to retain their positions. Personal feeling should give way to the good of the association.

Among the papers read was one on "Education" by Allen Pringle. It is quite likely that this paper will be ignored by the bee-journals—the Review is just to hand and never mentions it. It will be ignored not because it was

not both entertaining and instructive but on account of Mr. Pringle's ideas on the supernatural. As I understand the matter Mr. Pringle was asked some two years ago to prepare a paper on "Education," to be read at the Association meeting but that he never consented to do so till this year. and then with the understanding that it was to have been read at one of the evening sessions or entertainments. Mr. Pringle's views on religious matters are well known and although I, myself with the great majority, do not think as he does, still he has the courage of his convictions and apart from his religious opinions his wide range of knowledge, his integrity and his honesty have earned for him a wide respect and reputation. Mr. Pringle on rising to read his paper said "Had I known that I was to read this paper in regular session of this association I would never have consented, and if it hurts the feelings of any of you, you must bear with me." While not agreeing with Mr. Pringle's position on the supernatural, I must acknowledge that his essay otherwise was a masterly one and contained subject matter for a great deal of thought, and as Mr. Pringle said if the feelings of any were hurt they should under the circumstances have borne it.

I was pleased to find many men in their right places notably Mr. McEvoy the foul brood inspector who is doing a work of incalculable good. A great deal of praise is due the retiring president, Mr. Pickett, for his services in '94 and '95. In Mr. J. B. Hall, the newly-elected president, the association have a worker and one who has the interests of bee-keepers at heart, but he alone cannot do all and without casting any reflection on the directorate for 1895, I would much like to know why the most able men we have and men who have done the most good should be ignored.

In conclusion I trust it may be my good fortune to attend many such meetings.

Music and the Honey-makers.

The belief that bees can hear, and that they find music in sounds which to human beings are hideous, is at least as old as Virgil, and probably a good deal older. Has not Virgil described—and have we not all heard in our childhood—how anyone can persuade bees to swarm by banging a gong in an intelligent and insinuating manner? Beekeepers, it is true, have of late years abandoned the practice, but the belief in its efficacy still prevails to a considerable extent. At last, however, Sir John Lubbock comes to knock the illusion on the head. He made some experiments with honey and a music box, wishing to know whether the tinkling tunes would have the same effect upon bees as the sound of the dinner bell has upon a hungry terrier. He found that the bees, however hungry, never rose to associating the idea of the music with the idea of meals, and he draws the inference that they cannot hear. The argument certainly sounds conclusive, but Sir John could hardly have surprised us more if he had told us that bees could not sting. —Exchange.

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