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THE CANADIAN
BEE JOURNAL.

"The Greatest Possible Good to the Greatest Possible Number."

VOL. VIII, No. 20. BEETON, ONT., JANUARY 15, 1893. WHOLE No. 329

MR. JOHN F. GATES:

OVID, ERIE CO., PA.

The subject of the above sketch was born in the township of Concord, Erie Co., Pa., in the year 1847, and, like most other people, of very distinguished parents, with whom he continued to reside until it was necessary to strike out for himself. His early education, as he says himself, "was not such as it was;" and if it had not been for that fact, he is quite confident that he might have been as successful at teaching, or as distinguished as a profound lawyer, as he has since proved himself to be as a practical beekeeper, and a writer for the press. The parental acres were extensive enough to afford our esteemed friend an equally extensive agricultural education. If his name was not "Norval," and his residence not the Grampian Hills, his ambition was quite equal to that of his great prototype, and ran in the same direction; for at the early age of eighteen years he "sought the bubble reputation at the cannon's mouth," and enlisted to serve his country during the war of the rebellion. Finding himself still alive at the close of operations, in spite of the enemy's bullets and the biscuits of the commissariat department, he returned to the paternal acres with a soul burning with desire to acquire a perfect and satisfactory topographical acquaintance with the vast stretch of territory which Uncle Sam stole from Papa Bull and his little Canadian brothers. During a portion of this time he was evidently afflicted with the same propensity that has distinguished Mr. Gladstone over all his predecessors, with this difference that whilst the distinguished British statesman satisfied the *feræ naturæ* of his disposition by felling an occasional tree at remote intervals of a year or two, his equally distinguished contemporary went into the business by the acre, and covered himself with glory and the bosom of his country with chips and timber.

During this period, however, of physical and industrial activity, he was not insensible to softer emotions; and, influenced by the Biblical injunction that it is not good

for man to be alone, he accepted the suggestion of the good book and his father's example and took unto himself a young English woman as a help-meet. Since then he has returned to first principles and the parental acres, where he may still be found analysing his after dinner thoughts, between the naps in which he indulges in "the old arm chair."

WASHINGTON CONVENTION.

TWENTY-THIRD CONVENTION OF NORTH AMERICAN BEEKEEPERS' ASSOCIATION.

The annual Convention of this Association met at Washington on December 27th, 28th and 29th. The President, Mr. Eugene Secor, took the chair at 2 p.m. Mr. W. Z. Hutchinson, of the *Beekeeper's Review*, acted as Secretary. Other members present were Messrs. Frank and Ralph Benton, of Washington D. C.; Charles Ouillett, West Chester, Pa.; R. F. Holtermann, Brantford, Ont.; E. W. Pitman, Centerville, Va.; W. Hislop, Ontario; R.F. Will, South River, Md.; H. E. Bliss, W. Winsfield, N.Y.; W. S. Kemp, Farmington, Pa.; R. Ebery, Strasburg, Va.; T. F. King, Landover, Md.; A. H. Draper, Upper Alton, Ill.; G. W. York, Chicago, Ill; A. C. Hooper, Washington, D. C.; C. D. Duvall, Spencerville, Va.; Mrs. C. H. Martin, Yonkers, N. Y.; G. W. Sharpless, Linden Grove, Pa.; G. W. Porter, Charlottesville, Va.; A. I. Root, Medina, O.; E. R. Root, and some others. The meeting was not very largely attended, though there was a very substantial sprinkling of representative men present.

Some preliminary work being completed, the President read his opening address as follows:—

PRESIDENT'S ADDRESS.

I wish, first of all, to express my sense of gratitude to the all merciful Father who has permitted us to see each others' faces again at our annual meeting.

So far as I know, no member of this society has been called to cross the silent river since last we met. Abundant labors and insidious disease may have enfeebled some of our honored veterans, and deprived us of the pleasure of their presence and counsel, yet I am thankful that they still live, and their interest in apiculture will turn their thoughts towards this convention.

One of the pleasant features of an organized association is the thought of meeting kindred spirits and renewing old, or forming new friendships. The opportunities which these meetings afford for social intercourse and personal acquaintance should not be lightly thrown aside. Life long attachments are created which are cheering and helpful to many a pilgrim as he nears the sun down of life. These meetings, too, bring us face to face with those whose writings we have read, and I opine that, after we have become acquainted with a writer, we know what value to place on his dictum.

Those who believe that beekeepers' conventions are only valuable in proportion to the number and length of the discussions on technical subjects, have failed to take into account the social part of our nature and the benefits to be derived from a closer personal contact with those who have achieved success in the same line of work.

Our meeting in this city is opportune. We are enabled by records and models in the Patent Office to learn what science and invention have done in the last forty years for the pursuit which we represent. Indeed it will not be boasting if we assert that in the period named, more progress has been made in the field of practical apiculture than in all previous recorded time. Some interesting and important facts relating to the natural history of the honey bee had been known for a long time, but they were facts which were not particularly valuable to the honey producer until the invention of the movable frame hive. The improvements which followed in rapid succession made a new era in beekeeping. Until then it was all uncertain and unremunerative employment. When the caravans of the East took honey as an article of merchandise from the land of Assyria to Egypt, they probably got their supply from the mountain caves, where the wild bees, in favorable years, had stored a surplus. But I have no idea that any one in the great cities of the ancients ever got a taste of it except the rich.

Following the invention of the Langstroth hive came the extractor, the section honey-box and comb foundation—the last two, in my opinion, as important as anything ever given to beekeepers. The section-box has popularized honey to such an extent little known or dreamed of a half century ago. Instead of the large unwieldy

boxes of honey which our grandfathers took to market, or the tubs of broken honey so familiar in those days, the grocer can now supply his customer with a neat package of almost any desirable quantity without so much as soiling his fingers.

The queen cage, also, and the ability to send queens by express and mail to the remote parts of the earth, gave an impetus to bee culture never before felt. And be it said to the credit of American inventors and breeders, they are never content with mediocrity. Beekeepers' meetings and our excellent bee literature have awakened interest and enquiry, the mechanical genius of the age has been stimulated to meet the demand for improved appliances, and queen breeders have spent much time and money trying to improve the honey producing qualities of the bee first introduced into this country. In the desire for improvement (or novelty), in the latter direction, there have been undesirable importations in my judgment, but, on the whole, progress in the right direction. Indeed it may be said too, that not all our inventions are improvements, but they mark the milestones on the road to success. Beekeeping, like our civilization, is yet in a state of transition, but as Paul advises, we are going on toward perfection, although we may never reach it.

