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CANADIAN BEE JOURNAL

PUBLISHED MONTHLY.

NEW SERIES
VOL. VII, No. 2.

BRANTFORD, ONT., AUG., 1899.

WHOLE No.
414

At this date of writing we judge that the honey crop in the United States has been very light. The Canadian crop has not been all harvested, frequent showers may give a good deal of thistle honey, but so far, the clover

The Honey Season. honey crop has not been up to expectations, conditions seemed to be all favorable, but did not palm out. From clover at the home yard we had two extractings. The best short honey flow we have had at the Villa Nova bee yard is from a good average colony on scales 14 lbs in three days and the day following the man in charge near noon reported that they would likely get 8 lbs that day. We do not know how basswood has turned out but with us it has yielded only very moderately. With frequent showers fall blossoms should hold well. Some localities report a good honey flow, but these are the exception, we do not think anyone need to sacrifice their honey crop in order to dispose of it.

* * *

Mr. Herman F. Moore, Secretary of the Chicago Bee-Keepers' Association makes the following suggestion in the American Beekeepers' Association. Bee Journal:—

The United States Beekeepers' Association has been doing much good in the past, and will no doubt do much in the future to benefit bee-keepers.

But there is one thing that might be suggested to the end that the Association will be better advertised than it has been

in the past. Let us have a short report, or article, every month from the general manager or secretary, or both, on the work the Association has done for the preceding month, and the new plans that are being made for future work.

A yearly report may be all right for old members, and those who have put on the harness; but how about the other 300,000 bee-keepers that we are anxious to get into the fold?

The greatest business enterprises have been built up on broadcast advertising, and this is necessary for every business, both small and great.

I take it that all the bee-papers would publish free any remarks Mr. Secor and Dr. Mason chose to make on the progress and aims of the Association. Articles could be sent to one bee-periodical with the request that all the others copy.

If the officers of the Association did not wish to make all the contributions themselves, they could request some bee-keeper to write a paper for publication on some phase of the Association's work. Suppose prominent apiarists look up the number and form of mixtures and adulterations of honey in Indianapolis, New Orleans, San Francisco, New York, Cleveland, and other large cities, and report the same through the papers for our information and instruction.

The first step toward curing any disorder is a perfect knowledge of the symptoms. This matter of adulterations and prevention of the same is being agitated

by the people more than ever before; and we must dig up new ideas and new methods of work, or have the procession pass us.

HERMAN F. MOORE.

The above suggestions are certainly good. The Association has done a good work and it can do much more in the future. There is no doubt that its membership, through good work and the same brought to the attention of bee-keepers, can be worked up to ten thousand. As far as the Bee Journals are concerned the officers and members of the Association may rest assured that they can have the hearty co-operation of the Canadian Bee Journal, and, we believe, of every Bee Journal. To hold this however, we would not advise action upon the thought that "Articles could be sent to one bee-periodical with the request that all the others copy." The press is rather sensitive about impartial treatment, and if any paper's influence is desired it has a right to be placed on exactly the same footing with its contemporaries. In these days where typewriters will take about as many copies as there are Bee Journals published in America there is no excuse for giving one Journal first place and then expect others to print what has already appeared in other places. It should be arranged as far as possible that the matter would be handed to the papers at a time of the month when the largest number of them will be issued, which is, we believe, about the first of the month. Bee Journals are perhaps more handicapped for making money than any other class of publications. The most, if not all, will not take advertising of a questionable kind but such as is considered quite legitimate by what are considered first class papers. We have time and again refused such advertising because we thought it right. Then too, notices of conventions are put in free, something out of which other papers make a revenue. This would not be so bad if a report of the convention would be sent along having in it the discussion on bee

topics, or at least a portion of it, but often nothing is sent, and in the majority of the remaining cases it gives the names of those present, perhaps the officers elected, and ends up with the fact that a profitable discussion took place, naming the subject but leaving out entirely the profitable part. Unless I am mistaken no class criticises their literature more than bee-keepers, no class has greater privileges. Any one wishing to go into the business of publishing a Bee Journal would do well to consider these matters.

* * *

In this number of the Canadian Bee Journal appears an article on Fairs and Exhibitions by our old friend and able

writer, D. W. Heise. That Exhibitions it is desirable to have good and Honey honey exhibits at Exhibitions, there is no doubt. Exhibits at Fairs. That bee-keepers generally

benefit by such exhibits, I do not question. The time has been when it paid handsomely for a bee-keeper to make an exhibit at the large Fairs. There is no doubt that they pay the exhibitor, but not to the extent as set forth in Mr. Heise's article.

My earliest recollection of the Toronto exhibition is when some one told about the great honey exhibit there. In fact I distinctly recollect that this was talked of more than anything else, at least this was the case with my friends, who were in no way interested in bee-keeping. The exhibitor was Mr. D. A. Jones, who is really the father of large honey exhibits in Canada, and perhaps of the world over. My next experience with honey exhibit was when a student with Mr. Jones, with others, went down to help put up the honey exhibit. It was a great affair. The quantity displayed was bound to attract public attention. In those days the meat stores which now handle honey, did not then do so. The packages that were exhibited were large and the purchases made were large quantities. Ten or twenty pound and even sixty pound of

were more in evidence than five pound cans and smaller. These packages were the things shown, and thought to be the proper thing, and human-nature like, the people followed each other's example and bought enormous quantities. Mr. Jones ordered a lot of 5 cent tins, with slip tops, holding about an ounce of honey, and the sales were enormous. I believe Mr. Hall tried to purchase some of these, but Mr. Jones, wishing to retain the monopoly for that year refused to let Mr. Hall have any. Mr. Hall, having much comb honey and wishing to be even with Mr. Jones, took sections and cut them across, from corner to corner to corner, dividing the section into four pieces with a three cornered piece attached to each piece of section and sold each piece for five cents.

Then the late Jacob Spence began business in Toronto. He had been interested in bees, and finding an opening for selling honey, and seeing the need of a place in Toronto to which bee-keepers could send their honey, opened a retail honey store. He was favorably known by bee-keepers and had their confidence. In his work he showed originality and energy but he failed in making it a success. This was perhaps due to the mistake of so many who go into business with inexperience. He did not work on a sufficient margin of profit. After computing all expenses in view that can be figured up, the business man of experience and the successful business man knows he has to add a heavy percentage to estimate the bare cost to say nothing about a profit on which he can support himself and a family.

Mr. Spence was largely instrumental in getting honey into stores generally, and he was also instrumental in having honey sold in small packages. He had active men going from store to store pushing sales, and with the promise of receiving granulated or partially granulated honey with liquid, he had a large trade. That this resulted in placing honey in many homes I cannot say. The more men see an attractive

article, the more they desire it, and doubtless many a person bought honey in the small packages who would not purchase in the larger. This state of affairs and others tended to injure the sale of honey at the Toronto Exhibition, and in one way and another the same condition has been reached in other places. Men and women no longer purchase large quantities of honey at the exhibition when they can order from their grocer and fruiter at almost any time. If they do purchase it is generally a small quantity compared with the olden days.

Again, if the quality of the honey sold at the Exhibitions had always been undoubted, perhaps more honey could have been sold, but unfortunately this is not the case. I have known honey to be brought to exhibitions which the family would not consume after they took it home because it contained honey dew, and there was the accompanying rankness and unpleasing flavor.

