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CANADIAN BEE JOURNAL

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NEW SERIES
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BRANTFORD, ONT., AUG., 1898.

WHOLE NO.
402

Some but not all of our bee-keepers know that there is a prize, or rather four prizes, given at the
Inventions. Toronto Industrial Exhibition for the

"Best and most practical new invention for the apiarist, never shown at this exhibition." This prize has been given for many years. That it is a most difficult prize to award, any thoughtful person will admit. At almost a moment's notice the judges are called upon to decide a question which covers more than one important point. It may be in a direction they have never thought and many an invention has been shown. It might be instructive and amusing to record the inventions which have been displayed. In the direction of the ridiculous has been shown a box rather longer than wide and fitting into this is a board with an upright handle in the centre. The board is exactly the same size as the length and width of the box. By pressing or sitting on the end or point of the handle, you could punish severely anything between the bottom of the box and the board attached to the handle. The practical application was in this way, the hive without bottom was placed upon the box minus the squeezing apparatus. The bees, if for reason were not wanted, say in the fall of the year, were shaken into the box and then destroyed by crushing the bees between the board and the bottom of the box. The invention however, did not take a prize. This year as far as we can recollect, there is shown the Deep Cell Foundation. A

coil of wire pointed at one end and a tin cover at the other, the object of this was to set the cage over the queen on the comb and force her into the coil, by compressing the coil the queen's wing could be reached and clipped without touching the queen. We believe this invention was shown by Mr. Pieris, Drumquin. The deep cell was shown by the G. S. & M. Co., also the perforated divider at the sides of the sections as used by Mr. Pettit and ourselves, also the wedge to put between the bottom board and the brood chamber. The deep cell foundation took first, the queen cage second and the other two inventions were discarded as not of sufficient merit. It would be well if in future such awards were published, they are of value for the present and the future. If anyone else has an invention to describe let us have it.

* * *

The better thinking class of people are beginning to see the necessity for honest and independent journalism. The editor of **Courage in Journalism.** Munsey Magazine says in effect that much of the criticism of the present day is valueless, it does not make and unmake as at one time it did. Praise is given where it can be, but if any adverse remarks should be made the courage and honesty is lacking. At the annual Press Association Meeting held at Ottawa, during the past winter, one of the leading speakers referred to the necessity for the same thing. Since

that time we have noticed the same thought from other sources. The trouble is, it is pleasant to have everything nice; no fault found; no pointing out of defect or error, no reforms, no advancement can be made by praising and never condemning. It is pleasant to see that the number of independent thinkers is on the increase. We want independent men who will support an honest effort to set matters right and give their support to such, even when matters are not moving just to suit them. A man who withdraws his support the moment his wishes are crossed does not encourage independence.

* * *

At this date of writing July 21st, the honey crop in Ontario, Quebec and east has been good. Clover

The Honey Crop. yielded exceptionally well, the basswood flow has been light, what buckwheat may bring forth we do not know. As to the price of honey, not much was left from last season and times are comfortably good. As far as I can understand the apple crop is light. In one section where fruit growers are best posted, I understand buyers are paying \$2 a barrel, in other sections they are contracting for \$1 per barrel. What effect if any this will have bee-keepers must judge. I believe the less fruit there is, the more honey is likely to be used. The editor of the Canadian Bee Journal has some thoughts of going to Europe with a shipment of honey, only choice clover honey will be taken and his plan at present is to allow no one to send less than 500 lbs. or more than 1000 lbs. and take perhaps 10,000 to 25,000 lbs., he to be allowed \$150 personal expenses assessed equally on the entire shipment and only allowed balance of his personal expenses and reasonable payment for services out of half of what is realized out of the honey over and above lowest Canadian prices. Of course I may not be able to find time to go or may not see fit to go on the above terms, but if any feel inclined to send a shipment on the above terms, let them

write at once. The shipment sent last year has not been a success, but we believe that if someone used to doing business went over with the honey, a success could be made of the shipment. However, as to this the sender must run the risk as to price secured.

* * *

In the past, during the fall of the year, and even during the winter, many bee-keepers have been unable to sell their bees wax. With the large and growing business of the Gould, Shapley & Muir Co. Limited, Brantford, they have decided to take wax at all times paying either cash or trade. This information will please those who want to realize quickly upon this product of the apiary.

* * *

Ever since the St. Joseph Convention of the International Bee-Keepers' Association, I have been **Larvae taken for thinking of the dis-** cussion which there **Queen Cells.** took place in regard to the age of brood taken by the bees to rear queens, when the colony has by accident, or otherwise been made queenless. Some argue or maintain that the bees will take brood of the proper age and convert the cell about them into queen cell and treat the larvae to produce queens. Before that time and since, I contended that the bees did not always use wisdom in this direction, they seem to aim at getting a queen quickly and not one which will serve her purpose best. Long observation has taught me that the queens which come out even several days before the regular time on account of advanced larvae having been taken do not make good queens—others contend to the contrary. Is it not possible that the law of the survival of the fittest, is at work here. A colony in the natural course of events when the old queen is failing provides for a successor, if they do not do this and they have to do this after the old queen is lost

the stock deteriorates through rearing inferior queens and is finally exterminated. The above is simply a thought which may be taken for what it is worth.

Notes and Pickings.

—D. W. HEISE.

"I have used many thousand sections containing full, and partly drawn comb, but I have entirely discontinued their use even for bait sections, for the reason that in this locality at least, first-class comb honey cannot be produced in sections containing comb drawn out the previous season."—C. Davenport in A. B. J.

G. M. Doolittle says in A. B. J. 306, that the changing of hives for the purpose of strengthening a weak colony should always be done at that time of day when the greatest number of young bees are in the air, as 10 young bees just entering in on their life work, are worth 30 or 40 old ones that are just at its close, and the old ones we would get in a ny event.

The teaching, that bees will not become field workers until 16 days old and over, may be all right where a colony is in a normal condition, but just bring about the abnormal condition, by removing all the field force when the hive is full of hatching brood, during a good honey flow, and I miss my guess if you don't have quite a large field force of young bees in 4 or 5 days. I have repeatedly noticed this with my system of management for the prevention of after swarms.

"The only practical way to improve the working or honey-gathering qualities of our bees, is to breed from colonies that will store the most honey. If this is followed out we need not go to the bother of measuring their tongues."—C. A. Bunch in A. B. J.

"Separators or no separators, fence or no fence, plain sections or sections with beeways—well it sets my head in a twirl. The finest comb honey put on this market is produced by a bee keeper that never uses separators or fences, but uses plain sections set a bee space apart in the super. Bees go all around the sections except where they rest on the bottom of the super."—C. A. Bunch in A. B. J. In the July number of the American Bee Keeper,

Editor Hill requests this picker to launch my idea in regard to a better filled section which I mentioned in a former note. You get the whole of my idea Bro. Hill in the above paragraph copied from Mr. Bunch's article; that is, full and free communication all around the section. And as to super construction to thus hold the sections in proper place, I think I am sufficient of a mechanic to know it is practical although I have not tested it.

