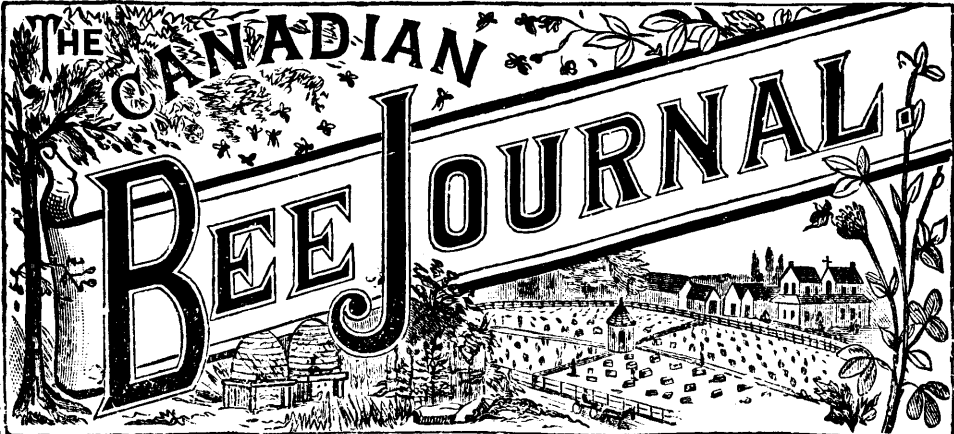


Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- | | | | |
|-------------------------------------|---|-------------------------------------|---|
| <input type="checkbox"/> | Coloured covers /
Couverture de couleur | <input type="checkbox"/> | Coloured pages / Pages de couleur |
| <input type="checkbox"/> | Covers damaged /
Couverture endommagée | <input type="checkbox"/> | Pages damaged / Pages endommagées |
| <input type="checkbox"/> | Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée | <input type="checkbox"/> | Pages restored and/or laminated /
Pages restaurées et/ou pelliculées |
| <input type="checkbox"/> | Cover title missing /
Le titre de couverture manque | <input checked="" type="checkbox"/> | Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées |
| <input type="checkbox"/> | Coloured maps /
Cartes géographiques en couleur | <input type="checkbox"/> | Pages detached / Pages détachées |
| <input type="checkbox"/> | Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire) | <input checked="" type="checkbox"/> | Showthrough / Transparence |
| <input type="checkbox"/> | Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur | <input checked="" type="checkbox"/> | Quality of print varies /
Qualité inégale de l'impression |
| <input checked="" type="checkbox"/> | Bound with other material /
Relié avec d'autres documents | <input type="checkbox"/> | Includes supplementary materials /
Comprend du matériel supplémentaire |
| <input type="checkbox"/> | Only edition available /
Seule édition disponible | <input type="checkbox"/> | Blank leaves added during restorations may
appear within the text. Whenever possible, these
have been omitted from scanning / Il se peut que
certaines pages blanches ajoutées lors d'une
restauration apparaissent dans le texte, mais,
lorsque cela était possible, ces pages n'ont pas
été numérisées. |
| <input checked="" type="checkbox"/> | Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de la
marge intérieure. | | |
| <input checked="" type="checkbox"/> | Additional comments /
Commentaires supplémentaires: | | Continuous pagination. |



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

Vol. VII, No. 24. BEETON, ONT., MARCH 15, 1892. WHOLE No. 308

POSITIVELY SUNNY TEXAS

AFTER APRIL 30TH

I will ship Pure Italian Queens by return mail at the following prices

- Warranted Queens, each..... \$1.00
- Tested Queens, each..... 1.50
- Select, tested yellow to the tip, breeders', each 2.00

I refer by permission to the Editor of this journal who has purchased a number of Queens from me.

W. H. LAWS,
Lavaca, Ark., U. S. A.

b 22-7m.

LIPPINCOTT'S Is the most popular and widely read Magazine published. Each number contains

A COMPLETE NOVEL, short stories, sketches, etc.

The January (1892) number will contain
The Passing of Major Kilgore.
By Young E. Allison.

The February (1892) number will contain
Roy the Royalist,
By William Westall.

The March (1892) number will contain
A Soldier's Secret.
By Captain Charles King.

For sale by all booksellers and Newsdealers.

Single Copies 25c. **\$3 PER YEAR**

CANADA : PATENT

FOR SALE

ON A HONEY EXTRACTOR.

Four years use and the best of references prove it the neatest, handiest, strongest and cheapest Extractor known. Address, REV. A. R. SEAMAN, Connellsville, Fayette, Co. Pa., U. S. A. b 21-8t.

CANADIAN FRIENDS AND OTHERS.

I am prepared to furnish you as yellow queens as there is in the U. S. Also a very fine strain of three Banded Italians bred in separate yards. Either race at following prices.