To take an award by merit one has to go to a good deal of expense in putting up an exhibit, and justly so. I am not arguing against exhibits, but I think friend Heise's article paints exhibitions in altogether too rosy a color. If the exhibits are not attractive and if they are not sufficiently large to draw the people, the management of the exhibition would soon withdraw a proportionate amount of prize money.

Then those who exhibit know well the uncertainty of awards; judges are but human and I never believed in the one judge system, unless that judge was without blemish—perfect, divine. No human being is this, and so long as this is the case I would advocate more than one judge. But what I wished to say is this, that those exhibitors well know that the result of judging is uncertain and therefore the recognition of merit is hazardous.

Mr. Heise cites a case in Ottawa and the results. Let no man deceive himself. If he had done the same thing last year, woe to him. I may be flattering people I

should not, but such undertakings and opportunities rarely offer and they may be undertaken by one who lays the foundation for success in it, when another, not knowing how to build that foundation and undertake the venture, would utterly fail.

Mr. Heise's article has much that is good in it. With a good article, taste and enterprise, one year with another, it probably pays to show even now, and if one adds to this the desire to benefit bee-keepers generally—as he will—he will have a proportionate reward.

R. F. HOLTERMANN.

A Bee Journal with a Question Box has above the department the following "In the multitude of coun-
A Question Box. sellers there is safety :—Prov. 11—14."

We have every respect for a question drawer and the answers to the questions, but as we have seen some of these departments conducted with such diversity of views and opinions, diametrically opposed to one another, that it is a pretty difficult matter for a beginner to know what to pick out as best. The "safety" must consist in the fact that a great many have opinions diametrically opposed to one another, and that the safety lies in accepting none of them with great certainty.

Thoughts and Comments.

The following appears in Gleanings under 'Stray Straws' from Dr. Miller:—"Do bees consume more stores when they have honey-dew? Some of mine starved with what I supposed were sufficient stores." The editor in a foot note adds:—"A few years ago, I believe, it was agreed that the bees would consume less good stores than of poor. Has there been anything to change that opinion? I do not remember.—,"

In the above it would be interesting to know who the bee-keepers' were who

came to the above conclusion, and what claim they have to agree upon the question for the entire fraternity. Not that I do not agree with them, but just to show them up as learned upon this question at least and to find out if they could account for the statement. In my estimation and from practical experience I find that a bee during the time she is confined in the hive displays the least activity when all the conditions prevail for perfect comfort, the temperature right, quiet, darkness and well ripened good honey, perfect stores. When we depart from these conditions, as with honey-dew, the health of the bee is affected and she becomes active, and consequently consumes more stores. With honey-dew as stores there is a greater tendency to set up dysentery. This would largely account for the increased consumption. The inferior quality of the food might also explain some of the difference.

Under the same heading "Black Clothing" is mentioned and the opinion generally is against wearing such in the apiary. I have long had the opinion that black was more likely to attract than any other colors. Then too we rarely find this color in the plant life. This may have something to do with the matter.

F. A. Gemmell, Stratford, says in the Review that the amount of wax he has been able to secure from a set of eight Langstroth combs is 3 lbs. I will guarantee I can take eight Langstroth combs and get 4 lbs of wax from them.

Since the days when D. A. Jones was in his glory as a noted and enterprising bee-keeper, and when he had Frank Benson by to secure Apis Dorsata and did succeed in capturing some specimens, since those days no one, as far as we know has succeeded in doing anything with these bees. In the last number of Gleanings, a missionary, Mr. W. E. Rambo Damoh, C. T. India, gives an account of a colony he has found and his observations. Among other things he says, "The bee-friends could but see these beautiful bees as I saw them through field glasses they would want to have them if only for their beauty. At thirty feet they looked like a five banded Italian queen." Dr. Watts in a director of the Economic Products of India writes, "It would seem that this bee does not build larger cells for drones than for workers, and that the drone is similar shape and size to the worker, differing principally in the head which resembles the head of the drone of Apis Mellifica

I cannot imagine that we want a bee which can rear drone and worker comb in the same cells. We can control drones in *Apis Mellifica* with comb foundation, surely no intelligent and well posted bee-keeper would go back to the system where he cannot control drones by using worker comb foundation. It is well to investigate but the more I hear of the bees the less favorably I am impressed with their economic value.

Since writing the above re black, the British Bee Journal has come to hand. In it there is an article on Insects and Flowers by R. Hamlyn-Harris, F. Z. S., F. E. S., etc. In this article the writer states:—"During a period of observation extending over many years I have repeatedly noticed that flowers of certain colors remain unvisited by insects; the same peculiarity occurring year after year. And also observing the movements of bees in a confined area, such as a conservatory (the one I am alluding to being 30 by 20 ft. and 12 ft. high, at Hambrook, in Gloucestershire.) With every kind of flower then in bloom it became more than evident that scarlet blossoms particularly were entirely ignored. In endeavoring to account for this my mind travelled first on the subject of unnatural heat, and I then came to the conclusion that, in consequence of this, it might perhaps be that very little nectar was secreted by those flowers accustomed to less heat in their natural state; but although this may be, and no doubt is, to some extent the case, I am more and more inclined to believe that the color of flowers acts directly or indirectly, either as a means of enticement or the contrary, and that, unless the bee is blind to certain colors, instinct teaches her to avoid those of little service in the execution of her duty. But the question naturally presents itself.—Can bees distinguish these flowers? If they can, why do they not visit them? No bee-keeper needs to be told how wonderfully God has planned the most delicate tissues and receptacles for nectar as a means of allurements to insects in order to bring about the necessary fertilization of plant life. I have known honey-bees, enticed by the fragrant aroma, display great excitement in the endeavour to get through the glass of our conservatory to reach some *Hoga Carnosa*, which was in full bloom and literally dripping with nectar; these blossoms were of lovely waxy whiteness. Again, I have watched for days as the blooms in a peach house have been most

frantically worked at by bees until it seemed as if every blossom must be fertilized. The bees in question flew about the outside of the house until the gardener opened the windows and (as is not always the case) the bees thoroughly knew their way in and out. We often find that where fertilization of certain plants takes place very readily and when this is so, of course, the assistance of bees and other insects is not necessary, as, for instance, when wind, buds, etc., are employed; little nectar is available, and no doubt this influences the instinct of bees not to waste their time over hunting useless fields. Without any doubt, then, we may confidently, so far as insects are concerned, regard blue and violet (and white if that may be termed a color) as their "pet" colors, because these possess a very marked influence as a means of enticement. Yellow is less frequently visited whilst green is treated with extreme indifference. Some years ago experiments of a very interesting character were made in order to verify, if possible, the ideas of zoologists and botanists on this very subject, and with what result? Let us see: Two groups of plants were placed side by side (about 2 ft. apart) in a garden bed. One group consisted of *pelargonium zonale*—the second group of *epinobium augustifolium* linne, the small leaved willow-herb.

The scarlet flowers of the *pelargonium* and the violet red ones of the willow-herb open at the same time. Certain species of lepidoptera (butterflies) and bees swarmed around, but curious to narrate, the butterflies stopped at the plants and gave about equal attention to the willow-herbs and the *pelargonium*, but the bees took absolutely no notice of the scarlet red blossoms but simply revelled in the blossoms of the violet-red willow-epilobe.