The beekeepers of the country belong to that great army of producers who are feeding the world, and at the same time are trying to solve the problem how to feed themselves—in other words, how to make an honest and decent living from the natural resources which the Creator has placed within their reach, resources, too, the use of which do not impoverish but enrich the earth. Were the honey bee blotted out of the book of nature, few people realize the loss to agriculture, horticulture and floriculture that would result. These kindred industries are slow to acknowledge the benefits derived from the bees as an important aid to complete fertilization in many plants, as positively necessary to others, and beneficial to all flowers visited by them. Cross fertilization is nature's method of progress. The bees are nature's assistants in this work. No other known agency can be substituted. Instead of hostility, the beekeeper should receive the thanks of the agriculturist and fruit-grower, and the fostering protection of the Government. Its entomological experts should not only spread abroad knowledge regarding insects injurious to vegetation, but also correct information as to those which are helpful to the farmer.

If beekeeping be a lawful and necessary pursuit, the Government should throw around it the same protective legislation that is granted the dairyman and pork raiser. We can no more compete against glucose honey with an honest product than the farmer can against oleomargarine butter or cotton-seed lard.

I wish right here to express my disapproval of a method of adding to the income of the honey producer (which has been recently much discussed) by feeding a substance not distilled in nature's labaratory. If it is not longer to produce honey at a profit in large apiaries from the natural secretions of plants and flowers, it is an argument to my mind that the business is being overdone in some localities, and that it is time to return to the practice, once more general than now, of smaller apiaries and a wider distribution of bees throughout the country.

In my judgment, we cannot long prosper if we adopt methods which will put us on the defensive in every honey market in the country. Adulteration is the crying sin of the age. The people are becoming aroused on the subject. We ourselves are trying to put a stop to it. It will not be sufficient to say that this improved article is to be sold for just what it is. If it is possible to produce it at a profit, it will not be long before every consumer will have heard of the trick and conclude to make his own honey. Any attempt to forestall the seasons will prove a delusion and a snare.

The Columbian Exposition in 1893 offers to the beekeepers of this country an opportunity for instruction which will probably not come to many of us again. For the purpose of contrasting the new with the old, and comparing products and appliances with the leading honey producers of this and other lands, it will be an object lesson too valuable to lose, Pride, if nothing else, should stimulate every lover of his country to add to the collection. Although the management failed to suitably recognize our industry, we cannot afford to let this occasion pass to impress upon the people the magnitude of our industry. Nothing so impresses one as quantity. A glass of water is insignificant, but the Atlantic ocean needs no addition to its majesty. So while a few pounds of honey, although perfect, will attract little attention, tons of a less perfect article will make its impression. Perhaps some of the states have not offered that encouragement to exhibitors that you feel is due. It may be by properly presenting the matter to the State Commissioners; arrangements can yet be made, and the expenses of a State exhibit at least, be secured.

At some time during the Exposition I hope to see a beekeepers' Congress arranged

or in Chicago. It will be a great pleasure to meet bee-keepers from foreign lands—many of whom, I have no doubt, will visit our shores at that time. I call your attention to this matter that you may, if you so desire, appoint a committee to determine the time of such convention, and publish proper notice thereof. If thought best to hold such a meeting in connection with the next gathering of this society, timely notice should be given that some of our friends across the water might arrange to be with us. A gathering of bee-keepers at that time might be of unusual interest to us.

In closing, allow me to thank you for the honor conferred by calling me to preside over this the twenty-third annual meeting of this society.

Among my predecessors are some of the foremost beekeepers of the county and the world. I am happy to be numbered with such an array of talent and worth. The beekeepers of America may well be proud of the pioneers of this industry. Such names as Langstroth and Quimby will ever make beekeeping a respectable calling.

FRANK BENTON, of Washington, in referring to the President's address, upon the subject of insects, beneficial and injurious, stated that the Department of Entomology made a study of the lives and histories of all insects, and gave an interesting account of the work of that Department. Mr. Benton thought that the Government should aid the general development of apiculture in the country.

Another member thought the Government could do much to aid beekeepers.

R. F. HOLTERMANN, of Brantford, stated that several county associations in Ontario had been looking into the necessity of preventing the production or importation of syrup stores in comb, and selling it as honey. The subject would come up at the O.B.A's. Annual meeting with a view to get Dominion legislation in this direction.

A paper from Dr. C. C. Miller, Marengo, Ill., which, with the accompanying editorial remarks, taken from *Gleanings*, was read, upon grading honey:

Grading.

A PROPOSED COMPROMISE.

DEAR ERNEST—Although exceedingly anxious that, before the convention at Washington, some system of grading should be effected that would be so nearly acceptable to all as to meet general acceptance, yet I shrink from any attempt at formulating such a system. The plain truth is, I don't feel that I know enough for such a task. Yet I have made the attempt to do as requested. I can not apologize for the system I offer by saying it is hastily thrown together. It is nothing of the kind. It has been the subject of much care, and the hardest thought I am capable of giving. There is nothing original about it, except the string that ties it together. It is a mosaic, made up from all the systems that have been offered, modified somewhat by the discussions I have heard and read. If freely criticized in the right spirit, it is possible that something may be made out of it that shall be satisfactory, even if it be so modified as a result of the criticisms that nothing of the original draft can be recognized. But here is the system, having four grades, depending on appearance or condition independent of the source of honey, and four classes of honey.

FANCY. Combs straight, white, well-filled, firmly fastened to wood on all four sides; all cells sealed; no pollen, propolis, nor travel-stain.

No. 1.—Wood well scraped or entirely free from propolis; one side of the section sealed with white capping, free from pollen, and having all cells sealed except the line of cells next the wood; the other side white or but slightly discolored, with not more than two cells of pollen, and not more than ten cells unsealed beside the line of cells touching the wood; comb fastened to the wood on four sides.

No. 2.—Three-fourths of the total surface must be filled and sealed; wood well scraped of propolis.

No. 3.—Must weigh at least half as much as a full weight section.

There are the four grades.

For the classes of honey, I would suggest the four already in use, sufficiently understood from the names alone, namely: light, amber, dark, mixed.

You will see that there is nothing new in any of this. It is hardly probable that it will entirely suit any one. It does not suit me. I have not tried to give what would suit any one man or set of men. I have merely made an attempt to come as nearly as I could to what all might agree upon, each one making some concession for the general good. If some one has something better as a basis to start with, I shall be not only willing, but glad to see this thrown aside and the better taken in its place. But something must be taken as a basis. It will not do for each one to offer the system that exactly suits him. We'll not get on very fast in that way. If no better basis is offered than the one I have given, then let each one look it over and see, not what changes must be made to make the plan entirely acceptable, but, rather let him see what is the least change necessary to make him willing to agree to the system, taking into account what others as well as himself may desire.

I see I have made the impression that

W. C. Frazer's system suits me better than all the rest. That is hardly true, as will be seen from the system I have attempted; but I like his idea of having a system of grading which does not involve the honey itself, leaving that as a separate classification. Others had the same idea, but did not bring it out so clearly, or, at least, it did not strike me so.

The names of the grades are simple. They are easily understood both by the producer and consumer. And I don't know why the consumer shouldn't fully understand just what they mean. There will never be a great overstock, I fancy, of honey classed as *fancy*. Perhaps it is drawing the lines rather tightly to say: "All cells sealed." Possibly a certain number of cells next the wood ought to be allowed unsealed. I think very few have been in the habit of sorting out their best honey into this grade; but the man who puts several tons on a large market could select a number of crates for which an extra price could be obtained, and that without lowering the price of his No. 1 honey.