Untested, April and May, \$1 each; six for \$5; 12 for \$8.

June and after, 75c, each, six for \$4; 12 for \$7.50.

Queens by return mail a speciality. Safe arrival and satisfaction guaranteed. Send us money if you can.

Jennie Atchley,

b 24-1 yr.

Floyd, Hunt Co., Texas.

Have you

received one of our Price Lists for 1892? If not, send us a post card with your address and we will mail you one, and when you get it, read it thorough and pick out what you want, then send us an order and see if we cannot satisfy you.

We pay 35 cents per lb. in trade for Beeswax delivered here.

MYERS BROS.,

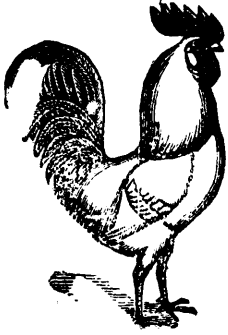
Mfgs. of all kind of Bee-keepers' Supplies.
Box 94, STRATFORD, ONT.

TILBURY CENTRE

Bee Hive Supply and Mfg. Co.

We wish to inform the bee-keepers of Canada that we have now in full blast one of the largest Bee-Hive Factories in Canada, and are manufacturing the finest section in the Dominion. Don't fail to get sample of our section before you place your order for 1892, and we will call your special attention to our Dovetailed Langstroth Hive, also comb foundation faster, and section folder, made by W. O. Leach. Send for our new price list of 1892 now.

Address—TILBURY CENTRE BEE HIVE MFG CO. Tilbury Centre. b p 92 1y



**CANADIAN
POULTRY
JOURNAL**



PIGEON FANCIER.

JOHN GRAY, . . . EDITOR.

Published at Beeton, Ont., 8th and
23rd of each month.

*Leading Poultry Journal
of Canada.*

Illustrated, Reading Matter Crisp
and Fresh.

ONE DOLLAR PER ANNUM

Send stamp for sample copy.

ADDRESS:

C. - P. - J.

BEETON, ONTARIO.

BEE-KEEPERS'

In Eastern Ontario, Quebec and the Maritime Provinces will save money by sending for my Illustrated Catalogue and Price List of all kinds of Bee-Keepers' Supplies before placing their orders.

F. W. JONES,

24 tt.

Bedford, Quebec.

- W. R. STIRLING -

Manufacturer of



**THE
MODEL BEE-HIVE,**

Frames, Sections, Feeders,
Smokers, Extractors, Honey
Cans, Shipping Cases, Bee
Veils, etc.

Also Breeder of Italian Queens

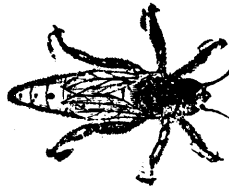
SEND FOR PRICE LIST.

Address,

W. R. STIRLING

P. O. Box 9 Roudeau.

b-19-1y



ITALIAN

QUEENS

Untested, \$1 each, six for \$5. Tested, \$1.50
each, six for \$7. Extra Selected
for breeding, \$4 each.

H. FITZ HART,

Avery, P.O., New Iberia,
Louisiana, U. S.

b 24-1y.

MENTION THIS JOURNAL

<p>KEEP YOUR AND ON THIS</p>	<p>"THE DOLLAR" KNITTING MACHINE</p> <p>Ask your sewing machine ag't. for it, or send a 3ct. stamp for particulars and price list. THIS IS GOOD FOR \$2. SEND to GREELMAN BROS. M'rs., Georgetown, Ont.</p>
---	--

C B J 23 1y

CAUTION!

EACH PLUG OF THE

MYRTLE NAVY

IS MARKED

T. & B.

IN BRONZE LETTERS.

-- NONE OTHER GENUINE --

b p 23 1y



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

VOL. VII, No. 24. BEETON, ONT., MARCH 15, 1892. WHOLE No. 308.

GENERAL.

FOR THE CANADIAN BEE JOURNAL.

Ernest Root on the situation.

DEAR EDITOR—I read with much interest the reply, by Mr. R. McKnight, to my editorial remarks regarding the action of the O. B. K. A. with reference to further affiliation. I am pleased to observe his friendly and cordial spirit; and I am sure that, on my part, while I felt that the committee were laboring under a big mistake (and I think so yet), I had only the kindest intentions towards them.

It will be necessary to refer to only two points in reply to Mr. McKnight; and one is, I am certain that the purposes of incorporation, while they may not have been stated in open convention at Keokuk, were freely talked over in private conversation among the bee-keepers. I know that Capt Hetherington was not the first one to do this. Mr. Newman thoroughly explained the matter shortly after the Keokuk meeting, in an editorial—see page 6, Jan 1, 1890. of the American Bee Journal. As to what I meant by "available" matter, I will make an extract from a letter just received from Dr. Miller, which fully explains;

"DEAR ERNEST—I don't believe McKnight looked up available in any common dictionary or he would find a definition that would make your statement all right. Moreover, it seems that McKnight is not familiar enough with newspaper terms to know that the word "available" is a word constantly used to mean, "For reasons satisfactory to ourselves we do not think it desirable to publish."