Editor Hutchinson in his journal, very vigorously defends the system of contraction so extensively practiced throughout the State of Michigan in years gone by, but which Editor Root says has largely been abandoned, and calls it a fact. I fully expect to see the announcement of a challenge for a journalistic duel between the two Ed's.

During a heavy flow of honey, like the clover flow just closed in this locality, it is impossible to manage colonies with a single extracting super, and produce a well ripened article, without the loss of several dollars per hive, through insufficient storing capacity. In such cases I would like 2, and sometimes 3 supers, but am sorry to say I have not the second for all and third for none. How some beekeepers can extract from the brood chamber without at least a loss of 50 per cent unless they take the honey green "is beyond me."

I think swarming has ceased for this season in this locality, and as near as I can learn in most apiaries the increase has been fully 100 per cent. The increase in my own was 50 per cent including 3 Seconds, and 1 Virgin (so called) through lack of attention.

This picker has had for his vacation since the middle of May, solid work of 15, 16 and 17 hours per day. Perhaps it would not be necessary to say that my clothes do not fit nearly so tight as they did in the winter, 25 pounds less avoirdupois, that's all.

Never in my short bee-keeping experience did the bees store so much honey in a given time under the most unfavorable conditions as this season. High winds prevailed fully 3 days out of every 5 throughout the entire clover harvest, together with cloudy days and cold nights. And how the little workers succeeded in rolling up such a magnificent surplus is a surprise to me. For instance, a swarm hived on the 2nd of June, had by the 5th of July, filled a 10 frame Quinby hive, and

30-frame Langstroth super. Not that this is such a large yield under favorable conditions, but it is the unfavorable that staggers me.

This is the first year that I have been annoyed with swarm desertion. Nearly 50 per cent of the swarms, after having been hived in new, well made hives, with new frames and full sheets of foundation, deserted, some the second, third and even the fourth day. The latter having the foundation nearly all drawn out and filled with honey. I can account for it in no way, as the hives were all kept in the shade before hiving, and on the stands they are pretty well shaded with trees. All those deserters had clipped queens, and of course it was an easy matter to return them, but it makes extra work. By the way every swarm without an exception remained and did well after being returned. Will some one please tell me where the trouble lay, that I may try and avoid it another year. [Desertion has given much trouble to everyone this season.—Ed.]

For the benefit of the journal readers who noticed the wailings of that Bachelor bee-keeper, page 301, I may say. There has been no "assassination," I am yet alive. Reason? Let him have two colonies of bees just to square matters. If his case is as hopeless to catch the fair spinster as he would have us believe, and his sympathy for widows and orphans is genuine, he will no doubt manifest it in the near future, as there are quite a number of both in the county. When the afore mentioned sympathy is manifested in a genuine way by our "Bachelor Brother," I will deem it a pleasure to apprise the Bee Journal readers of the fact, if he should fail to do so himself.
—July 9th, 1898, Bethesda, Ont.

BEE-BREAD IN SECTIONS.

How it may be Avoided.

C. DAVENPORT

in A. B. J.

In my last I made mention of the fact that the previous season I lost a large amount—large at least for a bee-keeper—by not understanding the business of producing honey better than I do. This loss was caused partly by bee-bread. A num-

ber of thousand sections, when finished, contained so much of this that they were unsalable, and the honey in thousands more was so poorly fastened to the wood that it was almost impossible to haul them to the nearest towns without breakage, let alone shipping them. In fact, a great many were broken in handling before they left the apiary, as a large part of them were but slightly attached to the wood at the top.

With but few exceptions, bee-bread or pollen in sections has always caused me some loss each season, and to a less extent sections containing honey imperfectly fastened also, but never anything like this. The year before, under the same management, there was practically no loss from either cause. The reason might, therefore, in some sense, be accounted to blame, but a bee-keeper in order to make a success of the business at present must be able, and understand how, to meet the conditions of different seasons, and I have no doubt this loss I have described might have been avoided if one had known how; and while I will admit that I might not be able to entirely avoid it if the same conditions were to occur again this season, yet I consider what I did learn in regard to the matter was of more benefit to me than what was lost; that is, that it will, or may be, in the years to come, for I am a young man yet, and expect to continue to follow bee-keeping as a business in future.

As I have said, what I learned last year cost me hundreds of dollars, and now it is to be laid before the reader at a cost to them of but a fraction of a cent. I wonder if many of us appreciate what benefit a first-class journal like this is to its readers. By this I do not necessarily mean that anything from me may be of value, but there are hundreds of others who each year, through its columns, tell us their experiences, and what is constantly being learned that is of value to our pursuit. There have been in the past, and no doubt there will be in the future, single copies that are worth much more to me than the entire numbers cost for a year.

I will first say that pollen in this my immediate locality is very abundant through the entire season, but as this is used mainly in brood-rearing, the natural instinct of bees causes them, when conditions are so they can, to store it in the brood-chamber, where it will be easily accessible for this purpose. But the plan I follow with swarms, either natural or artificial, and one which I believe is largely practiced, is to hive them in a

hive with frames containing only starters, when, if the supers from the parent hives, in which work has already commenced, is put on in a day or two, work will be resumed in them at once, and a good queen will usually lay in a large part of the comb below as fast as it is built, so the most of the honey brought in is necessarily for some time stored in the sections.

I do not believe there is any other method by which as much honey can be secured in sections; and, in a good season, or during a good flow, a swarm when first hived will bring in much pollen for a few days. Last year the flow, except during the first few days, was very scant and irregular; and as it was those swarms treated the way I have described that put pollen in the sections, it will be seen that this method should not be practiced during a flow in a locality where pollen is as abundant as it is here, for when they cannot secure honey, if pollen is plentiful, they will carry in an excessive amount of it, and must of necessity store it in the sections.

Now, I have not much doubt that two, or possibly one, frame in each hive containing drawn comb, then waiting until considerable comb was built before putting on the sections, would overcome the difficulty, or if no frames containing combs were on hand, a like number filled with foundation would prove effective.

There is so much pollen here that colonies that did not swarm would oftentimes carry it into the sections; but years ago I accidentally learned how to almost entirely overcome this by changing the places of combs in the hive. This was done to discourage swarming.

My practice was, and is largely yet, at the approach of the swarming season to replace the two outside combs with those that contain the most sealed brood, the two from the outside which usually contain a large proportion of what pollen there is in the hive are then placed in the center. If done at the right time this has a tendency to check swarming, and I soon noticed sections over colonies so treated hardly ever contained any pollen. Such an abundance of pollen right in the center of the brood nest may possibly act as a check to their gathering much more for a time. However this may be, there would soon be plenty of room for them to store a large amount again in the two outside combs.

As to sections containing honey but slightly fastened to the wood, I believe there are means by which this can be

largely avoided, no matter what the character of the flow is, and even if only small starters are used. But as this article is already so long I will have to wait to explain my experiments in regard to this matter until some other time.

Southern Minnesota.

Apiculture on the Farm

—OREL L. HERSHNER.

The last few years of failing crops in many localities, and ruinously low prices everywhere, have given the tillers of the soil reason to welcome every legitimate means to increase their income from the farm. Frequently the saving of a few dollars, by giving careful attention to some branch of rural husbandry, auxiliary to the main branch of farming, would mark the difference between success and failure.