In the botanical gardens of Vienna three groups of herbaceous plants stood side by side, viz., the blue *hyssopis officinalis*, the pale *monarda fistulosa*, and the scarlet *monarda didyma*. All three blossom at the same time in the middle of July. Honey-bees came flying in numbers, but only to visit the blue hyssop and the violet monard; the scarlet *monarda didyma* being strictly avoided by them. It is naturally difficult to say whether this is merely a matter of dislike or instinct on the part of bees, or, as some incline to think, that they are really color-blind when it concerns red (scarlet) just as some human beings are

with regard to some colors. If, therefore, we accept the latter theory, it becomes easy to understand how it is that in these the scarlet pelargonium and the scarlet monarda respectively were not visited, and if we incline to the second theory, it is merely a question of dislike, why do bees possess such a strong antipathy to the scarlet? These experiments, though simple, are of great importance, as they throw some light on the matter, for I am sure most practical bee-keepers' can confirm me in saying that bees under normal conditions will never work on scarlet-colored flowers of any kind. And if bees do not see red, we must naturally assume that those nerves of the eye which are affected by this color are wanting."

[The above extract is deeply interesting and the British Bee Journal is to be congratulated upon having so able a correspondent and one who treats the beautiful works in nature with such reverence for the creator of them all. It is interesting to notice that in England the bees work upon the willow-herb, here in Canada in some localities it is a noted honey plant. I would find it more difficult to believe that of the same blossoms only the scarlet did not produce honey than I would that the bees cannot detect the scarlet color.—EDITOR.]

Honey Exhibits at Fairs and Exhibitions.

Paper read by D. W. HEISE at the York Bee-keepers' Convention.

I claim that no man can speak, or write intelligently on any subject unless he first acquaints himself with every detail in its connection. Having never been an exhibitor of honey, I know I shall fail to do justice to the subject assigned me; but as we are told that we should never question the wisdom of our superiors, I reluctantly submit to the inevitable. In trying to treat this subject, my remarks will from necessity have to be drawn from the stand-point of the observer only. Any bee-keeper who has attended the various county fairs, and larger exhibitions, and has taken the time to inspect the creditable displays of the product of

the apiary, surely could not fail to observe with "pride," the great advancement made in that direction during the past ten years. This has been brought, partly, by the more liberal premiums offered by the different agricultural and exhibition societies; and partly, by the inducements held out by the Ontario Government, through the various agricultural organizations; and last, but not least, by the reputation which the exhibitor is enabled to acquire as a producer of nature's purest, and most wholesome of all sweets; as well as by the profits which accrue to him through the sale of honey, which is by no means small. The amount of honey that exhibitors are able to dispose of at the fairs, is a feature in this connection which bee keepers' and honey producers have perhaps lost sight of, or at least it has not been held up as much of an inducement towards making an exhibit. It is nevertheless one of considerable importance. I will here give you the amount of honey that a certain exhibitor had at the Ottawa Fair in 1897. Including comb and extracted, he had 11,000 pounds, and in two days he succeeded in disposing of the entire lot, securing 8 to 8½ cents for liquid, and \$1.75 to \$1.85 per case for comb. This same man had 8,000 pounds at the Toronto Fair last fall. Considering the eight large exhibits, and taking as an average one-half of the amount above referred to I think it would be only fair to assume 32,000 pounds as a very probable amount of honey in the Apiarian building at the Toronto Exhibition last fall, and from information in my possession I have reason to believe that a very large amount of the honey was disposed of at good prices. A pleasing feature is noticeable in selling honey at fairs, inasmuch as a very large percentage of it is sold to parties who rarely come in contact with honey at any other time. Thus an increased demand is created without in any way affecting the producers' established trade; and it also diverts a considerable amount from the large city markets, the flooding of which always has a demoralizing effect on the price of honey generally. I would now like to draw your attention to a few remarks along the line of Exhibits as a public educator. In no other way can honey be brought so prominently before the public attention as by a large and creditable display at fairs. Especially will this apply to the larger exhibitions in the Provinces, such as Ottawa and Kingston in the east, Toronto more central, and London in the west, where hundred

and thousands of consumers come face to face with a sweet reality, the product of the bee keeper through the aid of his thousands of busy workers. A desire is created within those who have never used honey, to sample the delicious looking sweets, which usually results in a purchase being made, thereby creating an appetite and a demand which it would be difficult to accomplish in any other way. Now a few words as to the injury that may be done to the bee-keeping industry by unwise practice on the part of an exhibitor. Knowledge has come to some of us that certain indiscreet honey producers make the fairs a dumping ground for the inferior part of their crops. This practice if permitted to be carried on extensively, will certainly tend to very much injure the reputation as well as materially lower the price of good honey. Only the very first quality of honey from the different sources should be permitted for sale on the grounds of any public fair. I would not prohibit the cutting up of cull sections as is the practice providing the honey they contained was of a first class quality. I am strongly of the opinion that the Bee-keepers' organization should take this matter up, and bring such strong pressure to bear upon the public fair officials throughout this Province, that they would see the importance of making such stringent regulations that would entirely prohibit the sale of any inferior honey upon their grounds. If this were done it would not only enable us to retain, but would largely assist us in raising the high standard which our honey has already attained. Never having been an exhibitor, as before stated, I know I would be out of place in dictating to those who have had practical experience in that direction. I would, nevertheless, like to make a few suggestions along a supposed line of improvement, and my suggestions will apply principally to county fairs. Where a prize is given for five, ten, twenty, or one hundred pounds of extracted honey, it should not be necessary for the exhibitor to bring forward the entire lot for the Judges' inspection, but simply a sample from the same. The list should fully specify and define the source from which the honey was gathered, whether Clover, Linden, Thistle, or whatever, for the following reasons: One sample may be Clover, another Linden, and still another Thistle. They may be all first class honey from their individual sources. It then becomes a choice or fancy of

taste with the Judge as to which of the varieties he considers superior, and his decision may be an injustice to the unsuccessful competitor. This of course applies to flavor only. Then again the lists should specify the size, and color of glass to be used to contain the samples, this applies to color only. Where one sample is contained in an eight ounce jar, and another in a two pound jar, the one in white glass, and the other in green, it becomes impossible for a judge to decide as to the true color of the samples. I feel sure it would be more satisfactory to both judge and exhibitor if the jars for inspection were as near as possible equal in size and color. Much more could be said on this important subject, but I beg to conclude, thanking you for your attention.

D. W. HEISE.

The United States Bee-Keepers' Association Convention.

The Philadelphia Convention of the United States Bee-Keepers' Association, as has been announced before, will be held Sept 5, 6, and 7, 1899. Dr. A. B. Mason, the Secretary, sends the following information as to railroad rates, lodgings, e'tc., which we are pleased to give a place in these columns;

STA. B, TOLEDO, OHIO, JUNE 26, 1899.

MR. EDITOR:—I have been faithfully trying to get the railroad rates to the G. A. R. encampment at Philadelphia for the information of those bee-keepers who may wish to attend the convention of the the United States Bee-Keepers' Association on the 5th, 6th and 7th of next September, and find that in the territory covered by the Central Passenger Association the rate will be one cent per mile each way, "with a minimum of \$11 (except that the fare will not apply via Pittsburg, Pennsylvania road and Washington), but via Harrieburg direct," but the \$11 rate will be waived where the current first-class one-way fare is less. In such cases the fare will be one cent per mile each way in the Central Passenger Association territory added to the authorized one-way fare for the round-trip from the nearest Trunk Line gateway (or station). Tickets for sale Sept. 1 to 4, inclusive.