C. C. MILLER.

Marengo, Ills.

I might go on and reply to other points; but I

believe that further discussion is ill advised and unwise, and I have already made myself sufficiently plain in my original remarks on the subject. I believe that, if we cannot agree to agree, the best thing for us to do is to pleasantly agree to disagree as brothers and let the matter drop.

I am glad that Mr. McKnight feels that the N. A. B. K. A. is elastic enough to permit him to remain a member, as it surely is. In the same way, I hope the O. B. K. A. is elastic enough to permit me to become a member when I may find it convenient to cross the line. If we can not affiliate in name, we can, I am sure, associate in heart and spirit. Those of us in the United States who have felt the cordial entertainment from that fine body of Canadians while the N. A. B. K. A. has been in session on their territory would not willingly break loose every tie of fellowship.

Ernest R. Root.

Medina, O., Feb. 25, 92.

From The Progressive Bee Keeper.

Planting For Honey.

OTTO J. E. URBAN.

MANY bee-keepers will say "what is the use of planting for honey, when the prairies and the forests abound with wild flowers that furnish all the nectar our little pets can possible gather?" Yes you are right friends! But there is an IF, and a big one at that, in the matter. IF the prairies were not turned under and the forest rooted out and turned into farms, yes, then we might have plenty of pasturage for our bees always. Every year that comes brings about extensive changes

in the surface of the earth. Hundreds and thousands of acres are yearly turned under by the plow and bee pasturage is destroyed where the plow is once put to work, with but few exceptions. Here in the south where white clover don't grow, we have nothing on our cultivated lands that yields much honey. In some seasons, the cotton blooms yields a nice clear nectar, but is very uncertain. Taking all things into consideration, it might be time to think about planting for honey. My hobby in this line is honey yielding forest trees. I have tried quite a number of the small plants and weeds, oatnip, horehound, spider plant and others; also buckwheat and alfalfa. They all are good, provided you can have enough land planted with these plants. I have thrown them all aside and come back to my old favorite the forest tree. At the head of honey producing forest trees, of course stands the basswood. Years ago a nurseryman discouraged me in planting basswoods, he saying he had tried them and found that they died out in a few years. Since then I have learned better. The bottoms of the Brazos river are full of wild basswoods. My friend, J. G. Echman, of Richmond, Texas, who lives near the Brazos river bottoms, keeps nearly three hundred colonies in one yard and he says he is not overstocked. Mr. Root says: "Our trees were planted in 1872 and in 1877 many of them were bearing fair loads of blossoms. A tree that was set out about ten years ago, in one of our streets, now furnishes a profusion of blossoms almost every year." Now, brother bee-keepers, why can't we do the same? The expense is very small. Young trees can be purchased at a very low price, if bought by the 1000. The labor don't amount to much, either. The total expense should not exceed \$25, and this small investment will become a little gold mine in the course of time, and the best of it is, it lasts not only one, or a few years, but it will be here for our children and grand-children, and will ever increase in value as time passes by; provided, you plant your trees in a suitable location. The basswood needs a low moist place but I would not plant it in swampy places. As a general thing, swamps have a hard subsoil, which the roots of the tree cannot penetrate. Any low place where other timber grows will be good for basswood. I shall try to plant, for an experiment, about ten acres in basswood, next fall. This ten acre block is prairie land, and I will report from time to time how I succeed. This planting was originally intended to have been done last fall, but I could not do it on account of the severe drouth we had all fall. It was too dry to plant anything. The next best tree for Texas is the Wild Clima.

It grows in our river and creek bottoms and on the prairies luxuriantly, and yields a clear nectar, which, after being evaporated by the bees, makes a nice straw colored honey of good, mild flavor. This tree will grow on any heavy, black soil in Texas. I don't know how it will do on sandy land. I have seen it on black and mixed land only. There is a number of other trees yet that will grow in Texas as well as all through the south, such as honey locust, tulip tree, and many others. The willow should be planted along all streams and ponds, as it blooms very early and helps bees to get started early in the spring. All such trees will help our bees along, require but little work to start them off and as they grow up and spread their tops we can begin to thin out and use the timber for many purposes. What a blessing would a twenty or twenty five acre grove of fine forest trees be on a prairie farm after the trees are large enough to cut a part of them down to use for fuel. It saves the farmer many dollars and did not cost but a trifle. Nearly every farmer has spots of waste land on his farm which would add to his income if planted in forest trees. I would never plant anything for honey alone, as it takes at best one thousand acres of pasturage for an apiary of 150 to 200 hundred colonies.