Few people are well adapted to the cultivation of bees and the production of honey. The sting of the bee is quite painful to some, but cases where it has proven fatal or even serious are very rare, and there is much needless fear of them. Bees, like domestic animals and men, are not usually vicious without cause. They seldom volunteer an attack, and it is rare that they will sting when their hives are not being manipulated or otherwise disturbed. The bee smoker and veil give effectual protection to the person of the operator. After the apiarist becomes accustomed to being among his bees he will not ordinarily care to wear a veil, except when handling colonies that he knows to be vicious.

Apiculture offers good rewards to the careful and progressive farmer, but there is perhaps no other pursuit that suffers so much from neglect and mismanagement. The apiarist should thoroughly familiarize himself with the natural history and habits of the bee, so as to be able to control their reproduction. Rearing of young bees should be stimulated only at that season of the year that will bring the workers of proper age to gather the crop of honey when it comes. The rearing of drones in large numbers should be discouraged and their number controlled, for drones are consumers and not producers. The flora of the territory surrounding the apiary, and in reach of the

bees, should be carefully studied, in order to know from what sources to expect honey. Locations differ widely in this respect. Flowers that produce honey in abundance in some localities, are useless for this purpose in others. The flowers of one kind of plant may produce honey in great abundance one season, and absolutely nothing the next. But in this state it is rare that we have an absolute failure. Our best honey plants are white clover, basswood, and buckwheat. In some seasons the bloom of the apple trees secrets considerable nectar and in some localities the wild raspberries, sweet clover, golden-rod, wild asters, dandelions, thistle, sumack, heartsease, and some other less important flowers, produce forage for the bees. There are few localities where a majority of these plants are not found in greater or less abundance, and for this reason a person can hardly go amiss in establishing an apiary. Care should be taken to give the bees room to store the honey at the right time. The honey flow from any class of flowers usually lasts but a few days, and if the apiarist is not acquainted with the condition of his bees and his flora, and does not act promptly his opportunity of securing a honey crop will be gone.

A few words of comparison of apiculture to other rural vocations and avocations may not be out of place here. After the initial expense in establishing an apiary, the outlay necessary to the production of a crop of honey is comparatively small. Including interest on investment the expense would not probably exceed two cents per pound. The labor of looking after a few colonies of bees is hardly worth estimating, in as much as one man can without difficulty do the work required to run three or four hundred hives, if he devotes his whole time to his bees, and employs a few days help in the busy season. A fair average crop of honey may be placed at thirty pounds per colony, which, if put in good marketable shape, will sell for from 8 to 10 cents a pound. These are low estimates, and in many localities larger returns would be obtained. Thus the net returns per colony may safely be placed at from \$1.80 to \$2.00 per colony. Most farmers, if they have conducted their farming operations on business principles, know pretty nearly what the net profits are, from a given amount of capital, invested in poultry raising, sheep husbandry, dairying, gardening or fruit growing. Without attempting to be accurate I venture to say that the net profits from any of these rural pursuits are far less than

can be realized from the apiary. Bees are the only domestic animals that do not require daily feeding and constant care.

In the winter months apiculture can be combined with almost any branch of farming, and many apiarists are actively engaged in poultry raising, gardening and fruit-growing. Thus it is possible for farmers and gardeners who operate small places to greatly increase their income, by the outlay of a small amount of capital, and the use of a small plot of land for an apiary.

It is not advisable for a beginner to rush headlong into beekeeping. If he does failure and disgust are likely to result. From two to five colonies are all that any beginner should attempt to handle. The beginner is likely to try numerous experiments during his apicultural infancy and these experiments are more likely to be disastrous failures than not. If experiments are tried on a small scale the loss will be correspondingly light. As the number of colonies increase the apiarist will acquire knowledge and skill, and instead of giving up in discouragement on account of a wholesale failure and consequently heavy loss, he will be attracted and fascinated by this most interesting of pursuits, and eventually make it a financial success. Let the beginner start with a few colonies. Have them in good common movable hives, placed in some sheltered location, near the house: see that they have the proper amount of room for storing the surplus honey at the season when honey producing flowers are in bloom, and they will gather and store the honey for you. And if your bees are near your neighbors land, where there are plenty of flowers, they will not hesitate to trespass. But the neighbor should not protest for the bees are gathering and storing a pure and wholesome sweet that would otherwise go to waste: and incidentally they are fertilizing and fructifying the neighbors' fruit trees and clover and buckwheat fields that would be less productive but for the bees. From the standpoint of political economy every member of the state who is a farmer should encourage apiculture, for they add to your wealth. The income to the rural population might be largely increased if more bees were kept and the nectar that now goes to waste, saved. The consumption of honey if capable of great increase. It can be truthfully recommended as the purest and most wholesome of all sweets. In some cities it is largely used by bakers in the manufacture of various kinds of honey sweetened cakes. It is used in the manu-

factory of confectionery, vinegar and medicines. The increased consumption of honey for all these and other reasons should be encouraged. If the farmer did but know it he has a better opportunity to gather his sweets from his land, than he once had when maple trees were abundant in his forests.

Apiiculture, like every kind of industry pertaining to the farm, is the subject of considerable literature. There are a half dozen, or more, periodicals published in this country and Canada that are devoted exclusively to the interest of apiarists; and there are numerous books published also, by men who have spent the best part of their lives in researches and experiments upon the bee and the production of honey. These books give detailed information on every branch of the subject. No one can afford to enter any calling without thoroughly informing himself in relation to it. To those intending to embark in apiculture I can give no better advice than that they subscribe for at least one of the periodicals devoted to bee-keeping, and purchase one of the several exhaustive works on the subject.

Buffalo, N. Y.

The Apiary of R. H. Smith,
St. Thomas.

Our Beekeeping experience dates from the spring of 1880 with the purchase of one colony of bees in the Thomas hive, and not a strong colony at that, but it did not matter much for we had read that bees increased very fast so we had dreams of lots of bees and honey, and we would be well pleased if we only had all we could use of Nature's purest sweet. Well do I remember going to Bracebridge eleven miles to bring home the bees, (for we lived in Muskoka at that time). As we had only an ox team my brother and I decided the only way to insure their safe carriage over the rough roads was to carry them. After closing them in carefully and tying a light bar on each side of the hive for handles, we started about sundown and arrived home during the night. Next morning we were curious to see the inside of the hive; not having heard of such a thing as a smoker I made a smudge in an old pail and my wife was

to blow in smoke while I pried off the honey board. I don't think that board had been taken off before, but I got it loose with a snap, and some bees came out, the smoker could not be got to go where we wanted it, so the bees began to get in our hair and sting. I tried blowing in smoke but more seemed to go down my throat than into the hive and by this time the bees were getting the best of it. When I found how tightly the frames were glued into the slots we decided we had seen all we wanted to at that time.

The next thing was to prepare hives for the increase; as we did not like the Thomas hive I made one from a description given in the Montreal Witness by an Ontario bee-keeper, a two-story affair, but



R. H. SMITH, ST. THOMAS.

the two stories were not divisible, so that to get at the lower story one had to dip down through the upper one; both were to be surrounded by four inches of chaff, a clumsy contrivance that was no improvement on the Thomas hive.