The No. 1 contains the bulk of a good beekeeper's crop, and on that account it is the most important of all. The only beekeeper with whom I have had a chance to talk the matter over, objects to my putting down "ten cells" as the limit allowed unsealed on the poorer side of a No. 1 section. But it seems to me that, so far as possible, every thing should be very exact. If such a phrase as "only a few cells" should be used, then some would understand that to mean three, and some fifty. If ten isn't the right number then make it five, twenty, or whatever is thought best; but don't leave it indefinite. The term "slightly discolored" is indefinite, and on that account objectionable, but I don't see how to better it easily.

In No. 2 not more than one-fourth of the total surface must be left unfilled and unsealed. Possibly it is not necessary to say three-fourths of the surface must be filled and sealed, for it will hardly be sealed without being filled. As to the remaining fourth, it may be filled and not sealed, or there may be empty comb or entire vacancy to the amount of one-fourth of the section. Of course, the unsealed part might be on one or both sides. That is, one side might be all filled and sealed, and the other side half sealed, or each side might be three-fourths sealed, or one side may have anywhere from the half to the whole of it sealed, only so that there shall be enough sealed on the other side so that the sealing on both sides taken together shall be as much as three-fourths of the total surface of both sides added together.

The difficulty of adopting a system of grading that shall be satisfactory to all, is greater than at first anticipated, so that I do not wonder that some have little faith that any one system can be agreed upon. I think that all agree that the ground of the difficulty lies in the fact that different localities raise different kinds of honey and each locality wants a system of grading that shall throw no discredit upon the honey raised in that locality. If I am rightly informed, the York State men have no difficulty in agreeing upon a system that suits them; so can the California men; so can the Mississippi Valley men. Now suppose white clover is the only kind of honey raised all over. There would probably be no great difficulty in settling upon a system acceptable to all. No. 1 white clover would easily be the same in York State or in Western Illinois; and then suppose that, all over the land, a second crop should be obtained from Spanish needles. Would not all agree that a No. 1 Spanish-needle section should be just the same as No. 1 white-clover section, except that one was filled with white-clover honey and the other with Spanish-needle? and the same way if all the different sources of honey ruled in every location. Now, if I am correct in this then there ought to be no more difficulty in agreeing upon the grades, as things now exist; and then the only thing to add is, to say what kind of honey is contained--light, amber, dark, or mixed. If any one objects that light, amber, etc., are not distinctive enough, then there need be no difficulty at any time in specifying particularly any one class of honey. Indeed, I should expect that, in time at least, some few particular kinds of honey would come prominently to the front, and that possibly in some markets No. 1 Spanish needle might be quoted higher than No. 1 light. But the great thing is, to agree upon the grades, to be alike applied to all kinds of honey, and I have some hope that we may reach that.

Marengo, Ill. C. C. MILLER.

[We are heartily in sympaty with the doctor in his effort to get a system of grading that will insure some probability of adoption at the North American at Washington. While his plan, as he suggests, is not original with himself, it embodies the idea of simplicity, and, at the same time, elasticity for different locations and different kinds of honey, in a way that is better, perhaps, than any thing else that has been proposed. There is possibly one criticism that will be made; and that is, that the different grades should be *lettered* rather than *numbered*. After all, we do not know that we would insist on that point too strongly, because the No. 2 grade is, in reality, No. 2 honey.

When our forefathers framed the articles of our constitution—an instrument admired the world over—it was by no means satisfactory to every member of the body that framed it. But each one was willing to yield a point for the sake of getting something better than they had; and what a world of good it has done! Now, we as bee-keepers should be careful to see that we are not prejudiced, but willing to yield a point for the sake of obtaining *something*; and even if all do not use it after it has been formally adopted by a national body of bee-keepers, a large majority probably would. We *need* something, and *must* have a system of grading whereby honey-buyers all the way from San Francison to New York may be able to know just what is meant by a certain description of honey. We should like to hear briefly from all those who have proposed systems of grading, as to what they think of the one above; and particularly should we like to hear from commission men.

MR. DRAPER:—I would endorse the doctor's position as a whole. He has it a little better than I can get it.

MR. CRANE.—The practical objection is that it does not suit the markets. It suits me all right. The commission men last year objected to such grading; they want fancy and No. I together. The variety of grades distracted the customer.

In reply to a question, MR. BENTON said he thought very little fancy honey could be secured.

MR. CRANE said he found that very little more could be secured for the best grade proposed, and that it was not worth while to make the distinction.

MR. DRAPER thought the season had much to do with it. If a good flow, there would be plenty of well finished sections, and only a good grade would sell.

A. C. HOOKS, Washington, D. C.—I am much interested in the grading of honey. I would say fancy was in place, but I would only put pollen in the last place.

R. F. WILL, South River, Md., would endorse all that the last man had said. I have had a great deal of experience in Washington.

A dealer, in reply to a question, said the difference he would be willing to pay wholesale between fancy and No. 1 would be one and a half to two cents per pound, and between Nos. 1 and 2, one to one and a half cents.

A lengthy and animated discussion followed, which was postponed until later.

QUESTION DRAWER.—What can be done to prevent the spraying of fruit trees during blossom?

Mr. HARPER thought that fruit growers could be reached through the sellers of their machines.

MR. BENTON thought that was no use. It could be done by means of State laws. The Department has a bulletin upon insecticides and their application; they can be had free from the Department at Washington. The way the Ontario act worked was then explained.

The discussion on the grading of comb honey was again discussed. The following was passed:

FANCY.—All sections to be well filled; combs straight, of even thickness, and firmly attached to all four sides. Both wood and comb to be unsoiled by travel-stains or otherwise. All the cells sealed except the row of cells next the wood.

No. 1.—All sections well filled, with combs uneven or crooked, detached at the bottom, or with but few cells unsealed. Both wood and comb slightly soiled by travel-stain.

CLASS.—Light, mixed, amber and dark.

MORNING SESSION.

The subject of self-hivers was taken up by E. R. Root, of Medina, Ohio, as follows:—

SELF HIVERS, BY E. R. ROOT.

Up to about a year ago I took but little interest in self-hivers. They seemed to me to be too complicated, too expensive, too every thing, in fact, to be available and practical for bee keepers. So far they would hive only a third or a half of the bees, and they were, therefore, but little better than a complete failure, for nothing is a success that is only half a success. At the previous meeting of this association, however, which assembled at Albany, Mr. E. L. Pratt, of Marlboro, Mass., after one of the sessions, drew me to one side, and showed me specifications of his new automatic hiver. Unlike all previous arrangements for the purpose, the bees entered into a new hive on returning from the air, the entrances to which

they had long been accustomed. This struck me at the time as being a vital point, and possibly the key to future success. The trouble with the former self-hiving devices that had been brought out was, that the bees on returning, if they followed their queen, which it seems most of them did not, would have to go to a new entrance and to a new hive. Those of us who have had experience in handling swarms with clipped queens' wings, will remember how readily the bees will return to the hive on discovering the absence of their mother; and it is nothing strange that they should rush pell-mell into the old entrance, thinking, of course, that she must still be in the hive. It would not matter particularly whether the queen had gone through the perforated zinc passageway to another hive; the majority of bees would go to the old place just the same.