The rate in the territory covered by the Trunk Line Association will be "one fare for the round trip with a minimum of

\$1.00, except that the fare from New York and Baltimore will be \$8.00; from Washington \$4.00; from Newark, N. J., \$2.85; from Elizabeth, N. J., \$2.75; and proportionately from intermediate points. One fare to New York plus \$3.00 from points west of Binghampton and Syracuse via New York, going and returning same route." Tickets to be sold, and going, Sept. 2 to 5, inclusive.

The Central Passenger Association territory includes that part of Canada lying south of a line running from Toronto nearly west to Lake Huron; the southern peninsula of Michigan, that part of Illinois lying east of a line running from East St. Lewis to Chicago, including both of these cities; all of Indiana and Ohio; that portion of Pennsylvania lying west of the Alleghany River, and that part of New York lying west of a line from Salamanca to Buffalo.

The remainder of the United States lying east of the Mississippi River, and south of the Ohio River, and those portions of Pennsylvania and New York not in the Central Passenger territory above described, and all of New England, are in the Trunk Line Association territory.

In both the territories named above, "tickets will be good returning to Sept. 12, inclusive, except that by deposit of ticket with joint agent at Philadelphia, between Sept. 5th and 9th, both dates inclusive, and on payment of a fee of 50 cents, return limit may be extended to Sept. 30, inclusive."

Rates have not yet been fixed by the Southwestern Passenger Bureau, and the Western Passenger Association, but both have promised to inform me as soon as announcement is made."

By inquiring of the station agent any one can readily learn the rate of fare.

Side trips to Washington, Richmond, Norfolk, Gettysburg, Antietam and other points of interest will be provided for at about one fare for round trip, or a cent and a half per mile for circuitous routes.

In a letter just received from Mr. F. Hahman, secretary of the Philadelphia Bee-Keepers' Association, he writes in substance:

"If those expecting to attend the convention will write me we will find quarters for them; those not notifying us will have to take their chances, as we cannot engage rooms for anybody except those we are sure will come."

Let me suggest that all such as desire entertainment write Mr. Hahman at once, or as soon as they have decided to attend

the convention, so as to be sure and reach him by Aug. 15 or 20, and tell him what you wish provided. Mr. Hahman's address is Harrowgate Lane, Sta. F. Philadelphia, Pa.

The Philadelphia Association proposes to find good lodging-places for all who notify Mr. Hahman, and breakfast at the lodging-places if possible; and dinner and supper can be had at some of the numerous restaurants near the place of holding the convention, which will be in Franklin Institute, at 15 South 7th Street, between Market and Chestnut Streets.

A. B. MASON, Secretary.

Alsike Clover for Bees and Stock.

—By F. A. SNELL.

There is no crop I think that will, in the Northern States, pay the bee-keeper or farmer better to raise than does alsike clover. It blooms profusely, and the blossoms are rich in the secretion of honey—just what the apiarist most desires. The period for the building-up of colonies and their increase in numbers also comes at the time this plant blooms. With frequent rains this bloom will yield honey for six weeks, and a heavy flow for a full month when all conditions are favorable. It is a heavy bloom of honey-yielding plants that gives a big crop of surplus. It matters not if there is a good deal of white clover growing. The farmer bee-keeper should grow this clover so far as he can reasonably do so. More surplus honey will be secured in one month with a heavy bloom than in three or four months with only a fair bloom, other things being equal. I have many times found this proven true as stated above. There is never too good a bloom when we do our best to secure it by generous sowing of seeds producing honey; hence we should sow the alsike, and then with white clover we may have a generous honey harvest from the clovers, which is of finest quality.

As a crop for stock, after an experience of over thirty years, I can say that the hay from alsike is much superior to that from any other clover I know of, and, of course, is far ahead of timothy hay. The quality is very high. Stock prefer the alsike for pasture or hay to anything else in the line of hay. The stalks are fine and the hay is all eaten—no woody stubs

left, as with the coarser clovers. If not wanted for seed it is well to sow a little timothy with it, as it then stands up better. Under favorable conditions, with rich land, I have had it grow four feet in length of stalk—usually two or three feet. Its hardness is a strong feature in its favor. It has with me repeatedly wintered well, when red clover has been killed out almost entirely. I have never known it to winter-kill. It has proven to be entirely reliable.

This clover seeds at the first blooming. It may be cut when just nicely in bloom, and then it will bloom later on in the season, giving nice fall feed for stock and bees.

Alsike will thrive on land quite moist, and give good crops, where the red clovers will not grow. If this clover is cut and cured a little early, or when nicely out in bloom, it is much relished by hogs, and when fed in winter, in addition to other foods, it contributes materially to the health of the animals, which is a matter that receives far too little attention from farmers in general. The farmer who keeps both bees and stock has a double interest in the matter of growing alsike clover—for the honey and for good feed for the stock upon his farm.

I have secured a good stand of this clover by sowing the seed on the grain stubble soon after harvest, when we had reasonable rains that would start its growing. A few acres should be at least tried on every farm. I do not know how far south it will do well; but in Northern Illinois, and north of that, it does well, and is much grown in some sections. Milledgeville, Ill.

sion and photographs made of what is going on inside. It is not known just how much honey each bee will collect in the course of a day, nor how long it will be gone on each excursion among the flowers. Special arrangements will be made for ascertaining this information. From the door of each hive a long tube-like passageway will lead, composed for the most part of glass, but in places of wood and metal. In this tube or front hallway of the hive, there will be a little vestibule or chamber in which the bee can be confined momentarily on his way in or out of the hive. The floor of the vestibule will really be the platform of a very delicate weighing instrument. When a bee starts to leave the hive it will be allowed to walk along the passageway, but when it reaches the exit the insect will find its way obstructed by a little glass door. Immediately another glass door will be slipped down behind the honey gatherer and then as it walks around the little chamber its weight can be had accurately, the scale being adjusted to the fraction of a gramme. Next a delicate mechanism will drop a spot of paint, ink or other coloring substance on the back of the bee for the purpose of future identification, a record being taken of the color and shape of the spot of this coloring substance. The insect will then be released and allowed to proceed in quest of sweets. When it returns a note will be made of how long it was absent and when it passes through the vestibule it will again be weighed, the increase being recorded as equivalent to the amount of honey gathered. The different changes which take place in the hatching of drones and workers among the bees will be carefully studied; also the curious method by which the bees are enabled to "construct" queen eggs when the regular queen eggs have been destroyed and there is no resident queen to lay others. The reason why bees live under a system of polyandry will also be traced to its origin, if possible.

Bees Photographed in Glass Hives.

—THE BUFFALO COURIER.

Just how the problems will be solved has not yet been decided upon in all cases, but some of the proposed experiments are interesting in prospect. For instance, in the case of the honey bee it is proposed to construct special observation hives; for although this insect has been serving man for centuries, we are not nearly so intimate with its habits as we might be. The hives will have glass windows, which can be opened on occa-

Wanted.