About this time Mr. D. A. Jones created a great stir in the beekeeping world, and made a great exhibit in Toronto. I went down to the exhibition and learned several things about handling bees and after buying a smoker and some comb foundation, I went home determined to see the inside of our only swarm. After taking off the honey board which was glued fast

to every frame, I found the bees had built their combs across the frames instead of in them, they having no starters or comb guides. However I took the hive to pieces and transferred the combs into the frames, filled up the hive with full sheets of foundation, fed them up in October and they wintered well packed in chaff. The following spring we purchased one colony from Mr. Jones, and then decided the Jones' deep frame hive must be the right one, so made a lot of Palace hives after Mr. Jones' pattern, but that did not fill the bill very long, so, like most other beginners, we devised another hive to take the combination frame and that was

one of her letters at the time she said, "I have borrowed every crock in the neighborhood to put honey in." That season decided that we would make a specialty of bee-keeping, and I came home to keep our little farm till the bees increased enough.

That time came before we had many bees: for two years in succession we had a failure in most of the farm crops from drouth, and to cap the climax a bush fire swept over that part of the country and it consumed the result of our labor of years. I can sympathize with those in the fire-swept region this year. We then moved to Bracebridge for five years, where I ob-



HOME OF R. H. SMITH, ST. THOMAS, ONT.

the best we had tried. After blundering along with varying success I took a trip to the North-west with part of a car load of stock for my brother and among other effects, a colony of bees. The long confinement and journey (15 days) reduced them in numbers but they built up and filled a crate of sections. That I exhibited at the first agricultural fair held at Indian head, Assinaboia, to the great surprise of many. During my absence my wife looked after the farm and bees, they increased from eight to twenty colonies and she extracted about 900 pounds of honey. In

tained employment as assessor, etc., that did not interfere with my work with the bees.

In the summer of 1893 I paid a visit to Mr. J. A. paugh at St. Thomas, who was wanting to sell out his apiary and home. We decided to take it only to meet with a severe reverse the first two years in the failure of the honey crop. But last season and the present we had fair crops of honey.

The picture of our home does not show much of the apiary of 110 colonies which is located partly in the rear and under the

apple trees (which were at the time loaded with fruit). We have also two other apiaries about five miles from the city, or 170 colonies in all. This picture was taken at a sad time for us; my wife, who is sitting on the steps, had been ailing for six months, and had just been told by a Toronto doctor that she had only three or four months to live. It was a great shock and we all felt as sad as we look. However, the doctor proved to be mistaken in the time but not in the disease, (cancerous tumor). A year has passed since that time and last month my dear wife gradually sank and passed away after great suffering, patient and brave to the end. Henry, our oldest son, and I miss her very much. She was always thinking of our comfort, and if I was away from home during the swarming season I knew the bees would be looked after, as she delighted to work with them and always had a few colonies for her own special use.

[This was written last fall.—Ed.]

A Beginner's Experience.

JAS. J. HURLEY.

Another month has passed away, and I am pleased to record the fact that my new friends, the bees, are prospering. On July 1st I extracted 60 pounds of honey. I had a great experience on that day. I now have at this writing (July 22) two supers on my hive, one of which is filled and the other almost so. I expect that there will easily be 60 pounds more to take off when the season closes; making a total of 120 pounds from one hive. Of the two supers now filled only one was extracted on July 1st, so that the bees have drawn out three supers and gathered the above quantity of honey. The other super extracted now contains a swarm of bees. I preferred to give the swarm the drawn-out frames rather than the frames with foundation.

After having extracted on July 1st, and replaced one super on the hive, I expected to have a swarm. On the evening of July 7th I was informed that a swarm of bees were in a neighbor's tree, and assuming that they were mine, I hived them. No one saw them issue from my hive. I am yet in doubt whether they are mine or not. I could see no perceptible diminution of bees in the hive. I took my super, from which I had extracted the honey, to the tree where the bees hung. They fell to

the ground in my efforts to cut the branch to which they attached themselves. I found the queen and saw her pass into the hive, but the bees were slow to follow. They clustered in front and all around the hive. After waiting till dark, I took the smoker and gave them a good severe smoking, and drove them into the hive. I then closed the entrance and carried them home. They went to work at once. They cleaned the comb up nicely and immediately set to work gathering bee-bread and honey. I was surprised at the quantity of bee-bread they gathered. I kept watching very anxiously for the queen to start laying which she did not do until the 16th, just nine days after having been hived. At the top of the frames and forming an arch is stored the honey they have gathered. All the cells, with the exception of those containing bee-bread, have now an egg in each. Some of the brood is quite well advanced. I am going to watch them closely through all their stages of growth during the twenty-one days. When one set of brood is out it will be a very strong hive, because the swarm was a large one.

I have become very fond of bees. They are an interesting and delightful study. Editor Holtermann keeps me thoroughly posted and has given me a valuable amount of information. He seems to know the honey bee almost as thoroughly as it is possible to know it. I am not now at all surprised that he has taken such a forward position among the bee-keepers of Canada. I have spent much time with him in his own apiary. His presence seems to have such a quieting effect that I am never afraid of getting stung while he is about.

Talk about getting stung! Did you ever have the itch? Well, its the same thing. On the morning of July 1st I started out to take the supers off my hive for extracting. I had a bicycle suit on. The bees got at the calf of my leg and stung through the stocking. They didn't do a thing with me. The leg swelled up, and the heat and fever that was in it was something awful. I simply scratched all night long.

I am living in delightful anticipation of the crop of honey I will reap next year. Possibly I may become conceited enough to think I am a bee-keeper, and attend some of the conventions. I remember the last Ontario convention held in Brantford. Editor Holtermann, who was then president, entertained a number of the delegates. I had the honor to be present. I sat next to that veteran bee-keeper, Mr.

Hall, of Woodstock, who occupied the vice chair. While sitting beside Mr. Hall, a "good thing" occurred which I cannot resist telling now that the opportunity has presented itself. It occurred this way: After Mr. Hall had disposed of the toast list placed at his disposal, I noticed a large number of gentlemen had said nothing. I thought some might be brought to their feet if they had the opportunity, so I suggested to Mr. Hall to call for volunteer toasts. It seemed to strike Mr. Hall as a good idea, so he immediately rose, placed his hands with great deliberation upon the table, cleared his throat and said: "We all admire our noble young men, whose patriotic fervor prompts them to take up their arms at their country's call, and defend it if need be, with their lives! Let us," with a majestic wave of the hand, calling the guests to their feet, "Let us drink the health of our noble volunteers!" Alas! the silent bee-keepers were not in it. Not one arose to respond. One or two young men, whom Mr. Holtermann had engaged to furnish the musical part of the program, replied. The hand of Mrs. Hall was plainly visible. She had evidently kept her mate at home when the convivial Scotchmen and Irishmen of Woodstock were around the banquet table keeping alive the immortal memories of their respective countries. Mr. Hall, evidently was not one of them. No one present saw the joke, and I have been bursting ever since to tell it.