Mr. Pratt, realizing this fact, placed a new hive that was to receive the swarm, in front of the old one, in such a way that the bees going to and from the field would pass through the new hive into the old one. A set of combs was placed in the former, and a sort of bee-escape was arranged in connection with the perforated zinc in such a way that the queen could readily pass into the new hive, but not back again; and when in the new hive she would be debarred from passing out at the entrance by the perforated zinc. Thus, when a swarm should issue, the bees will fly out in the usual way, and the queen following or preceding would enter the new hive, and there be entrapped. The bees remaining out for a few minutes would soon discover the absence of their queen, and return to the old entrance, and, behold! the queen would be in the new hive. From some preliminary trials that Mr. Pratt had been able to make, the previous season, he found that the plan worked successfully, and that all of the bees remained in the new quarters.

I told Mr. Pratt at the time that this was the only self hiver that I ever took any fancy to, and that I believed the principle of having the bees go back to an old entrance, to which they had long been accustomed, was the key to success. The following summer, we rigged up some ten or fifteen hives, on the principle before stated; and although I was sanguine of success in the very beginning, the result greatly exceeded my expectations. If I remember correctly, there was not a single failure. The colonies were not only automatically hived in every case, but they went to work in their new quarters, building comb, storing honey, just as they would have done had they been hived in the old-fashioned way on a new location. By way of experiment, some of the colonies were left from three weeks to a month, to see what the final result would be. Young bees hatched in the parent colony, and finally began to add their numbers to the new swarm. The latter, in the mean time, went on storing honey to the extent of fifty or sixty pounds in two or three instances; and one in particular had stored it to the phenomenal amount, for these poor seasons, of one hundred and fifty pounds.

Most of the colonies mentioned above were arranged a little differently from what Mr. Pratt originally designed, but not so as to change the essential principle of allowing the bees to go to an entrance, to which they had long been accustomed. The new hive to receive the swarm, instead of being placed in front of the old one, was placed below. This simplified the arrangement to the extent that it required only one bottom-board, and made it less difficult to adjust the hives so as to be perfectly bee-tight as far as communication from one hive to another was concerned. The plan that we used so successfully was this: The old colony was taken temporarily off from the bottom-board. Another body, precisely like the other, was set in its place. Into this was put a full set of empty combs. On top of this was then placed a board having a couple of holes, on the under side of which, and communicating with said holes, was a sort of queen escape, made of perforated zinc, like the sample I herewith show you. This is so arranged that the bees can readily pass up and down into either compartment of the hives: but the queen can pass only one way, and that downward; and having gotten into the lower hive she is prevented from getting out into the air by means of perforated zinc. When preferred, the queen's wing may be clipped, and the zinc omitted at the entrance. The mode of operation is simple. The bees, in working, pass through the new hive not yet occupied, crawl up into the hive above, through the perforated zinc. This seems as if it might be an objection, in that the bees are compelled to travel so far before entering the hive proper. This objection exists more in imagination than in actual practice. In a few days, the swarm issues; the queen being below, is trapped; the bees return, and, finding their queen below, seem to accept their new quarters as their new abode. This in brief, is the Pratt method of self hiving.

I am not prepared to state that the Pratt automatic hivers will prove to be as successful in the hands of others, because bees do not always follow an invariable rule, especially when their owners try to make them do just as they plan they ought to do, or as they do for others under like circum-

stances; so it will probably take another year or so before we can speak definitely with regard to its success in the hands of beekeepers in general; but an implement may be a success, and yet not be practical. This may be the case with the automatic hiver. At present I fear they are rather too expensive to be used generally by beekeepers, even if their success as to actual operation is assured. Beekeepers can not afford to pay more for self-hivers than it costs to hive them in the old fashioned way. By a little more experimenting I am in hopes that their mode of construction may be simplified enough so as to permit of their more general use.

Automatic hivers are old—very old—in principle. Mr. H. A. King used a device that was very similar in principle to the automatic hivers of to-day. But as he did not then have perforated zinc it could not be made to work successfully. The late Moses M. Quinby also used a similar device. Henry Alley, I believe, was the first one to revive the idea of any connection with perforated zinc. Although his was the first, it seems not to have been a complete success, as it hived only a part of the bees—at least, I judge so from the reports I have received. Mr. E. L Pratt took one step further and gave us the automatic hiver which I have described here to day. It remains for some one else now to make it cheaper; and, last of all, for some enterprising editor—if they are a success—to get beekeepers to use them.

Ernest R. Root.

Mr Root said that to make self-hivers a success, we must devise some plan by which the self-hivers could be sold for less than fifty cents.

Mr. Benton thought the self-hiver could well afford to pay fifty cents, as the investment would cover quite a few years.

W. Z. Hutchinson, Flint, Mich.—As soon as a self hiver is a practical success, the price will be a secondary consideration. It ought to last as long as a hive. Some advocated a honey board under the lower chamber.

Mr. Holtermann thought that the drone guard at the entrance would be cheaper, as the queen excluders would be required to be used at a time when all excluders would be in use.

Mr. Herschiner, Buffalo, knew a gentleman who had had experience with a self-hiver he had invented He had experimented with about one hundred colonies; the design was to get the workers all in one hive. The honey crop was a good one, and he thought the system a success.

Mr. Benton.—I think the gentleman (Mr. Langdon) will be successful. From one hundred to one hundred and twenty colonies the gentleman had secured about six thousand pounds of comb honey.

WHAT THE DEPARTMENT OF AGRICULTURE HAS DONE AND CAN DO FOR APICULTURE.

By C. V. Riley.

The wisdom of establishing, as a part of our government machinery, a Department of Agriculture charged with doing all it can to foster and encourage agriculture in all its branches, will not be questioned by anyone who has made himself acquainted with the work of the Department since its organization, first as a bureau in the Department of the Interior, later as a separate Department, and finally as a co-ordinate Department with representation in the cabinet. There are those who would abolish it, and who believe that the moneys appropriated for it are thrown away, but such are ignorant of the needs of agriculture in a great and new country like ours. That, as in all government bureaus, there is some waste of means, and that some unnecessary or parasitic growths have attached to it which might well be removed or reformed, is also incidental to the development of any government organization; but so far as my experience goes, there are fewer of these abnormalities in the Department which ministers to the wants of the farmers than in almost any other of the Departments of the Government. In almost every case, also, they have resulted from political interference; and indeed the greatest danger to the Department, as at present organized, is the increase of political and bureaucratic influences, which is almost inevitable.