Thorndale, Texas.

From The American Bee-Keeper.

New Inventions.

BY JOHN F. GATES.

THE question has been asked "Are we drifting from our moorings." I used to think that we were not, but if all bee keepers anchored to one idea there would be no improvements. While it is safe to our own pockets to be conservative, yet no class has done more to advance the interests of bee-keepers than those who experiment, and seem not to be satisfied with their present condition. Had the inventors of the Monitor been contented with wooden war ships our great American Republic would have been divided. Had we all been content with stage coaches where would our railroads have been? Had Edison preferred to sit at his telegraph instrument we should now be without his master ideas. This onward impelling force in Americans has sought out so many good things in the last fifty years that I have not space to tell them. Some rejoice in real improvements, well, we can't grind out a grist of real improvements to order. We have many discouragements and losses before we succeed in turning out one. Many of these inventions must be tested by bee keepers before a true verdict can be given, and we should all be willing

to lend a hand to be one of the great jury in the discussion of these cases as they are brought before us by our leaders; the inventors. Yet while the tester goes hand and hand with the inventor, each watching the other's movements, each helping the other to discover and rectify mistakes. It is to true that many good inventions have been swamped and for years laid dormant when they might have been in use, simply for the lack of wisdom to guide us to small experiments first. Yes, there seems to be so much rush, new things can't be tested in a hurry. To change an average apiary all at once to some new mode of management, or new style of hive, even if the hives were given to us, would be unwise. But add the cost of hives and fixtures which the change involves with the loss which one is sure to meet with for a time under any new arrangement, and can we wonder that there is so little confidence placed in inventions or the inventors. Still had we gone more slowly, tested more carefully, and on a smaller scale and given ourselves more time to sum up the evidence, no doubt many times our verdict would bless instead of curse the inventor. No doubt there are inventors who abuse one's confidence, but they too well have but little chance to deceive us if we go slow. We can change too much, and again too little, I am aware that I have missed some good opportunities by being a little too set in my ways, and I have had too little charity for improvements. Medium ground is safe ground on which to stand. We should watch the signs of the times and not jump conclusions, nor bite at all that takes our fancy. nor kick at all that we despise, we ought always to review. draw conclusions and watch very closely what the mass of bee-keepers seem to favor, or decide upon. If we are good readers of indications we need never get left, and often can go across lots, thus reaching the head of the procession, but be sure we know the way across else better we had gone around.

Ovid, Erie County, Pa.

From American Bee-Keeper.

Wintering on Summer Stands.

THE question of wintering is always of interest and for that reason is always seasonable. In treating the question I do not expect to give any new points to experts, but many of the readers of this magazine are beginners, and are looking to this valuable journal for information on this as well as on all other apicultural matters. Many successful apiarists of large experience claim that all wintering should be done in cellars, or other special

depositories; with these I have no quarrel, but never having wintered except on summer stands, I am unable to speak thereof from personal experience. One objection to this plan of wintering I can well imagine will force itself into the minds of a great majority, viz.: the expense required to fit up as it should be fitted, with regard to ventilation and temperature, such a special depository as is necessary in order to guarantee success and the objection of itself will probably prevent that majority from incurring the required expense.

For the benefit of the same majority I will give in detail the plan of wintering on summer stands, adopted by myself with perfect success, and which I have made use of for eighteen years or more, and that too on Langstroth frames, with single walled seven-eighth inch pine hives.

As theories in regard to matters connected with apiculture are of little consequence when compared with actual facts. I will not attempt to theorize now, but will detail the facts for the use of any who desire to know them.

When the honey season ends which with myself is about the 10th of December, I examine the condition of every colony, crowd each colony on to seven frames (I intend they shall all be strong enough to cover fully that number) and see that each frame is at least filled with sealed stores in its upper half the whole length. Later on when I get ready to pack for winter I extract if necessary from those combs that are more than two-thirds filled with stores and combs throughout the brood chamber are equalized and placed in a position where the colony can at times get at them if desired. When the temperature falls so low that the colony begins to cluster closely I force the cluster to one side or other of the brood chamber, which can easily be done, by moving the frames on which the cluster is formed. Prior to this, however, I have stimulated the queen by feeding regularly each day a small amount of sugar syrup, and thus kept the colony rearing brood as long as possible.

After the cluster is forced to the side of the hive I place a "Hill's Device," or some substitute therefor, over the frames, and cover the bees with a light porous blanket. Burlap or cotton duck is as good as anything for this purpose. The "Hill's Device" under the blanket forms a means of communication for the bees with every frame in the hive, and that too without danger of becoming chilled. As the hive in use is wide enough for ten frames I use one and a half inch division board in each side of the hive, which allows the seven frames to be spread apart a little more than desirable for

summer use. After covering the frames in closely so that not a bee can show his head outside, I put on an upper story and fill it one-third full of forest leaves pressed lightly down, and use a cover with one and a half inch hole bored in each end for ventilation.