Frame Hives and Box Hives.

—G. M. DOOLITTLE

For a long time it has been taken for granted that the movable frame hive was vastly superior to the box hive for the production of comb honey, with but little thought being given to the subject. If I asked a prominent bee-keeper the question, which is the better, the frame hive or the box hive for the producing comb honey? the answer I would receive nine times out of ten would be, "why, the frame hive, most certainly. If this were not so all the writers in the different bee papers would not be writing about frame hives and praising them." But the simple reason that writers on bee culture use frame hives amounts to but little. The things we wish

to know is, why these writers use the frame hives in preference to a well made and a well proportioned box hive. As I am asked nearly the same thing by a correspondent, he saying, "give your views through the columns of the CANADIAN BEE JOURNAL," perhaps it may be interesting to some, to go over these grounds with me. Paul, the great apostle to the Gentiles told the early Christians that they should always be ready "to give a reason of the hope" they had, so any bee-keeper should always be ready to give a valid reason for the way he manages his bees, or a good reason to support whatever he writes for publication. If any man or woman cannot do this they can rest assured that there is something wrong somewhere. So, when asked as above, I questioned myself, why do I use movable frame hives in preference to box hives? As I believe I have good reasons for so doing, I will give them to the readers of the CANADIAN BEE JOURNAL, and let them draw their own conclusions as to the correctness of the same. We are to suppose each style of hive is well made, and of the same dimensions, and that the box hive gives as easy access to the surplus arrangement as does the other, so that we may be fair in our reasoning. Keeping all of the above in our minds we proceed; as spring is the season when we first begin to prepare to secure our honey crop, we will commence with that time. Upon the first warm day we wish to know that each hive has honey enough in it to last till the flowers bloom, so the bees can secure a living. To this end we wish to examine the inside of the hives, we come to the box hive, take it from the bottom board, and hold it up to the sun, driving the bees down with smoke, to see if we can see any sealed honey, and after inspecting all as best we can, we have to guess at the matter, and trust that our "guess" is right. If bars are used at the top in connection with the honey board, we can remove the honey board and guess a little closer than before. With the movable frame hive all we have to do is to lift out the frames and we know to a certainty just how much honey there is in the hive. As we work on we soon find a colony with little or no honey, which would starve if not fed in a week, so we get out our feeder and feed them. If it keeps warm so the bees can get at the feeder, or to a comb of honey we place in the chamber to the hive, all goes well. If it turns cold our bees starve. In a case like this, with the frame hive, all we have to do is to give the starting colony a frame of sealed honey from

our honey room, or fill a comb with syrup, and hang in the centre of the cluster of bees, when we know positively they are all right. Then on our examination we find a colony as above, while the next one has much more than is needed. With the frame hive we can exchange an empty comb for a full one, and thus both colonies are benefitted and we are saved the trouble of feeding at all. A little later in the season we wish to know that each hive has a good prolific queen, so that workers may be produced in time for the honey harvest, and if they have not such a queen procure one for them by raising or otherwise. Here we are almost entirely baffled with the box hive, while we can know to a certainty about the queen being good or poor if we use a frame hive, and if poor the matter can be easily remedied. At this time we also wish to get all surplus drone comb out of the hive, if this has not already been done, for if the bees are allowed to build more or less drone comb, said comb will soon be filled with drones, which, when hatched, will consume large quantities of honey, which would otherwise be stored as surplus. This keeping the drone comb out of the hive is no small item, for I have known so much drone comb to be built by a swarm having an old and failing queen that the next season the drones produced from that comb consumed nearly all of the honey, as fast as the few workers reared could gather it. With the box hive we can do little or nothing by way of getting rid of this drone comb, while with the frame hive it is easily taken out and worker comb or worker foundation fitted in its place. Then I am a believer that a colony of bees can be increased much faster by a proper manipulation of the combs, thus getting the bees ready much quicker for an early honey harvest, then they would be if left to themselves, which thing, (manipulation of the combs) is an utter impossibility with the box hive. Again, as it approaches the honey harvest, we find that some of our colonies are extra strong, while others are weak. This we wish to remedy by taking bees and brood from the stronger and giving them to the weak. Of course bees can be drummed out from the box hives and given to others, but how much easier it is to take a frame of brood and bees from a frame hive and set it into another hive, than by any plan we could use were we to adopt box hives. Many more reasons could be given, but the above are quite sufficient it seems to me, to convince any one of the superiority of frame hives. Notwithstanding all of the above let me

say, that the value of the frame hive consists wholly in the use of the frames, and if any one is so careless or lacking in energy that they never handle the frames, or make use of them to promote the welfare of the colony, then the box hive is as good for them as any.

Borodino, N. Y.

The Taylor Swarm-Catcher.

—H. ROWSOME

Beekeepers have continually exercised all their ingenuity in discovering almost countless methods of reducing the apiarist's dirty work, i. e. Swarming. But putting aside the various self-hivers, queen catchers, and different systems of dividing, only one method of controlling swarms has come into vogue viz. clipping the queen's wings. But there is a device that is little used and ought to come into more general practice. I mean the Taylor Swarm-Catcher which cages not only the queen but the swarm as well.

If the beekeeper can watch the hive entrance for the queen, he can just as easily and in a third of the time, clap a catcher to the entrance and then look round for other swarms which may be issuing, taking care of three or four in the time he spends looking for the queen. And besides this he avoids the labor of clipping his queen's wings.

The catcher should not be left on the hive longer than the swarm is issuing as there is a tendency for it to return. When the cloth is tied over the entrance the catcher should be stood up entrance downward, so that the swarm will not cluster on the cloth, making it more awkward to be taken off. Of course the merest tyro understands that the queen must be inside the cage or all will go wrong. The catcher should be left standing near at hand for those bees that have escaped to cluster upon, but it must not rest against a hive because the roar of the swarm might cause another to issue.

The swarm must not be dumped at once but the bees ought to be allowed time to cluster and to get rid of the flying fever. Otherwise the swarm will fly up and cluster upon a tree. A fussy man may put his swarms on ice or under the pump. The writer has left a late swarm out all night. Then when the cluster is thoroughly cool it may be dumped in almost a solid mass with no flying at all.

In a very crowded apiary I had three swarms in ten minutes, six in the hour. They were caught with the greatest ease. The swarms rushed pell-mell into the cages, which were then tied up and the bees looked as pleasant as a bull in the pound. No swarms united. The writer infinitely preferred this method to displaying traces of his Simian ancestry by shinning up a tree and playing the ape in its powerful branches and then shaking a collection of swarms as big as a barrel down his sleeves to make him howl like a roasted cat and after that hiving a lot of bees in one place without a queen and in another all queens with the attendant complications.

With every attention paid to the easy details, and these details soon become a habit, the Taylor Swarm-Catcher is a success, but if the necessary conditions are neglected and the device is a failure, the fault is not in the cage but in the manipulator thereof.

Burlington, Ont. July 16. 1898.