Comb and extracted honey, also bees-wax. Will pay in cash, bee-keepers supplies, 6 and 10 inch comb foundation mills (at a bargain), goods we manufacture, or in bicycles. State the kind you have to sell, also quantity, quality, and how put up.

Address,

Goold, Shapley & Muir Co., Limited,
Brantford, Canada.



Meeting of the Senate of Canadian Bee-Keepers.

What Protection do you Give Bees, When Taken out of the Cellar in March?

Introduced by Mr. Shaver.

Mr. Fleming. If I had bees in the cellar I would not take them out in March.

Mr. Taylor. Put on super and fill it with leaves four or five inches deep; see that the bees are well protected on top. Look after the entrance. If it was a nice day I would let them fly.

Mr. Armstrong. A man in our section—all the protection he gives his bees when he takes them out of the cellar is that he puts a cushion right down on the frames; he is very successful.

Mr. Roach. I never cellar. I would want to put them right in clamps, and pack them in for the winter.

Mr. Young. I read the best American Bee Journals, and from what I can read, and learn from experience, I believe cellar wintering is the right and proper method. I do not give them any protection after I take them out. I take them out from the 12th to the 15th of March; I do not say not to take them out till the 15th of April, but the earlier the better. In the fall of the year I gather about a dozen barrels of maple leaves, and fill the supers as full as I can, and contract the entrance to half an inch. It does not make a particle of difference to me where I put them. I take them right out. I start about 10.30 or 11.00, and when I get through you would think they were swarming. I used to try a few to-day and a few to-morrow. Those you let fly to day, to-morrow are ready to jump on the other ones. On several occasions I used jute, good thick heavy sacks, on top of a quilt—a good roof. I watch for a nice day, from the the 10th or 12th to the 18th. Last year I took them out on the 18th. All the American Bee Journals that I have read say, keep your cellar from 40 to 50 degrees.

Mr. Holtermann. When you are studying this question you have to come down to conditions again. You might as well say, here is one man or woman or child,

and in the spring, how are you going to dress that child. One has been sick, and is weak and feeble; on that one you would put a good overcoat, while the other could run about without one. (Hear, hear.) I believe that if the bees are wintered well, and come out with good vitality, that if you leave on the sealed quilt (see that it has not broken loose) and then put on super with either leaves in or a cushion, and contract the entrance, that is enough. If you can get a fence about them, say as a shelter from high winds, so much the better. If they are wintered well I do not believe they need any more. If the colony is not strong in the fall, in the spring we put a cushion with leaves or planer shavings between the wall of the hive and that division board, and put that on the coldest side of the hive.

Mr. Robinson. I opened half a dozen hives on the sixth of March. Last year it was exceptionally fine, I did not give them any protection. I have seen the thermometer come down to eighteen or twenty below zero after the middle of March. It may not do then.

Mr. Phelps. I think it matters very little how cold the weather is, so long as it is not prolonged. A cold snap for a day will not disturb a colony of bees at all, but if it is continued cold weather, that finishes them; in that case they want protection; any way to keep them warm. Let anyone advise any scheme they like. The plan suggested here is as good as any.

Mr. Armstrong. Do you think they ought to be protected?

Mr. Phelps. I do, decidedly, if it is cold; if experience is worth anything.

Mr. Young. How far should the fence be from the bees?

Mr. Shaver. For six days I had to dig the snow away from them. I had boards at every hive, standing up. The snow would drift around, and I would have to shovel them out. I kept some with double boards. I was afraid to have these boards sticking up in front of the hives, and the snow so that you could not see the hives. I could not stand it.

The formal question list was then declared closed.

Kind Words.

Mr. Heise. I would like to use words of appreciation. I will attend again next year if I am alive and well. We have enjoyed ourselves. I have listened to the discussions of this Convention with more profit than all the other conventions I ever attended. (Hear, hear.)

Mr. Armstrong. My sentiments are the same as Mr. Heise's. I think, if we have a Convention of this kind—I don't know whether once a year will be often enough. If we have a real good thing, we should have a lot of it. Would it be advisable to put it off for twelve months? I am satisfied that it has been a better Convention than we had last time at Brantford, with three sessions each day. (Applause.)

Mr. Atkinson. After I started from home yesterday morning, to go ten miles to the station, I wished I had not started, but, like the Dutchman, "I was so glad I was here." (Laughter and applause) It has been one of the most profitable meetings I ever attended; better than the Guelph meetings even. We have had a lot of good, useful information. This is my first visit to Brantford, but if I can get as much information every time, this will not be my last visit.

Mr. Holtermann. I have learned a good many things and we have had good, solid discussions. I believe we have all profited by these meetings, and I think we can congratulate ourselves upon having done a vast amount of good to the people generally. As editor of the Canadian Bee Journal, I am exceedingly well pleased with this Convention.

Mr. Shaver. As a local man, I move a vote of thanks to those coming from a distance.

Mr. Holtermann. It gives me much pleasure to second the motion.

Mr. Alpaugh, the chairman, being a visitor, did not like to put the motion. Mr. Holtermann came to his assistance, and the motion was enthusiastically carried.

Mr. Edmondson. I have not been able to attend very regularly, but I have enjoyed myself and learned something.

Mr. Fleming. As a Michigan man, I am thankful for the invitation to attend and have received much valuable information. I think bee-keepers should study bees in their natural state. In doing so they are engaging in a profitable business, and at the same time may get a very deep

insight into the workings of God; the business would become, not only lucrative, but interesting—something that would draw us out and not crowd us. I think beginners should follow common sense, because if they follow older ones all the time they will fall into the same old rut; let beginners think for themselves, and so go on towards improvement. (Applause.)

Mr. Alpaugh. I have enjoyed myself as much as at any bee meeting I ever attended, except our last Senate meeting. We have had a lot of good, valuable information distributed. If another meeting is held within my reach I will try and attend.

Mr. Armstrong. What about the place and time for our next meeting? We might as well settle that to-day and let the people know twelve months ahead. I move that we have another meeting in about twelve months from now, in the city of Brantford.

Mr. Shaver. I will second the motion for a meeting in Brantford a year from now, or thereabouts.

The motion was put to the meeting by the chairman and declared carried unanimously.

Mr. Phelps. I am glad that motion passed. The weather prevented a good many from being here; I know several who intended being here. I think it is the wisest thing to do, to continue the good work. There are plenty of questions that might be suggested and discussed.

Mr. Miller. I move a vote of thanks to the bee-keepers here and to Mr. Holtermann for the kindness extended to us.

Mr. Atkinson said it gave him much pleasure to second the motion.

Carried unanimously.

The delegates attending the convention whose trains did not leave until 5 30 or 6 p. m. then engaged in a sociable talk about matters connected with bee-keeping generally, giving each other the benefit of their experience, after which the convention was declared closed, and the gathering dispersed.

How is the honey season with you? It is very poor about here. I had one swarm on May 27th and another to-day. There is just enough honey to keep them alive, since yesterday honey has begun to come in a little.

A. Demerse.

Renfrew Co.

Clover and Linden will be in abundance we are looking for a good flow.

Linwood, June 15, '99.

A. Boomer.

The Philadelphia Convention Programme.