I give a large entrance, using a bridge about four inches wide for the bees to crawl under, which prevents the easy access of sudden draughts into the hive. The only other protection than that prescribed above, found in my apiary is a close osage hedge, six feet high on the north and west sides. With the above means of protection my bees have withstood the rigors of our eastern winters for years, with a temperature varying from 20 degrees to 20 degrees below zero, and some seasons without a purifying flight from middle of November to middle of the following February. Many mornings with the thermometer below zero in January I have found a warm current of air being forced out from the entrance, so strong as to be perceptibly felt upon the back of the hand. I know not and care not whether others may agree with me or not, I state the facts as I find them, and have no hesitation whatever in advising every beginner to follow the methods outlined above.

FOR THE CANADIAN BEE JOURNAL.

"Available"—What Does it Mean?

I have read with much interest the reply of Mr. R. McKnight to my editorial remarks regarding the action of the Ontario Bee-Keepers' Association with reference to further affiliation. I am pleased to observe his friendly and cordial spirit; and I am sure that, on my part, while I felt that the committee were laboring under a big mistake (and I think so yet), I had only the kindest intentions toward them.

It will be necessary to refer to only two points in reply to Mr. McKnight; and one is, I am certain that the purposes of incorporation, while they may not have been stated in open conversation at Keokuk, were freely talked over in private conversation among the bee-keepers.

I know that Capt. Hetherington was not the first one to do this. Mr. Newman thoroughly explained the matter shortly after the Keokuk meeting, in an editorial—see page 6, Jan. 1, 1891, of the *American Bee Journal*.

As to what I meant by "available" matter, I will make an extract from a letter just received from Dr. Miller, which fully explains:

"DEAR ERNEST,—I do not believe McKnight looked up "available" in any common dictionary, or he would find a definition that would make your statement all right. Moreover, it

seems strange that McKnight is not familiar enough with newspaper terms to know that the word "available" is a word constantly used to mean: "For reasons satisfactory to ourselves we do not think it desirable to publish."

C. C. MILLER."

I might go on and reply to other points; but I believe that further discussion is ill-advised and unwise, as I have already made myself sufficiently plain in my original remarks on the subject. I believe that, if we cannot agree, the best thing for us to do is to pleasantly agree to disagree, as brothers, and let the matter drop.

I am glad that Mr. McKnight feels that the North American Bee-Keepers' Association is elastic enough to permit him to remain a member, as it surely is. In the same way, I hope the Ontario Bee-Keepers' Association is also elastic enough to permit me to become a member when I may find it convenient to cross the line. If we cannot affiliate in name, we can, I am sure, associate in heart and spirit. Those of us in the United States who have felt the cordial entertainment from that fine body of Canadians while the North American Bee-Keepers' Association has been in session on their territory, would not willingly break loose every tie of fellowship.

ERNEST R. ROOT.

Medina, O., Feb. 25, 1892.

FOR THE CANADIAN BEE JOURNAL.

Mr. McKnight's Reply to the Above.

SIR,—Both Mr. Root and the editor of the *A.B.J.* approvingly quote an extract from a letter written by Dr. Miller, in which he says: "It seems strange that McKnight is not familiar enough with newspaper terms to know that the word available is constantly used to mean—"for reasons not satisfactory to ourselves we do not think it desirable to publish." I challenge Dr. Miller to name a dictionary extant in which his definition of the term may be found.

I make no pretensions to a thorough knowledge of "newspaper terms." I am not a professional writer. If my name were appended to a hundred newspaper articles in the course of a year, as Dr. Miller's is, and if I could write essays for publication on what "I don't know," I would probably post myself in the terms necessary to such an accomplishment.

But this additional contribution of Dr. Miller's to the controversy is only an attempt "to draw a red herring across the trail." It is not defined in "Webster's Unabridged" in the sense in which it was employed. I ran across it a few days ago in one of the back numbers of *Current Literature*, where its employment in this sense is soundly ridiculed.

R. MCKNIGHT.

From Gleanings.

Alsike Clover.

ITS VALUE AND HOW TO RAISE IT.

THE value of alsike to the bee-keeper makes it worth his while to extend its culture in every way possible. In inducing his farmer neighbors to grow it, he not only benefits himself but also his neighbors as well. Few appreciate its value. Rightly managed it may be made to yield three products—honey, hay, and seed, which, in a little more than a year, are equal in value to the land on which it grows.

With suitable soil, and in competent hands, ten bushels of seed to the acre is a possible yield, which, at the present prices, \$7.50 to \$9.00, will purchase an acre of good farming land almost anywhere. There are, besides, the hay and honey.