Mr. Rowsome, who has been spending the season with the editor of the C. B. J. in the home apiary with the object of engaging in bee keeping for himself in the above gives his experience—I should just like to emphasize the necessity of keeping the bees in the swarm catchers until they cluster. If this is not done they are likely to fly away when dumped in front of the hive. I believe this device will come into very general use before long.

To Prevent Swarming.

EDITOR C. B. J.

Dear Sir, Received the 50 frames and foundation to-day, many thanks for your kind attention and promptness in shipping. I have four hives with supers nearly all capped over and I am putting on a second super, between, so as to prevent swarming if possible, these four hives have caused me no trouble as yet, but I have two first swarms, which I am unable to control as regards swarming. Now I wish you would be kind enough to give me a little advice regarding these two

swarms. I put supers with full sheets of foundation on these two swarms in time, which they filled and capped over in 19 days, I then put on a second super with full sheets of foundation (between) but could not do this before they got crowded and commenced swarming. I then caged both queens for 8 days, this of course stopped the swarming and during the time the queen's were caged they did well, but after liberating the queen's they have again commenced swarming as before although they have ample room provided by the second super between, which was put on, on the 6th inst., and which is up to date nearly all drawn out. Now what objection would there be in placing a queen excluder between the bottom board and brood chamber to prevent the queen from coming out? Should this not answer the same purposes as caging the queen and at the same time letting her have liberty in brood chamber? This arrangement would of course prevent the drones from passing in and out of hive, but there is only a very odd one, and besides they are not needed for fertilizing purposes now. Is there any objection to this arrangement or should I let them swarm and proceed as explained by Mr. Morrison, page 294, C. B. J., July 1898 kindly reply and oblige. Yours truly

A. R. ROBINSON,

Quebec, July 14. '98

P. S. If all right to place queen excluder as explained how long should I let it remain there. A. R. R.

A. R. Robinson Esq., Que.,

Dear Sir,—I am in receipt of your letter of the 14th, and in reply would say that I am an advocate of preventing swarming by giving room in time, shading and ventilating, but I would not resort to methods such as you mentioned. To cage the Queen or prevent her from flying by putting a queen excluder under the brood chamber is bad practice. To prevent the bees from swarming in such a way, will, in my estimation, give less honey, and the bees will not work as well. Again, if the bees swarm frequently and the Queen does not follow, being prevented in some such way as mentioned above, they will destroy her. If I was very anxious to prevent increase I would break down the queen cells, and give the bees more room. If after this they started cells and swarmed, I would allow them to have a new hive. You appear to have a very heavy honey flow in the Province of Quebec.

R. F. HOLTERMANN.

Toronto Industrial Exhibition Prize List for 1898

Class 76. HONEY AND APIARY SUPPLIES

Open to All Bee-Keepers—Agents Excluded

Entrance Fee—25c. Each Entry

SEC.	1st.	2nd.	3rd.	4th.
1 Best and most attractive display of 50 lbs. of extracted granulated Clover honey, in glass, quality to count 80 points, display 20 points.....	\$4	\$3	\$2	\$1
2 Best and most attractive display of 50 lbs. of extracted granulated Linden Honey, in glass, quality to count 80 points, display 20 points.....	4	3	2	1
3 Best display of 500 lbs. of liquid extracted Honey, of which not less than 250 lbs. must be in glass, quality to count 80 points, display 20 points.....	18	12	8	5
4 Best 500 lbs. of Comb Honey in sections, quality as per score card to count 100 points, display 33; total, 133 points.....	22	17	10	6
5 Best 12 sections of Comb Honey, quality to be considered, that is to say clean sections and best filled.....	5	3	2	1
6 Best 100 lbs. of extracted Liquid Linden Honey, in glass, quality to count 80 points, display 20.....	7	4	3	—
7 Best 100 lbs. of extracted Liquid Clover Honey, in glass, quality to count 80 points, display 20 points.....	7	4	3	—
8 Best 10 lbs. of extracted Liquid Clover Honey in glass.....	4	3	2	1
9 Best 10 lbs. of extracted Liquid Linden Honey in glass.....	4	3	2	1
10 Best 10 lbs. of extracted Liquid Buckwheat Honey, in glass.....	4	3	2	1
11 Best Beeswax, not less than 10 lbs.....	4	3	2	—
12 Best foundation for brood chamber.....	3	2	1	—
13 Best foundation for sections.....	3	2	1	—
14 Best Apiarian supplies.....	10	5	—	—
15 Best and most practical new invention for the Apiarist, never shown before at this Exhibition.....	6	4	3	2
16 Best six varieties of uses to which honey may be put in preparing articles for domestic use, the increase they are likely to make in the demand for honey, quality and originality to be considered.....	6	4	3	—
17 For the most tasty and neatly arranged exhibit of Honey in the Apiarian Department, to be limited to the quantities called for in the preceding sections, all the Honey to be the product of the exhibitor. \$25 of this prize is given by the Ontario Beekeepers' Association.....	35	16	8	5
18 To the exhibitor taking the largest number of first prizes for Honey at this Exhibition, 1898.....	1. Silver Medal.	2. Bronze Medal.		

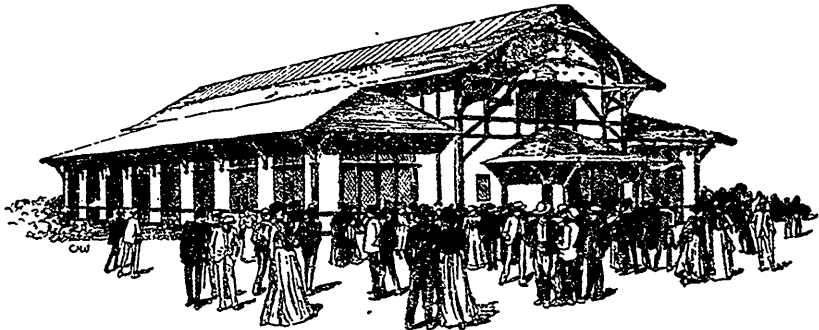
Special Exhibit.

A specially interesting exhibit will be made at this Exhibition under the supervision of Mr. R. F. Holtermann, of the Ontario Agricultural College Staff, by permission of the Hon. John Dryden, Provincial Minister of Agriculture, showing forth the Natural History of the Honey Bee; interior of the hive, queenless colonies, with queen cells, drones and workers. Also comb building and honey storing in different stages; also brood and the method of handling bees and taking honey, with practical lectures thereon.

Bee Culture

AT THE TRANS-MISSISSIPPI.

The Apiary building at the Trans-Mississippi and International Exposition is located on the North tract directly opposite the Transportation and Agricultural Implement building. It belongs to what is familiarly known as the Swiss Farmhouse style of architecture and is declared by experts to be the best arranged and most convenient building ever erected for bee exhibits. The building is 148 feet long by 75 feet wide and is built of wood and staff. All the exposed heavy timbers are painted a red brown color while the roof is green and has a skylight on each side of the ridge pole that extends the length of the building. Every precaution has been taken to insure plenty of light as it is an important adjunct in displaying a honey exhibit. In addition to the skylights there are numerous windows and the show cases have both glass sides and tops. The interior of the building has been prettily decorated with



draperies of yellow and white and the names of the counties exhibiting are shown in comb honey.