Some of the most beneficent and far-reaching work of the Department was done during its earlier history, when its means were limited, but when the field was fresh and the opportunities relatively greater, and it is a notable fact that when the appropriation for the introduction of seeds and cuttings did not reach ten thousand dollars, where now it reaches over ten times ten thousand dollars, the introduction of new and improved varieties of grains and fruits gave results that were more beneficial and far-reaching than now, because the fund originally intended for such purpose has, through Congressional action, been

so largely perverted to the miscellaneous distribution of ordinary seeds as to be looked upon by many as a serious abuse.

It has been the desire of almost everyone who has been at the head of the Department to pursue a broad and liberal policy, to the end that all branches of rural economy might receive their due share of attention. The head of the Department is, however, helpless without congressional aid and sympathy, and it has too often happened that investigations which promised valuable results have had to be abandoned because of the failure of Congress to make the needed appropriations.

I venture these introductory remarks in part explanation of the record of the Department in apiculture, which it is my privilege to present to you.

The annual products of the apiary have been variously estimated at from fifteen to twenty millions of dollars, while I need not insist to the members of this Society that the work of insects, and chiefly of our bees, in the fertilization of our seed and fruit-producing plants far exceed in value the honey and wax product; so that it is quite impossible to estimate the combined value of these direct and indirect benefits from the bees. Fifteen years ago, when I first accepted a position in the Department, there was provision only for an entomologist, without assistants or means for any experimental or field work. During the next four or five years I succeeded in impressing the Commissioner of Agriculture and Congress with a sense of the importance of the work to be done in efforts to counteract the work of injurious insects, and the appropriations for both office assistants and field work increased. But the self evident advantage of endeavors to protect the farmer from some part of the immense losses occasioned by injurious insects, had to fight its way into recognition. It was not until 1885 that the more important work done in counteracting the work of injurious species had sufficiently advanced to justify my giving some attention to apiculture, and the fact that nothing more resulted from the work then begun may, to some extent, be laid to the lack of effort on the part of the bee-keepers themselves, *i.e.*, to their failure to take united action such as would bring home to the head of the Department and to those in charge of the general appropriations the needs and just demands of the industry.

However, that considerable has been done by the Department, and through its agency for beekeepers—much more, probably, than most of you are aware of—the published reports of the Department show. These reports, hundreds of thousands of which have been distributed very generally over the land, have surely had their influence in the promulgation of intelligent and humane methods in the culture of bees. Beginning about the time of the first edition of Langstroth's celebrated work, or nearly a decade before any bee journal had been printed in the English language, the Department reports have, from year to year, given some notice of progress in bee culture,, statistics of honey and wax production, and on several occasions excellent little treatises on bees and bee management, Notable among these is the article on the nature and habits of the honey bee, in the report for 1857. I cannot give the name of the author, as the initials only of the Chief Clerk of the Patent Office are attached to it. In 1860, Mr. William Buckisch of Texas, gave, in an extended article, a review of bee culture as practiced by Dzierson and his school. The essay by my old friend, Mrs. Ellen S. Tupper, of Iowa, published in the report for 1865, and covering her theory of bee-keeping, was widely read and frequently quoted, creating much interest in improved methods.

The introduction of Italian bees into this country is certainly one of the advances in American bee-culture which ranks second only to the invention of the frame hive, the honey extractor and the comb fonndation machine. But how many even now know that the Department of Agriculture had anything to do with the matter? Leading text books on apiculture are silent on this head. The fact is, however, that the first successful importation of Italian bees from their native land to America was made by the Department, and it was almost wholly from this importation that such skilful apiarists as Langstroth, Cary and Quinby, bred and disseminated the race during the early sixties. Individual effort had, for some years previous, been directed to securing this race of bees, and in the autumn of 1859 a few queens were landed here from Germany by Mr. J. P. Mahan of Philadelphia, on his account, and by Samuel Wagner of York, Pa., and Richard Colvin of Baltimore, acting together. Those imported by Messrs. Wagner and Colvin were lost during the winter which succeeded, and those which Mr. Mahan imported do not seem to have been multiplied as rapidly as the importation made through the Department of Agriculture the following spring. Mr. S. B. Parsons, acting for the Department, was in Italy at this time, making purchases of cuttings and plants for testing in this country, and an order was transmitted to him by the Department to procure some hives of Italian bees. Ten

were purchased by him in 1859, and forwarded to this country in May, 1860. These were distributed among several of the best bee masters, and they at once set about the rearing and sale of the queens of the new race. Thus it was that the Department succeeded where private enterprise had failed in this most important undertaking. Those who wish confirmation of this statement will find it in the agricultural report for 1859, page 543, and in that for 1863, page 530. The former is a letter written by Mr. Parsons while in Lausanne, Switzerland, and the latter is an extended article on the Italian honey bee by Mr. Richard Colvin, a competent authority, and who had been one of the private parties who had tried during the years 1858 60 to import this particular breed from Europe.

It were beyond the scope of this communication to enlarge on the merits of the Italian race of bees, particularly as Mr. Benton has treated us to a communication on the varieties of bees; but I may be pardoned for calling attention to what I believe to be a truth which all will admit who are familiar with the progress of apiculture in the United States during the past thirty years or more: namely, that the benefits, direct and indirect, which have accrued to American apiarian interests through the introduction of the bees of Italy, far exceed the few thousand dollars which, all told, the Department, from the time of its organization to the present day, has expended in the development of this industry as one of our nation l sources of wealth. As will appear from its report for 1877, the Department was earnestly solicited to appoint a commission for the purpose of gathering statistical information as to the condition and growth of bee-keeping in the United States; to communicate with the largest and most successful bee masters and secure their methods of wintering and otherwise managing bees; to test modern and improved apiarian appliances and recommend such as are worthy; to point out the most favorable bee ranges in the country; to encourage the cultivation of honey producing plants, and to educate bee men to use caps and crates of uniform size for commercial convenience. The Department had, however, neither the means nor the power to organize such a commission as was urged.

In 1885 I was enabled to establish, in response to what I felt was an evident want, an apicultural station, having fortunately the full sympathy of Commissioner Colman in the work. The station was located at Aurora, Ill., and Mr. N. W. McLean, an enthusiastic and well informed apiarist, was placed in charge. The reasons for establishing the station, and the objects in mind, I quote from the introduction to my report as Entomologist for that year:

"Among the subjects which I desire to have investigated in addition to some of more purely scientific interest, are the following:

(1.) To secure the introduction and domestication of such races of bees as are reported to possess desirable traits and characteristics; to test the claims of such races of bees as to excellence, and to prove by experiments their value to the apiculturists of the United States, and their adaptation to our climate and honey-producing flora.

(2.) To make experiments in the crossing and mingling of races already introduced and such as may hereafter be imported, and by proper application of the laws of breeding endeavor to secure the type or types best adapted by habit and constitution to the uses of practical bee-keepers in the United States.

(3.) To make experiments in the methods of artificial fertilization, and, if possible, demonstrate the best process by which the same may be accomplished.