Dr. A. B. Mason, Sta. B, Toledo, Ohio, the secretary of the United States Bee-Keepers' Association, has sent us the complete programme for the national convention to be held in Philadelphia Sept. 5, 6, and 7 next. A copy of the same follows:

Necessity of Pure Food Legislation from a Bee Keepers' Point of View—Rev. E. T. Abbott.

Out-Apiaries and their Management for Comb Honey—W. L. Coggsall.

Possibilities and Difficulties of Bee-Keeping in Cuba and Porto Rico, and the Effect of Our New Relations with those Islands on our Honey Market—Fred L. Craycraft and W. W. Somerford.

Best Method of Comb Honey Production, with Latest Hive Improvements—F. Danzenbaker.

Possibilities of Bee-Keeping—Address by G. M. Doolittle.

Marketing Honey—Can and Ought We to Control Prices?—P. H. Elwood.

Bee-Keeping and the Source of the Honey Supply in and Around Philadelphia—W. E. Fowler.

Foul Brood: Its Detection and Eradication—N. E. France.

Our Pursuit as Viewed by an Amateur—F. Hahman.

Why Bee-Keepers' Exchanges Fail—C. A. Hatch.

Bees or Honey—Which in Spring Management?—R. F. Holtermann.

Bee-Keeping as a Profession—W. Z. Hutchinson.

How to Successfully Conduct a Bee-Keepers' Exchange—J. Webster Johnston.

The Fall Honey Crop of Philadelphia—John L. Kugler.

Organization Among Bee-Keepers': If Desirable, Why, and How Best Accomplished?—Thomas G. Newman.

Best Method of Extracted Honey Production—Frank Rauchfuss.

Address by A. I. Root.

Fads, Fancies and Follies in the Apicultural World—Hon. Eugene Secor.

The Products of the Bee—Pollen, Propolis and Honey—W. A. Selsler.

Food Value of Honey—Its Adulteration and Analysis—Hon. H. W. Wiley.

President's Address—E. Whitcomb.

Secretary Mason announces that since his last notice was published about rates, the Western Passenger Association has written that the rates in their association will be one fare for the round trip plus \$2.00, added to the rates charged by the

other association through whose territory the person may travel. By enquiring of the local station agent, any one may learn the rate.

For any further information, address Secretary Mason.

THE ECONOMY OF THE HIVE.

A Picture of the Present Christian Dispensation.

I have decided to go wherever there appears to be an open door, and under no human guidance, to preach the word of God. To do this I am giving up all temporary work and will only return to it in as far as it is God's will. It is a step of absolute faith. As a servant I obeyed the voice that spoke to me. In that step although only a few brief days have passed, I have been abundantly sustained, and God has in a wonderful way encouraged me and strengthened my faith in Him. He has since that decision revealed to me that the economy of the hive, the natural history of the bee, is a perfect picture of the present age. The worker bees His children; their work, going out and making fruitful; the sweetness they take in is a picture of our sweetness, they use it for themselves first and what flows over they give out again. The despised, jeered at drone, despised and jeered at by the carnal mind, is a perfect type of Christ's life here on earth in all its details. It is a wondrous picture. May I use what God has given me to His Honor and Glory.

R. F. HOLTERMANN.

I am very well pleased with the Reversible Honey Extractor I purchased from you. It is all I expected it to be and more. I have been using it to extract combs kept over from last year, a pretty severe test, and it works like a charm.

Nottawa, May 24th, '99. SAM WOOD.

I am well pleased with your hives.

GEO. S. WENN.

Aberdour June 17, '96.

Seeds That Need Fire.

A Californian pine tree whose seed cones can only be opened by fire or great heat has been attracting considerable attention at Kew gardens, London. It seems, however, that this tree, *pinus muricata*, is not alone in its salamander-like requirements, for a former Australian living in London writes as follows to the London Mail:—

"The wattle tree of Australia (*acacia decurrens*) also possesses the same peculiarity, and its seeds will only germinate when subjected to great heat. Soaking the seeds of this tree in boiling water or roasting them in a frying pan has been tried and found successful, but all other methods have failed. After the seed has fallen from the tree it will often lie dormant for years, but immediately a 'brush' fire comes along and reduces all the parent trees to ashes (as is often the case in Australia), the seed germinates, and a perfect forest of young trees will spring up within twelve months. Even on ground where there has not been a wattle tree growing within living memory, these trees have been noticed to grow up after a bush fire. The wattle tree being very susceptible to fire, is easily killed, and if the same means that caused its destruction did not induce it to grow again, it would very soon be eradicated."

The teak is said to be another tree whose seeds can only be sprouted by intense heat.

[After reading the above we could not help wondering if that peculiarity was possessed by *epilobium angustifolium*, often called great willow herb or fire weed, or purple top, which springs up after fire has swept over a tract of country. We should incline to the opinion, and if some of our friends will send us some seeds from the plant we will try and have the matter investigated. Ed.]

A Law-Suit.

EDITOR CANADIAN BEE JOURNAL—A barrister here has entered suit against me for damages, and an injunction to restrain my bees from coming in his premises. The reasons he gives are, they trouble them when canning fruit, soil the clothes and sting the children's feet when walking or going about. There is no complaint from the bees stinging from being in too close proximity to them, because they

were sufficiently far away, so that it is impossible for him to hinder me from keeping bees any more than anyone else within flying distance of a bee. I have no fear as to the results, for if he could win a case of this kind it would simply mean that no one could keep an apiary within at least three miles of a person's residence. The Bee keepers' Union, of which I am a member, has undertaken to defend my case, but I would like to have all the assistance possible so as to make assurance doubly sure, and teach all such as this plaintiff a lesson that they will not soon forget. If I could have a list of as many as possible of all those who are keeping bees within an incorporated village, town or city in the Dominion, together with the number of colonies each have, I think it would be a help. Every bee-keeper in Canada is or should be sufficiently interested to forward to me such information of this kind as may be in their power. If the plaintiff does not relent, the trial will come off at the fall assizes in Goderich. He wanted my lawyer to consent to an interim injunction, but of course this was not granted. E. L. Dickenson of Wingham, who is well and favorably known, will defend this case. I expect to see him on Wednesday and will write you again should there be anything that I may desire further. Any assistance given by yourself or the readers of the C. B. J. will be thankfully received.

I am, yours truly,

G. A. DEADMAN.

Brussels, Ont. July 10th, '99

Bee-Keeping on St. Joseph Island.

Mr. J. R. Hand, formerly of Fenelon Falls, now of Carterton, St. Joseph Island, near Sault ste Marie, writes:—I think I will have a good crop of honey, white clover promises to keep in bloom for some time yet. The quality of the honey I have taken is fine. There is no doubt that the island is a great place for bees.

[The editor of the Canadian Bee Journal knows of no place where bees are likely to do better than on St. Joseph Island. It is also an excellent stock and dairy country, and in fact good for mixed farming. Those living on rented farms or those with very limited capital could on this island have comfortable homes of their own. Mr. Everett Crowder Reeve, Carterton, St. Joseph Island, would likely give any information to those having any thought of settling on the island.]

Annual Meeting Ontario Bee-Keepers' Association

Continued from page 20.

Held at Guelph
Tuesday, Wednesday
and Thursday
Dec. 6, 7 and 8, 1898

When is the right time to remove outer cases from hives wintered outdoors?

Mr. McEvoy. When the warm weather has come to stay.

Mr. Atkinson. When do you calculate that is?