The Nebraska display is arranged in a case that extends along the south side of building. The exhibit is very attractive and complete and contain a large array of samples of honey both in the comb and extracted. A unique feature of the Douglas County exhibit is the bottled wine and vinegar manufactured from honey.

In the centre aisle a large collection of pressed honey and pollen producing flowers and plants are displayed in a large case. Nebraska is represented by 1800 different specimens. There is also an attractive array of wax flowers, the work of Mrs. E. Whitcomb. Other states exhibiting are: Iowa, Wisconsin, Minnesota, Kansas, Missouri, Ohio, Texas and Utah.

Two liquefying rooms fully equipped with utensils used by bee keepers are located in the west end of the building for the convenience of exhibitors. There is also a very large assortment of hives and extractors and other articles required for bee culture.

A comfortable reception room has been fitted up for visitors in the gallery where three colonies of bees may be seen at work in glass hives or passing back and forth from near by gardens through holes made in the wall for their accommodation.

The color of honey varies as much as does the bees' sources of supply. Heart-sease, a species of smartweed, produce a rich deep amber honey, while white clover is a pale straw color. Alfalfa honey is not especially remarkable for clearness or color but it has a fine flavor, as has also the Basswood honey that is readily distinguished because of its greenish tint.

The United States Bee Keepers' Union has decided to hold its next convention at Omaha and an effort is being made to have it held September 7th, 8th and 9th, which

are the dates set for the National Pure Food Congress to be held at Omaha. Mr. E. Whitcomb, Supt. of the Bureau of Bee Industries, is in hopes that the Bee Keepers' Convention may be held at that time as he says the Bee Keepers' Union is working along the same lines and in harmony with the Pure Food Congress, and it is believed that reduced railroad rates may be more easily obtained at that time.

A Correction.

In my letter which you published in the C. B. J., the basswood trees I referred to were TEN feet high not two feet. I also said that sweet clover always produced "some" honey, the Journal made me say "sour" honey. Please correct.

Islington, July 9, 1898. J. D. EVANS.

Eighteenth Annual Meeting

OF THE ONTARIO BEE-KEEPERS' ASSOCIATION.

Continued.

Mr. Holtermann—There is no excuse at the present time for buying bees in a country where they have no foul brood act, and bringing them into this country. The first time I had the foul brood inspector come to the County of Brant, there was a man in my own vicinity who was constantly buying these bees from the other side, and I was pretty suspicious; I began to be afraid of those bees; I had the Inspector come there, and he found the disease in an apiary; he went to other apiaries where they had not the least idea they had foul brood, but they found they had it, and they were exceedingly thankful I had the Inspector come to that part of the country.

Now in regard to the cure, I had Mr. McEvoy come to our apiary last spring and inspect it, and he went through the apiary, and in the very last colony he found something like four or five cells which contained what he took to be foul brood.

Mr. McEvoy—It was, straight.

Mr. Holtermann—He says, "Just treat that; that will be all right."

Mr. McEvoy—Because it was a good colony.

Mr. Holtermann—I said I would not for one minute, with 100 or more colonies in the apiary, hesitate about destroying them. I went and got the coal oil, and poured it on the hives. My wife came out and Mr. McEvoy says, "This is none of my doings; I am not telling him to do this." (Laughter.) I just took it to one side, set fire to it, and burned it right to the ground.

Mr. Holmes moved, seconded by Mr. Post, that the Inspector's report receive the approval of this Association, and that it be received and placed in the annual report of this Association.

The President put the motion, which, on a vote having been taken, was declared carried.

The Secretary read the Directors' report.

DIRECTORS' REPORT.

Your directors have endeavored during

the past year to carry out the wishes of this Association, and to do all in their power for the interests of bee-keepers generally.

The usual grants were made to the Toronto Industrial Exhibition and also to the Western Fair Association, and a grant of ten dollars (\$10.00) was made to the Canada Central Fair, at Ottawa. These grants were used for the purpose of encouraging the various branches of the bee-keeping industry.

The sum of two hundred dollars (\$200) was set apart as grants to the various affiliated societies, but as there was only nine associations affiliated, the sum paid out was only one hundred and eighty dollars (\$180.00)

Acting on your expressed wish at the last annual meeting we have given the Canadian Bee Journal to every member of the association. The annual report has (so far as we know) been supplied to every member. The treasurer's statement and auditors' report will be presented to you, which will give a statement of our finances.

W. COUSE, Sec'y.

Mr. Holtermann moved, seconded by Mr. Chrysler that the report be adopted. Carried.

The secretary read a paper on "Out Apiaries," by Mr. W. F. Cogshell, of West Craton, New York State, as follows:

OUT APARIES.

My first out yards was established in 1878. I have now three, ranging from three to twenty six miles from home. I take entire charge of them myself from home with the help of a man and my thirteen year old boy except during the extracting season when I have more.

To accomplish this I get everything ready at home when there is no work to be done at the out yards, then the first trips in the Spring sees every yard supplied with their supplies for the season. These include fuel for smokers, and even the matches to light them with. The kegs for the honey are taken direct from the

factory to each of the yards just before the season opens. Of course I sometimes make a mistake in estimating the amount of store room required, but it is an easy matter to equalize them when occasion requires. Each yard also has its regular lot of tools and furniture which stays there the year through. This includes the extractor, store can, capping dish and knife, strainer, and plenty of tin pails for water etc. There is a supply of nails, screws, racks, wire cloth, and of course the hammer and screw driver, two bellows, one automatic smoker, long wisp brooms and a wheelbarrow make up part of the out door equipment. In fact, each yard has about everything that is likely to be needed there except the bee veils, which always go with the man who does the work. The spring locks which are on the houses are all alike so that one key fits them all. I always try to get as protected a location as possible when locating a new yard. This is usually in the edge of a piece of woods where a space can be cleared off and leveled down sufficiently for the purpose. I always try to get them at least twenty rods from the road so as to have no trouble with passing teams.

When I make the lease for the location I include the right of way to and from it and the right to move off the building which I put up when I go away. This building is usually 12x16 ft. and 8 ft. high at the eaves. This will accommodate from eighty to one hundred colonies, which is as many as the location will support in this section of New York. The bees are all wintered out of doors, either in chaff packed hives or in large packing boxes holding eight colonies. Those in the chaff hives remain packed the year round, but those in the boxes are unpacked at the time of apple bloom and are used as single walled hives during the summer, being packed again in October for the winter.

W. L. COGGSHALL.

Mr. Holtermann—A number of those present had the pleasure of meeting Mr. Coggshell in Buffalo. I had met him in previous years and in Buffalo I roomed with him, and there is no doubt that Mr. Coggshell gets through an immense amount of work and he is a very successful bee keeper. I am only sorry he did not, in his paper, go more into details.

Mr. Couse—There might be some excuse in the fact that he has been away from home: he says: "Dear Sir: I have been to New York and overlooked the matter." I pre-

sume his time was very limited when he got home.

Mr. Gemmell: "I have come in contact with him several times and I believe he is a good bee-keeper and I regret the particulars are so short."