(4.) To study the true cause or causes of diseases yet imperfectly understood, and the best methods of preventing or curing such diseases.

(5.) To obtain incontestable results by intelligent experiments on scientific methods, as to the capacity of bees, under exceptional circumstances, to injure fruit; *i.e.*, to set at rest the ever-discussed question of bees *vs.* fruit.

The experiments of the first year—the station having only been started in June—had reference to economy in the production of wax; feeding devices; the wintering of bees, and the question as to whether bees injure fruit; the artificial fertilization of queens, etc. In 1886 the experiments as to whether bees can injure fruit or not, were continued, and Mr McLean's report contains the results of experiments and observations as to wintering bees, the prevention of spring dwindling, bee forage (especially in regard to plants, etc,) diseases, particularly foul brood, and the control of fertilization in confinement. These last two subjects received special attention again in 1887, and experiments in mating queens to selected drones were made. In Commissioner Colman's report for 1888 occurs the following paragraph in explanation of the cessation of the apicultural experiments:

"Owing to the lack of specific appropriation, it has been necessary to discontinue the apicultural experiment station. This is to be regretted, as the station has done good work and as it has accomplished results of considerable benefit to this ex-

tensive and growing industry. The Division stands ready to continue this work at any time when Congress shall make appropiation for it."

Personally I was intensely interested in the results of this experimental work, and while unforeseen contingencies arose which materially interfered with my plans, yet I knew Mr. McLean to be a man full of energy and enthusiasm in the cause, and exceptionally well posted in all matters relating to bee culture. Yet he never had the full sympathy or co-operation of some of the most voluminous writers on the subject, and who, from being looked up to as authorities, are not always most sympathetic with others. There is probably not one of Mr. McLean's critics who would have done more of real benefit to apiculture during the same time and under the same circumstances. The experiments to determine whether bees injure fruit or not, certainly put a quietus to the discussion in so far as grapes are concerned, and have done much to prevent misapprehension on the part of growers who are not bee-keepers and to harmonize both classes. Aside from the above, the observations and information contained in Mr. McLean's reports on foul brood and in experiments looking to the control of fertilization of the queens, are many of them valuable, even though in the latter case he could not finally present any practical method of accomplishing this object.

The apicultural exhibit, which I prepared for the Department for the Paris Exposition of 1889, was largely made up of material contributed by individual bee-keepers, and received very favorable notice from foreign bee experts. In fact, it was rated the best of all the exhibits in this line. It certainly had much to do with educating foreigners as to the forward part taken by Americans in this industry, notwithstanding the display was hampered by restricted space. The success of the exhibit was largely due to the efforts of Mr. McLean.

In 1890, I felt that the appropriations to the Division of Entomology justified further effort to do something for bee culture. It was my purpose to continue experimentation, more especially in lines which individual efforts could not so well reach, as indicated in the previous work. The conditions around Washington are very unfavorable for this kind of experimentation, and three methods of carrying it on remain. One was, to establish a station controlled and worked entirely by the Department, as had been done under Mr. McLean previously. Another was, to to establish a number of sub-stations in different parts of the country, representing different climates, but all under the general management of some one especially in charge here at Washington. The third was to establish one or more stations in connection with some of the State experiment stations, created by the Hatch bill. After visiting a number of prominent bee-keepers in the south, and considering the matter fully in connection with the limited means to be devoted to the subject, the last of these methods was chosen. Prof. A. J. Cook and Mr. J. H. Larrabee were commissioned early in 1891 to conduct the experiments at the apiary of the Michigan Agricultural College. The results of the work of that year are reported in Bulletin No. 26 of the Division of Entomology. They included a continuation of the earlier experiments, especially planting for honey, observations and experiments in regard to the fertilization of plants by bees, selection in breeding, the amount of honey consumed in the secretion of a pound of wax, the effect on bees of spraying fruit trees while in blossom, and other minor experiments and observations, some of them a repetition of the work that had previously been performed by others. There was not much that was original in the apiarian work of the year, and perhaps the most important were the results in reference to the poisoning of bees by arsenical sprays. Moreover, the policy of dual interest in and control over the work at the station was not the most satisfactory as a working policy, because of the difficulty of separating the Department's interests from those of the station, and the feeling which developed on the part of others, and which I could not very well overcome myself, that the funds furnished by the Department were utilized primarily to improve a somewhat neglected apiary and to add to the income of the station. Prof. Cook's commission expired June 30, 1889, and Mr. J. H. Larrabee was appointed to continue the work, which he did up to June 30, 1892, when, by virtue of the great reduction in the appropriation for the Division of Entomology for the ensuing fiscal year, all the work in bee culture had to be abandoned. Mr. Larrabee's report will soon appear, and will, I think, make a creditable showing for the season, considering the means which he had at command.

Early in 1891 I had considerable correspondence with Mr. Frank Benton, whose interest and work in apiculture you all know, and who had made a personal effort to introduce *apis dorsata*. The failure of his effort was due to over exertion and undue exposure, and I have little doubt that, under more favorable circumstances, and with the aid of the Department, the effort would prove successful. I

felt that of all men he would be the most desirable agent to employ in the effort to introduce *apis dorsata*, because of his familiarity with the subject and his acquaintance with the countries to be visited; but, in addition, I had some important incidental work that I wished him to do in that connection, namely, the introduction also of certain parasitic forms of injurious insects, and particularly the introduction of the caprifig insect, *blastophaga psenes*, to colonize in those parts of California where the Smyrna fig is cultivated. I had made all due arrangements, in consultation with Assistant Secretary Willits, fully expecting to be able to send Mr. Benton on this proposed trip, and had so economized the appropriation that there was means to do it. Mr. Benton, also, had been led to give up other plans in anticipation of this mission. The project was never carried out, however, for the simple reason that the secretary finally refused to endorse it. There seems to have been some promise made to the Senator who had charge of the appropriation bill that no one should be sent abroad, or at least this was the chief reason given for the refusal to carry out my recommendations and wishes. Professor Cook was made aware of these circumstances, and it is consequently somewhat surprising that, in a recent communication to the *American Bee Journal* (Oct. 13, 1892), he should insinuate that the Entomologist felt no hearty concern for the beekeepers' interests, and should urge that "all move in solid phalanx upon the *head* of the Department" in order to gain our desires and rights.

What may be hoped from the introduction of *apis dorsata* most of you are probably aware of, but I may say that the chief hope was that it might be domesticated in our hives like the common *mellifica*, while Mr. Benton believes that some advantage may be gained by crossing it with that species. On physiological and zoological grounds I have my serious doubts whether this can be done to any advantage, for, while hybridism is feasible with the races of *mellifica* (which, however much they may differ in popular names, are zoologically mere varieties of one and the same species), yet *apis dorsata* is a sufficiently distinct species; and even if crosses could be obtained between it and *mellifica*, it is questionable whether such crosses would be fertile. Mr. Benton, however, has fully set forth the possibilities in *Gleanings in Bee Culture* for June 15, 1892, as also in his remarks before the association, and while the introduction of this species would not be the sole object in sending him abroad, the question of the possible value of this large bee of India is of sufficient importance to justify thorough experimentation and effort.