When the cultivation of alsike is recommended to farmers, one or more of the following objections are usually offered: 1. It does not germinate well; 2. It does not produce a paying crop of seed; 3. It does not produce as much hay as red clover; 4. The hay is of inferior quality. If fed to milch cows, the butter produced is white.

In the first case, either the seed was poor or the ground was not in proper condition. A sample of seed should be tested before purchasing.

In the second case, a short crop of seed is generally due to a lack of judgment as to the right time for cutting, and to improper handling afterward.

In answer to the third objection, it may be stated that, though the yield of hay may not be as great, the value of the whole product is greater.

Finally, the hay is better than red-clover hay, the stems being less woody, and devoid of the fine hairs which render red clover hay "dusty." In this market, timothy mixed with alsike is beginning to be rated No. 1, while timothy mixed with red clover, is No. 2. As to its effect upon butter, a few roots, carrots or the like, fed to cows will remedy that. Often failure is the result of making a trial on so small a scale that the crop is neglected; then the grower thinks, of course, it is "no good."

A neighbor, Mr. McCall, has given to the alsike-clover plant the same kind of intelligent and careful study that Mr. Terry has given to the potato, with equally satisfactory financial results. Mr. McCall is too busy "compelling success" to write of his methods for the benefit of others; so, believing that they would be in-

teresting and profitable to many, I interviewed him one evening. The following are the facts brought out.

Mr. McCall raises alsike for the seed, so his methods accord with his aim.

The most suitable soil is a clay loam, with a good proportion of the vegetable matter; but it may be grown on almost any kind of land.

The land, having been deeply plowed and thoroughly pulverized the previous autumn, and sown to wheat, is harrowed in the spring with a fine-toothed harrow—an operation greatly benefitting the growing wheat. The clover seed is then sown at the rate of 8 to 10 pounds to the acre. A lighter seeding is often recommended but Mr. M. believes that better results on the whole are obtained by a more generous seeding.

The sowing should be done as early as possible, so that the seed may catch some of the spring rains. Here, the first of April is about right. It is important that the seeding be even. Bare spaces certainly lessen the crop, while overcrowded ones do not increase it. It is by attention to small details that success is won in this as in any other undertaking. If the seeding is done by hand, mixing the seed thoroughly with several times its bulk of sand may aid in its even distribution.

The seed may be sown with oats, if preferred, provided the ground can be put into proper condition early enough.

Soon after the removal of the wheat from the ground, the young clover-plants should cover it. They often make such growth as to blossom and mature seed the first season. Possibly, by sowing the seed alone, and under the most favorable conditions, a fair crop of seed might be obtained the first season; but the second season is the one depended upon for the main crop, under ordinary circumstances. In the autumn and early spring the field may be lightly pastured, preferably by sheep, but care should be taken to remove the stock before damage is done. By early June the clover-field should be a sheet of vivid green, with no earth visible. Later, the pink and white blossoms appear, borne at the ends of the main stalk and branches. This is the bloom which will furnish the largest and best part of the seed crop. Keep watch of them; for they will soon disappear under a set of somewhat smaller blossoms, which in turn give away to another, the bloom continuing several weeks. During this time the bee does double duty in improving the yield of seed by cross-fertilization and in gathering the nectar with which the florets are abundantly stored. Mr. M. realizing the value of its labors, purchased

ten colonies, and feels that they paid for themselves in the first season by increasing the yield of clover seed, to say nothing of their gathering 300 lbs. of the finest honey in the world. Had he been an experienced bee-keeper instead of the beginner that he was, the honey crop would have been twice as great. A week or more of bloom passed before the boxes were put on at all.

To go back to those first clover-blossoms—they will have become a rich brown in color, and nearly dry. Now is the time to cut it. Just here is where a day's delay means partial if not total failure. Waiting for the later and inferior heads to ripen, the earlier and more valuable ones, becoming entirely dry, burst their pods and scatter the seed upon the ground. When out at the proper stage, a large part of the foliage is green and tender, and, with the immature heads, furnishes a hay equal if not superior to that from the first growth of red clover.

After it is cut, moisture does not injure alsike as readily as it does other hay. To avoid scattering the seed, the hay should be handled as little as possible during the curing, and then only when there is moisture enough in the atmosphere to keep the stems pliable—never in the heat of the day. This is the second point of extreme importance. Drawing should be done during the earlier part of the day, after the dew is off, and again in the latter part of the afternoon. Subsequent operations need no comment until the seed is ready for the cleaning process. In order to command the highest price in the market, the seed must be perfectly clean; but as it is so much smaller than any other seed which a farmer handles, the fanning mill requires finer screens than those ordinarily used, and the blast controlled so that seed is not blown off in the chaff. Though it requires skill and a good machine to perfectly clean seed without waste, care and ingenuity will often accomplish the desired result with slight expense, and add many dollars to the value of the crop.