Mr. Couse: "I suppose this paper might bring up a very good discussion on out apiaries. He is a man that does not say very much unless you pick it out of him. What I understand is that his production of honey is very large; he did tell me how many thousand pounds, but I do not like to say because I do not just remember. But, he does this work pretty nearly all himself with the aid of his boy and hired man, and there is very little expense in handling 1200 colonies of bees. I suppose he has come to the conclusion, like a good many more, that the price of honey is so low that unless we produce an immense amount of honey our returns are very small, therefore we must increase our apiaries if we are going to stay in the honey business. That is his position, I understand. The price of honey has dropped so low that a man with 100 colonies of bees dare not depend on it for a living. There were a good many complaints in Buffalo of people going into the business who were not specialists. The question was brought up as to why were, and they asked all those who made a business of bee-keeping and bee-keeping only to stand up and there were only some four or five, or three, I think it was, out of fifty or more."

Mr. McEvoy: "Did Mr. Coggshell stand up?"

Mr. Couse: "No; he has a farm."

"So that you see the bee keeping industry is usually connected with something else. If a man thinks of going into the business to make a living out of it he has now got to be an expert bee keeper and handle an immense number of colonies to make a reasonable living. Therefore we must come to the conclusion that we must, if we are going to go on in bee-keeping, find a market for our honey, for the amount that we must produce if we stay in the business, and I think it is a matter that ought to receive a good deal of attention at the present time, as to how many colonies a man can handle and how much honey he is going to produce and what he is going to do with it; he must find a market.

(To be continued.)

The United States Bee-Keepers Union

EDITOR CANADIAN BEE JOURNAL:—

Please say in the next issue of your journal that after thoroughly considering the matter of the place for holding the next convention of the United States Bee Keepers Union the executive committee has decided in favor of Omaha, Neb. as the place, and probably early in Oct. as the time, but the exact date will doubtless be fixed by those having in charge the securing of reduced rail road rates, and the committee is going to put the securing of these and hotel rates and place for the convention to me, t, etc., etc., on Bro. E. Whitcomb's shoulders, for they are broad and he is right on the ground. A short time since he sent me some particulars regarding rates from which I take the following; "Every day during the exposition tickets will be on sale from all western passenger association territory to Omaha at one and one-third fare for the round trip, except the rates from the following joints which will be as follows; Chicago, \$20; Peoria, \$17; St. Louis, 17 Denver, \$25. Tickets will be limited to return thirty days from date of sale not to exceed Nov. 15. From June 1st to Oct. 15 the passenger rates to Omaha from all the principal cities and towns in the United States Beyond the western passenger association territory will be 80 per cent. of double the first class fare. Tickets good to return until Nov. 15," but I'm expecting(?) lower rates, for Bro. Whitcomb told the convention at Buffalo last summer that if the Union would hold its next meeting at Omaha during the time of holding the Trans-Mississippi Exposition, we should have "as low rates as to any place on earth."

We know that brother Whitcomb will do "his level best" for those who attend the convention, and show them "the sights on the exposition grounds.

Further notice of rates, time of meeting etc. will be given when known.

A. B. MASON
Sec. U. S. B. K. U.

Sta. B. Toledo, O. June 25, 1898.

Ripans Tabules.

Ripans Tabules cure nausea.

Ripans Tabules: at druggists.

Ripans Tabules cure dizziness.

Ripans Tabules cure headache.

Ripans Tabules cure flatulence.

Ripans Tabules cure dyspepsia.

Ripans Tabules assist digestion.

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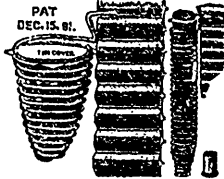
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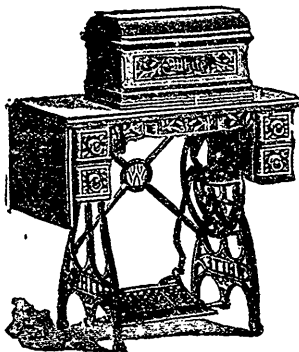
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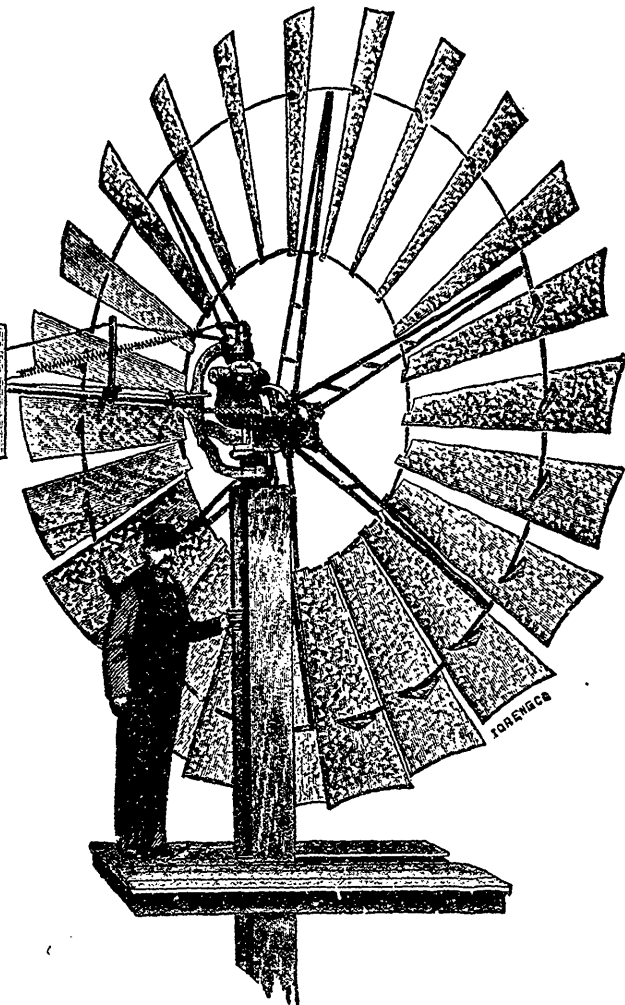
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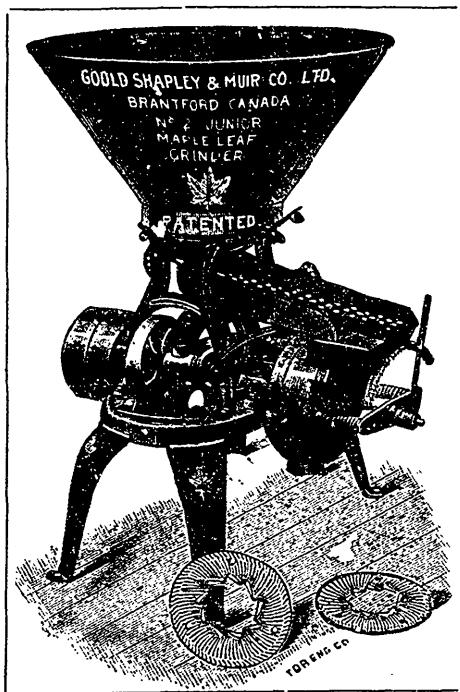
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