WHAT THE NATIONAL DEPARTMENT OF AGRICULTURE CAN DO FOR APICULTURE.

So far, I have indulged in retrospect, and indicated what the department has done, or attempted to do. Let me now come to the second part of the subject, viz.: what the National Department of Agriculture can do for apiculture; what it may accomplish. I sincerely hope this may be much,—will depend greatly upon what sums Congress may see fit to appropriate for such investigations, and this will depend in turn, to some degree, upon what representations as to the needs of the industry, and the possible benefits to the material interests of the country, are made to the head of the department, to the committees on Agriculture, and to other members of Congress by their constituents. Certain kinds of experimental work can be undertaken by individuals without serious interference with the main work of their apiaries. Indeed, it is desirable that each should experiment in a limited way, for localities differ in respect of climate, flora, etc.; in short, the conditions upon which methods of management depend are so variable that each progressive beekeeper must study to ascertain by experimentation what methods are best adapted to his own individual surroundings.

But there are certain larger fields of investigation, requiring more time and expenditure than individuals usually have at their command, and the results of which are pretty sure to benefit apiculture, if not directly, at least indirectly. For instance, if a species or race of bees could be bred or introduced which, in the early part of the season, when bumble bees are few in number, would fertilize the red clover, and later in the season do the same work more thoroughly than it is now done, there is no question that we should reap a reward in the larger yield of clover seed, and in this way our pasturage would be very generally improved. So that this would indirectly affect beneficially our stock and dairy interests, to say nothing of a more general employment of red clover as a green manure in the increase of most of our crops. In cases like this the benefit would be not to individuals, but would be general, and so great that the expense of accomplishing it would be insignificant in comparison. Even an experiment which fails, and which would be disastrous to individual participants in it, would not be felt by the general government, and might serve to point out the way to success in subsequent attempts; for failure often proves very useful in

pointing out the directions in which we should look for anything valuable. Thus, if the department by ample effort should prove that nothing can be gained in any given direction, it will save further disappointment to individual experimenters and prevent a repetition of useless effort. To my mind the character of the work to be undertaken by the department should be of such a nature as to benefit the industry in all parts of the country alike, and prominent among the subjects which it should undertake, is this introduction and testing of foreign races of bees, of which there is much yet to discover, and about which our actual experimental knowledge is limited. The distribution of queen bees of improved varieties, where they would most aid in building up the industry, might be undertaken by the Department wherever it would not interfere with individual effort in this direction. But while the fides for government action, so far as the economic side is concerned, are limited, there is a large and most interesting field for further scientific investigation of the actual life history of the bee, of its diseases, and of its relations to plant life. Few of you who do not view the economy of the bee from the purely entomological or scientific standpoint, are aware of the errors that are yet extant in connection with the subject, and are still perpetuated in many of the popular treatises on the bee, and there is no better evidence of the biologic questions yet to be decided than the discussions, at such gatherings as these, which, as evidenced this afternoon, involve the actual influence of the bee on the sweets which it gathers. I am satisfied that no thorough investigation under competent direction would fail to elecit most interesting facts and to settle many disputed points. In connection with the wintering of bees in the cooler portions of our country, there is much that remains to be investigated. The statistics of the industry have never been properly collected, and could not be, except by some national organization.

These are a few of the directions, gentlemen, in which I feel that the National Department may work advantageously; and if, in dealing with the subject, I have endeavored to indicate in plain words some things which the department has and has not done, it is in the hope of calling attention publicly to the matter and of bringing about in the future the action which I feel all beekeepers desire.

TO BE CONCLUDED.

—We are pleased to notice from the *Norwich Gazette* that Mr. Martin Emigh, so favorably and well known among Ontario beekeepers, has been elected reeve of South Norwich.

For THE CANADIAN BEE JOURNAL.

OLLA PODRIDA.

BY O. FITZALWYN WILKINS

DEAR MR. EDITOR:—Your kind acceptance of my first contribution to your columns, and your very cordial invitation to repeat the dose *ad libitum*, have encouraged me to "do it again some more;" therefore, I will premise my remarks by pleading guilty, to some extent, to the charge of plagiarism, inasmuch as the "Stray Straws" of Dr. C. C. Miller in *Gleanings*, over which the *A.B.J.* and yourself are having a little harmless fun, have proved very interesting to me, and have made me ambitious to distinguish myself in like manner.

As I intimated in my last effusion, I lay no claim to superior knowledge of apiculture, notwithstanding my experience of more than a quarter of a century in that line; therefore, an *Olla Podrida*, occasionally, is all I can offer for your acceptance.

As you doubtless know, *Olla Podrida* is the Spanish name of a dish composed of various kinds of meats and vegetables, highly seasoned; hence the metaphorical meaning is an incongruous *melange*, or hotchpotch. Such, then, will be the nature of the compositions hereafter emanating from my pen, for the reception of which you have somewhat rashly promised, as I think, that "our columns are always at his service."

BEE PARALYSIS.

Mr. T. S. Ford, in *Gleanings* No. 23, writes concerning bee paralysis, which he thinks is hereditary, being the result of in-breeding. Last year, I had the same experience with that disease, and I entertain the same opinion as does Mr. Ford. I have a thoroughbred Italian queen, purchased from an eastern breeder several years since, which is still living in a strong and healthy colony of her own progeny. Two years ago, I raised several queens from her, all of which proved to have been purely mated. Last year two of her grand-daughters were also mated with drones of their mother hive, and produced well-marked, bright, three banded workers. The progeny of both had paralysis badly.

I tried various remedies, so-called, with no beneficial results,—among others, the salt water recommended by some one in the *A.B.J.* They were decimated; I was disgusted and discouraged. Finally, I concluded to introduce queens from undoubtedly healthy, high bred colonies, with a few combs of hatching brood. The progeny of the diseased queens continued to die until none were left, but that of the introduced queens increased as rapidly and worked as well as any in the apiary. I am certainly inclined to consider bee paralysis the result of too close in-breeding.

o o o

"Go from home for news" is a somewhat hackneyed saying; but I was never more astonished than when I read the following statement in a late copy of the *Buffalo News*, under the caption of "Items of Interest":—"The national emblem of Canada is the thistle." That, surely, is news,—of the Buffalonian type. Well, we must consider its source and exercise charity. The *News* man, possibly, was educated in Boston.

o o o

Speaking of Boston reminds me of an incident related by a Canuck, who was a sojourner in that æsthetic city. In conversation with a Boston "lady of culture" at the dining table of the Tremont House, she naively inquired if pork and beans were procurable in Canada. She also remarked, "I presume you frequently see fine specimens of Bruin where you reside?" To which our Canadian brother blushingly replied: "Oh! yes, I am rather partial to the 'brewin' of Mr. Carling." The narrator told me when relating the story, that he had never seen a live bear outside of a menagerie.