The first seeding may be allowed to remain on the ground during the third and fourth season, and possibly fair crops may be had; but, on the whole, it is probably better to turn it under after the first cutting, and use the ground for some other crop—potatoes for instance.

The past season was an exceedingly poor one or clover in this locality; but alsike yielded double the amount of seed obtained from red clover when the latter was worth the cutting. Many did not cut it at all.

Flint, Mich., Feb. 15.

EMILY E. WEST.

From British Bee Journal.

South African Bees.

IN the Bee Journal for October 1st, you have a paragraph on so-called Punic bees, now being made much of by some persons in America, wherein it is considered probable that they come from the north of Africa.

I am forwarding you some South African bees for examination, and will be glad to see your remarks on them. You will notice that the two queens I send are differently coloured, and that the same applies to the drones and workers—bees from the same hive are dark and light; can you explain the reason for this peculiarity?

If any one interested in bees would care to have a South African swarm, and would undertake to make the necessary arrangements for their transit, I shall be very pleased to supply two or three swarms without charge. You have my full address to give to any who may apply for it.

On the same page above referred to, 'Balling' queens is mentioned; kindly explain the term, and how frequent manipulation would be likely to cause the trouble.

On page 455 in the number of October 8th, under the heading 'Bees from South America,' your Natal querist, who 'has had a little English tuition,' is inclined to dispise the uncivilized African bees. The writer has several hives of these bees, and finds them very tractable and marvellously industrious. When first captured, if from a wild hive, they are very much inclined to sting, but soon become accustomed to people, and unless they have already selected quarters, are not at all difficult to get settled; but if they have been captured after selecting quarters they are most obstinate. Cutting the queen's wing as is commonly practised here, is next to useless, as the bees fly away, and the queen, in her endeavour to follow, generally perishes. The best way is to securely cage the queen until the swarm is well settled and working steadily. But with bar-framed hives, where combs of young bees can be given to the new swarm, there is no difficulty whatever.—W. B. CUMMING, South Africa.

[We are sorry that the bees sent have arrived so completely covered with mould that it is almost impossible to identify them. We have, however, by diligently removing some of the mould, been able somewhat to make them out. They are a cross between the black and yellow races of South Africa. In your district there are two distinct races, one entirely shiny black, the workers being smaller than our European

race. The queen and drones are also black. The workers of the yellow race are smooth and glossy, the hairs on head and thorax are yellow, and also the scutellum, or triangle on the mesothorax. The upper abdominal rings are bright yellow, streaked with black, and the two lower segments are entirely black. The queen is of a deeper golden color, and in the drones the upper segments of the abdomen are banded alternately black and dull yellow, the lower segments being similarly but less distinctly marked. The crosses between these two races produce very considerable variations, from pure black to those banded with yellow, and are found promiscuously in the hive. Your bees being a cross of these two races accounts for the different bees you find in the same hive. Bees occasionally surround the queen in a compact cluster, or 'ball,' and this is called balling. It is apt to occur when a strange queen is introduced to a colony, although sometimes a colony will ball their own queen if unusually excited or disturbed, more especially in spring and autumn. Bees sometimes ball their own queen for the purpose of protecting her from strange bees, and when robbing is going on. If the queen is not soon released, she is usually suffocated, and is thrown out of the hive.—Eds.]

From "Gleanings."

That Canadian Imbroglio.

DR. MILLER OFFERS SOME NUTS FOR THE ONTARIO COMMITTEE TO CRACK.

DOTWITHSTANDING the fact that I am singled out as one of the evil few who were anxious to oust Canadians from the North American Bee-Keepers' Association, the action taken by the Ontario Bee-Keepers' Association came to me with a surprise as utter as it was painful. What! desire to be disassociated from that body of bee-keepers which includes in its numbers many whom I highly esteem, men whom I love as brothers! Have I so soon forgotten the kindly spirit shown by the Canadians at the Toronto Convention? If, in reality I had any desire to remain separate from them hereafter, then I should certainly have no word to offer in reply. Or, if the action of the Ontario were simply a withdrawal where further affiliation were considered unpleasant or unprofitable, then I could only regret the loss and submit in silence. But when false charges are made, even if they arise entirely from misconception, then, for the sake of those whose good opinion I value, I may be allowed a reply.