Mr. McEvoy. Well, with me about the 20th of May. Of course I am in South Ontario.

Mr. Atkinson. Do you think it would hurt to leave them till the first of June?

Mr. McEvoy. No, I don't think it would. I don't remove the cases, I just simply remove the packing, and raise the cases, because I want it to shade the bees from the great heat of summer.

Mr. I. Overholt, S. Cayuga. I like to have my bees out of the packing by the 24th or 25th of May.

Mr. Shaver. Doesn't that depend a good deal on the season?

Mr. McEvoy. Certainly, I said as a rule about that.

Mr. Cammel. Between the 20th of May and the 1st of June. I have left them in till the first of June some seasons, and some seasons taken them out earlier.

Mr. Armstrong. My experience is about the same as these other gentlemen have been saying. It depends a great deal on the weather. I go a good deal by that. If it is a cold backward Spring I don't take them out so early; if it is a warm Spring I get them out a little earlier. I don't take them out till the colony is good and strong and there is no danger of them getting the brood chamber cool, cooler than what it has been for weeks before that, but I am never in any great hurry. I used to be. When I first got my hives I wanted them out pretty early, but now I have gone the other way and want to be a little late instead of too early.

Mr. McEvoy. I agree with Mr. Armstrong. Of the two I would rather be a little late than a little early. Mr. Hosal. What time do you take the packing out in Spring?

Mr. Hosal. When the bees get so strong

they won't stand it any more. It is usually about 20th or 24th of May. Of course, the colonies vary.

Mr. McEvoy. How many take the cases away altogether? If you unpack you can either leave the case on or take it away altogether.

Mr. Armstrong. I take it away altogether.

Mr. Gemmell. I take them away altogether. I remember one season taking the packing out and leaving the cases there, and I found it very unhandy to put on and take off supers.

Mr. McEvoy. I don't know as my experience would suit all cases. I am in a pretty favored locality in a way. I am in a hollow, in an orchard, and in the summer where it is surrounded by woods it is very hot, and in the hot days the bees sometimes cluster outside. They do better with the cases as a sort of shade. I daresay in many cases it would be better with the case out of the road.

Mr. Holtermann. With us it is rather a matter of when the hive needs an upper story. When they need upper stories we find them inconvenient to have them in packing, but until that time I never see any harm in leaving them in.

Mr. McEvoy. How soon do most of you find that the colonies are ready for the top story?

Mr. Newton. As regards Woodstock, Mr. Hall was taking off comb honey in the apple bloom. My bees were not doing that. I suppose his should have been off, according to what Mr. Holtermann has said. As far as I am concerned I am glad that this has come out. We had a short discussion on it at our Oxford Convention. In late years they are trying to get their bees out early in March; they will probably get them out in February soon, and then probably they won't put them in at all. I used to take the packing off much earlier than I do now. We are leaving them on until nearer the first of June than the first of May, as we

used to do at one time. I think they do no harm there until they are so crowded that we have to give them room, as Mr. Holtermann said, but we want them out of the way then altogether; we don't want to see them again until the next fall.

Mr. Post. We sometimes have a failure of honey in Ontario in sections. If the packing protects them from the cold, why will it not protect them from the heat? And if we don't get a honey flow let them remain in packing all summer. My hives are permanent, that is the reason I state it in that way. I don't unpack at all.

Mr. Gemmell. You have a permanently packed hive.

Mr. Alpaugh. We generally get a little flow of some kind, whether it be late or early, in the section I live in. We generally get an early flow. I want to give them room anyway so as to keep them together.

Mr. McEvoy. It makes quite a difference to some of us in different locations. Mr. Post is down on the north-east part of and it is just right in his case. Lake Ontario, and it is colder. With Mr. Alpaugh and me, and others, it is the reverse; we are a little better with the packing off.

Which Kind of Packing is the Best?

Most preferred forest leaves, and oak at that, or such as would not be easily broken and lie closely.

Mr. Atkinson. I don't agree with those other fellows. With regard to leaves, I have had experience with them, and I have had experience with chaff and I have had some experience with old rags, and several other things, and I tell you the worst luck I ever had was with leaves. I packed my bees the first year with leaves, and just had a cloth on top, and I packed them with chaff and had a cloth on top. They wintered far better with the chaff than with the leaves. The next winter I tried it a little different with leaves; I left the top on the hive instead of the cloth, and they came through all right. I would just as leave have the leaves fine as coarse as long as they are perfectly dry. If the packing is thoroughly dry I don't think it makes such a great difference providing the tops are on.

Mr. McEvoy. When I put the packing on of leaves I press it down pretty firmly, and leave 4 or 5 inches between, and then put more leaves on, and then the top.

Mr. Alpaugh. I would like to ask Mr. Atkinson if he renewed his top quilt with a fresh one?

Mr. Atkinson. Yes.

Mr. Alpaugh. That is where you made your mistake.

President. Do you put on your packing loose or do you put it into a sack?

Mr. Atkinson. I put it on loose, under and above and on the sides.

President. I think it was in the yard of the late Mr. Gardiner, the packing he had was sacking, similar to common salt bags, filled with forest leaves, and he claimed these to be good for years without getting broken up. Then he set his hive cover on top of these and held them down in place. I think it would be a much cleaner way than to have them put on loose.

Mr. Alpaugh. I would like to ask Mr. Atkinson another question. You say you just renewed the propolis quilt with a fresh clean cover, and you just put the leaves on top of that loosely. You didn't pack them down?

Mr. Atkinson. I put the covers on top of the leaves again.

Mr. Gemmell. How many inches had you on top?

Mr. Atkinson. Four or five inches.

Mr. Gemmell. That wasn't half enough.

Mr. Armstrong. How much packing do you use?

Mr. Alpaugh. You really do not need much more on the top than on the sides. Anywhere from three to four inches; you must weight it down to that many inches, until it is fairly solid, with some kind of boards. Of course you can put in a foot of loose leaves, if you leave it in that state I don't consider it would be good packing.

Mr. Armstrong. Has any one used packing right over the covers without removing the covers at all?

Mr. Alpaugh. Do you use a cloth underneath your cover?

Mr. Armstrong. No, I don't put any cover at all.

Mr. Alpaugh. It is all right to leave the cover there if you put a little of something underneath.

Mr. Armstrong. I have tried it both ways. I have tried removing it the same as that photograph, and used the same case, and am using the same case now. I also tried leaving the cover on just as it was through the season after the honey flow was over, and I found that they wintered just as successfully with that wooden cover with the packing over the top.

Mr. Gemmell. How big is the entrance?

Mr. Armstrong. My entrance is about five by three-eighths inches.

Mr. Gemmell. Some three or four years ago, when I went to California, I had no time to loosen the covers, I simply lifted the hive into the outside packing case. My intention was to go around and loosen the covers. With some I did it and with others I didn't do it at all, and I must say I could see no difference in the hives as far as that was concerned. Those with the solid covers were no worse than those that had the covers pried loose. The entrance would be four or five inches, some of them a little more. This winter two-thirds of my bees have no quilts on them at all, just the ordinary wooden cover. Whether I shall loosen some of them or leave all that way, I haven't made up my mind.

Mr. Atkinson. How much packing do you use on the top?

Mr. Gemmell. A good foot, that is on top of the hive proper. I press it down pretty well with my hands.