o o o

Somebody has been giving Doctor Miller advice,—gratis, I presume. He tells the doctor, "Don't breed from a queen whose colony died in wintering." The genial author of "Stray Straws" says, "I don't believe [illegible]." Now, doctor, you don't know what you can do until you try. If at first you don't succeed, try, try, try, again. By the way, doctor, this is a joke. You should feel very much mortified after calling Jennie an "old crony." How would you relish being stigmatized as a flirt by the lady alluded to?

o o o

A contributor to the *A.B.J.* gives his method of introducing a queen to a colony which, like our American cousins, is averse to "petticoat government." He gives it a thorough smoking (wonder if he uses sulphur); raps on the hive for something less than an hour (spiritual rappings are not in it); smokes the queen at the entrance (very unchivalric conduct—smoking the queen—should imagine a cigar to be preferable); shuts up the hive (of course), then puts it on a waggon (without springs, I guess), and jolts it across the country to another bee yard two and one-third leagues distant, where he keeps it closed till dark. I calculate the shaking they receive has the effect of concentrating their minds (?) on the uncomfortable box they are in; consequently they have neither time nor opportunity to lavish their attentions on the strange queen. Methinks the shaking could be more expeditiously and thoroughly effected by running the colony through a thrashing machine.

o o o

"Langstroth's Reminiscences" in *Gleanings* are very interesting. I wonder if Uncle Amos won't compile a book of them, and pay Father Langstroth a royalty on the sale thereof. The beekeeping world would doubtless be glad to know it. No charge for the suggestion, Bro. Root.

International Bridge, Ont.

Honeyade is the favorite out door drink for German boys. It is made in this way: An ounce of ginger is boiled for an hour in two quarts of water. Then two quarts of cold water, a pound of sugar, an ounce of lime-juice and two ounces of clear sweet honey are added. When all is cold, the white of an egg is whipped in and a lemon is squeezed over the honeyade jar. The sturdy little Germans are allowed to drink their weight, as the saying is, of this.

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Canadian Bee Journal,

ISSUED 1ST AND 15TH OF EACH MONTH.

G. T. SOMERS - MANAGER.

DEVOTED EXCLUSIVELY TO THE INTERESTS OF THE HONEY PRODUCER.

ONE DOLLAR PER ANNUM IN ADVANCE.

EDITORIAL.

A number of questions have been received for the Question Drawer of the C.B.J. They will all receive attention in our next issue.

o o o

We have been unable to publish a complete report of the O.B.A. (O.B.A., mind!) owing to a large quantity of matter in reference to the N.B.K.A. being held over from our last issue. We hope to complete the report in our issue of Feb. 1st.

o o o

It is hardly necessary to say that a very pleasant time was spent at the O.B.A. meeting at Walkerton on the 10th, 11th and 12th. We may, however, add that those who were not there missed a rare treat. The names of the officers for the ensuing year will be found in our next

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The convention of the O.B.A. at Walkerton, from 10th to 12th inst. was one of the most interesting and important meetings of that body that has yet taken place. As we are very desirous of laying a detailed and accurate report of the proceedings before our readers, we deem it necessary to hold our reports over to next issue of the JOURNAL.

o o o

We are in receipt of a very pretty calendor, gotten up by the W. T. Falconer Manufacturing Company, of Jamestown, N.Y. It is something exceedingly artistic and would be an ornament to any office. This enterprising firm is making itself a reputation in the Western States of the neighboring republic.

o o o

What an easy matter it is for beekeepers, when conversing with their friends, to drop in a kind word for the C.B.J.; or, when writing to this office, to say that So-and So keeps bees and would like a sample copy of our JOURNAL, or forward a number of names on a postal card; or, what is better still, to secure a new subscriber and receive the premium offered for the same. We certainly appreciate the efforts of our friends during the past year, and we hope the year 1893 will be no exception. We are looking forward to a large increase in our subscription list, and realize the fact that it will require the efforts not only of ourselves but of all our friends to keep our JOURNAL abreast of the times.

o o o

In our last issue friend Ellis, of St. David's, drew attention to a firm in Toronto to whom he had shipped honey, but could get no receipts for the same. We think friend Couse, friend White sides, and four or five other beekeepers could tell a somewhat similar tale. The names of these men should be made public. We have done our part in the

matter during the last year, warning our subscribers to first ascertain the financial standing of supply dealers before shipping, or otherwise send their honey C.O.D. There are some dealers who may be called "sharks," in our leading cities, who tell nice plausible yarns about their financial standing, and have goods shipped to them promising to remit upon receipt of the same, but who fail to meet their obligations.

o o o

Friend W. J. Stevenson, of Guelph, writes us as follows:—

"I put in my cellar, on the first of November, nine colonies of bees in good order, the lightest weighing forty-eight pounds. I take an occasional look at them, and find the temperature from 45° to 50°, and very few do I find dead. Of course the winter is not half over yet, so I am not in a position to say how they will come out in the spring, but of course look for the best. It is my intention to erect a bee-house as soon as the weather is warm. I already have all the material ready. I would like to know if it would do to have it facing southwest and northeast, as I want to put hives on both sides and an aisle up the centre. I find I cannot be without the JOURNAL. I have all last year's, and am going to have them bound. They will make a nice book, and worth twice the subscription price. I think every one who keeps bees should avail himself of the valuable information contained therein. It has been a great help to me in numerous ways. I wish you every success."

REPLY.

It does not matter much, so far as the interior temperature is concerned, which way the building faces, so long as it is properly built. Face it the most convenient way to suit your various operations, and especially for extracting. If you use it for the latter purpose and for storing your honey, place the door in the most convenient position, and, if possible, so that whilst at work in the bee-house yor can see the bees when swarming.

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We are in receipt of No. 1, of volume 3, of *The Progressive Bee-keeper*. We have missed it from our file for some time past, and are pleased to know that friend Quigley, the editor and publisher, is again able to present his readers with considerable valuable bee literature. We sympathize with our friend in his recent loss by fire, and are pleased to know that everything is again in full swing, and that the *Beekeeper* will be a monthly visitor in the future. We quote the following, which will explain matters more definitely:

"NOTICE TO SUBSCRIBERS. — Financial loss by fire, last October, caused the suspension of this *Journal*. To the inquiries that come to us asking about it, we promised to commence publishing the *Progressive Beekeeper* again January 1st, 1893, and we believe this is the only one of the suspended journals that has fulfilled its promise. We hope to have no more suspensions. We kindly thank those who have offered us help. While we appreciate their kindness, we do not care to be indebted to any one for more than a paid up subscription. So, if you will lend a hand in this way, we promise you full value with interest, in a year's reading matter. It shall be our aim to give you only practical, common sense articles from beekeepers that have made their business a success. We have dropped three numbers of volume 2, so as to commence with the New Year. All subscriptions will be credited with the missing numbers, so that all will receive all papers paid for. We hope to retain our