Mr. Atkinson. You think they winter better with a foot than five or six inches?

Mr. Gemmell. I think so.

Which Bees are the Most Subject to Spring Dwindling, the Bees Wintered in the Cellar or Those Wintered out Doors?

Mr. Emigh. I don't winter outdoors, so I don't know anything about how much they dwindle when they are wintered outside, but if they are wintered properly in the cellar, and taken out at the proper time, I have never had great trouble in spring dwindling. I don't think any person can winter outdoors with very much less spring dwindling than I have had by wintering inside.

Mr. Pickett. I have wintered two seasons out of doors, but it is practically indoor wintering. I have been packing them with sawdust. For my own part I would hold up my hand for indoor wintering. As for dwindling, I see but little difference if necessary care is taken.

Mr. Atkinson. How soon do you take them out?

Mr. Pickett. As soon as we feel confident we are going to have warm weather. If I get them all out in April I do very well.

Mr. Smith. I think in the future we will put more out in March. The last two seasons I have put them out on the 8th of March. As far as I can see I think I shall winter more in the cellar. We have a good deep cellar, with high temperature. Some say 45°, but I would say from 45° to

50°, because I notice those on the top always come out in the best condition. I always raise them about 18 inches from the floor, and the cellar is perfectly dry.

Mr. Pickett. My experience has been much the same as his. The top rows always winter best.

Mr. Sibbald. I recommended putting them out in March in my paper. If they are contracted, if they fill the hive, it don't matter whether they are put out in March or not; if they occupy ten frames, half of it empty space where cold and frost can get in, they will spring dwindle.

Mr. Holtermann. There is such a diversity of opinion through the country as to spring dwindling. In five cases out of a hundred there is spring dwindling as a result of the season. Where you have these catchy springs; the sun comes out warm, and the bees get out, and then cold weather comes and spring dwindling is the result. But generally it is the result of poor wintering. If you have a good cellar, that you can keep an even temperature, and I must confess I don't like one between 45 and 50, I would sooner have it between 42 and 50, but if you can do that I believe you won't have much trouble with dwindling, but if you are wintering so that the bees are getting restless put your bees out early, because the longer you leave them there the more restless they will become. I wintered my bees last year, a good many of them, according to the Alpaugh plan. I like it, and I believe you can get every condition inside or out, and you want to select what is best for yourself. Unless you have a good cellar, and any temperature you like, I would say winter outside, and you will have less danger of spring dwindling.

A Hive Cover.

"The hive could be made much lighter than we make it by having a cap or cover fitting over it dove-tailed or simplicity fashion instead of telescoping cap, but we have tried both and no one can run fast enough to catch up with us to make us a gift of such a hive for our use. We want the overlapping cover for several reasons."
—C. T. DADANT, in *Gleanings in Bee Culture*.

[This from so prominent and well-known a bee-keeper should have weight. The Holtermann cover has the overlapping feature.]

Did Heise Steal it?

Mr. D. W. Heise is outrageously slandered in the June Canadian Bee Journal. A correspondent, referring to his humor, quietly asks: "Is Heise not a German?" In reply Editor Holtermann makes this public accusation:

"Yes, Heise is certainly a German. I do not know if he ever waylaid an Irishman and stole his wit, or how he acquired it, but we may rest assured he never came by it honestly."

Now, being somewhat German ourselves, we feel like helping Mr. Heise. The idea of a German having to steal wit of an Irishman in order to possess any! We wonder where Editor Holtermann has been all his life! We hope the next time they meet, Mr. Heise will show Mr. Holtermann the difference between German and Irish wit. If the meeting place shall be in Philadelphia, about Sept. 5, 6 and 7, we will try to be on hand to help Mr. Heise, in case he needs any assistance when he attempts to put a Dutch "Holter" on that "Irish" "man" of the Canadian Bee Journal!—American Bee Journal.

England's Honey Supply.

Mr. Benj. G. Irving, of New York, some time ago sent us the following interesting clipping, which originally appeared in the Westminster Gazette:

English bees are unable to produce as much honey as England needs. Every year we have to import 2,250,000 pounds, of which the declared value is 31,000 pounds sterling, or about 3½d. per pound. Among the countries engaged in supplying our markets with this product, the principal are the United States, Chili and Peru, the other contributors including the British West Indies, France, Australasia, Canada, Germany, Italy, and the Spanish West Indies. No statistics of the quantity of honey produced in the United Kingdom are obtainable, but it is quite evident that bee-keeping is capable of being much more profitably developed than it is.—American Bee Journal.

UNSOLICITED TESTIMONIALS.

Goold, Shapley, and Muir Co.

The Queen I received from you is a splendid breeder, I introduced her safely and she has eight frames filled with brood.

W. J. HAMMOND.

Arnprior June 9th, 1899.

I am well pleased with your bee-hives.

D. SHAW.

Angus June 5th.

I am well satisfied with my foundation, it is away ahead of what I have been using.

JOHN MARSHALL.

Hornings Mills, June 6th, '99.

I am much pleased with the hives, comb foundation and other bee goods I purchased from you, I think they are just what bee keepers need.

S. J. BROWN.

Laurel Ont, June 9th, '99.

Expositor, May 27th, 1899.

The Goold, Shapley, & Muir Co., Limited, have, during the past week, sent large shipments of bees to different points in the Dominion, including New Brunswick, Prince Edward Island and British Columbia. The company has a Dominion reputation for selling stock which gives the very best returns in the apiary. Last year they sold eight colonies to a man in Quebec, who increased them to twenty and secured 1200 lbs. of comb honey.

It Worked Too Well.

"They say that electricity is a sure antidote for the stings of bees," said the electrical enthusiast.

"Yes, I've tried it," said the student.

"Really? How did it work?"

"Well, a bee stung me, and it hurt so that I applied the electricity. After that I went over and sat down in a hornet's nest to see if I couldn't get over the effects of the cure."

Reports.

Bees built up well this spring, swarming is earlier than usual and the prospects are favorable towards a good season.

COLPITT BROS.

June 10, '99.

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This Exhibition is second-to-none in Canada for
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EXCELLENCE OF ATTRACTIONS.

Grounds extended and several new buildings
erected since last Exhibition.

\$1600 added to the Prize List this year, principally in Live Stock Department.

Dairy building extended and Prizes on Honey,
Maple Syrup and Sugar increased.

\$3000 offered in purses for HORSE RACES.

SPECTACULAR:

"BOMBARDMENT OF PEKIN"

For Prize List, Race Programmes, and all information concerning the Exhibition, write the Secretary, and for all information regarding Hotel and Boarding House Rates and accommodation, consult the Ottawa Evening Journal two weeks previous to opening of Fair.

Specially reduced rates on lines of travel.

Come first week and avoid the rush.

Wm. Hutchison, M.P.,
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E. McMahon,
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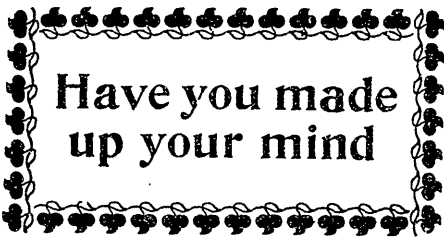
ENTRIES CLOSE SEPT. 6TH, 1899

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For information and Prize Lists, apply to

Lt.-Col. W. M. Gartshore,
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