The first charge made is the feeling "on the part of some United States bee-keepers to regard and speak of the North American as a national

institution." It is true, the society was often called the "National" for short, and I think that was all the evidence there was of such feeling, or, rather of such supposed feeling, for I am sure that for one I never had any other thought than considering the Canadians just as much brethren as the Georgians or Texans. In looking over the pages of the history of the society, characterized by the Rev. W. F. Clarke as that "admirable compend" for which "we all owe a debt of gratitude to our friend Thos. G. Newman," I find it called the "National Society" in the minutes of 1878; and in 1884 a motion seconded by a Canadian, S. T. Pettit, appoints a committee "to consider what modifications, if any, should be made in the *National Society*." "Rev. Wm. F. Clarke, of Ontario, spoke at some length on this resolution. . . . He said it was first intended to call the society by the name 'National,' but at his request it was called 'North American,' so as to include Canada. It was often called the 'National Society,' but it would be more proper to call it the International, for such was its real character, and such he hoped it would continue." In all this it hardly appears that the term "National" was looked upon as anything betokening any wrong feeling, and it is hardly possible Mr. Clarke so considered it. As corroborating this view, Mr. Clarke, in a written address at the convention of 1890, said, "I do not know of any ill feeling that rankles among us." So I think it looks pretty clear that, Mr. Clarke himself being judge, there was nothing to complain of up to the convention at Keokuk in 1890.

It may be well, also, to mention that at Columbus, in 1888, the name of the society was changed to "International American Bee-Association." As no other countries than the United States and Canada were represented in the society, it certainly does not seem that the adoption of the name international contemplated driving out the Canadians. Moreover, the adoption of this name was at the instigation of Thos. G. Newman, who is held up as one of the bad. Two years later the name was again changed to the present one, Mr. Clarke himself proposing the change.

I think it is pretty clear, therefore, that up to the meeting at Keokuk all was smooth sailing. At that meeting it was proposed that the society be incorporated. That incorporation was and is the head and front of our offending. The committee on organization and incorporation in their report, right in the very act of furthering the matter of incorporation, recommended that the constitution should read in its first sentence that the society "shall include in its territory

all of the United States and Canada." Does that look as though they supposed incorporation would throw out Canada? It is true, that Mr. Clarke objected that incorporation would affect the international character of the society; but his thinking so did not make it so, and it was explained that there would be no abridgment of its powers or limitation of its scope by means of incorporation.

The Ontario report complains that at Albany the committee on incorporation vouchsafed no information as to the terms, conditions, or effects of incorporation, but confined themselves to the bald statement that they had done as they were bidden. Why should they say anything more? They were directed to do a specific thing—to get an advantage for the society. They did as instructed, and then came saying, "We've got the advantage." What more was necessary?

The Ontario report recites that at Albany one of the committee, in answer to a question, was told that the association was now local, but its influence would be national. This does not agree with the printed minutes, in which E. R. Root replied to Mr. McKnight's question, "It is incorporated under a State law, but its influence is national."

Objection is made to the word "national." Now, if the mental machinery of others is like mine, they would think of Ontario, New York, Illinois, etc., as all one, when speaking of the society, and the word "national" in that case would have just the same meaning as the word "international." I feel pretty sure that Mr. Root and Capt. Hetherington both used it with that signification, and still more sure that Mr. McKnight so used it in his question, "Is not incorporating it under a State law making a local society of what was a national body?"

The Ontario committee says it has "come to the conclusion that Canada has no rights under the new state of things, and that it was not intended she should." The committee has simply come to two very false conclusions. I don't believe that a single man that favored incorporation believed that it would take away any of Canada's rights, and I fondly hope that some of my Canadian friends have still confidence enough in my word, vile offender though I am held up to be, to believe me when I say that I had not the most remote intention or desire to do any thing to make the rights of Canada less. I am very confident that the rest of the vile few were of the same mind.

The hint is given that the States other than Illinois suffer from the same limitation as Canada. Most assuredly they are affected in the same way, and yet it has not come to my know-

ledge that a single word of protest has gone up from any one of them. Surely, the committee ought to find in "the great body of American bee-keepers, which it believes are not responsible," and to which it tenders "assurance of continued fraternal good will, high consideration, and cordial regards"—surely among these there ought to be found not a few ready to rise up in earnest protest against any wrong done to Canada and the States outside of Illinois.

Now, in all candor, let me ask what harm has incorporation done? What right, just tell one little, lone right, that Canada had before incorporation that she now lacks? In what way is the North American any less "broad and international" so far as the society itself is concerned, than it was before? Will the meeting at Washington be any more local than its predecessors? What single thing has ever been done by the society that it could not equally have done if it had been incorporated at its first organization? What single thing is there that it cannot do in the future that it could do if it were not incorporated? Will any one of the four gentlemen who signed that report answer these questions? I am sure that room for their replies will be given in the same columns that admit the questions.

I have too high esteem for the sound heads and kind hearts of Canadian bee-keepers to believe that any misunderstanding, as I am sure it is a misunderstanding, shall lead to any permanent estrangement. The truth will come uppermost, and we shall know each other better.

C. C. MILLER.

Marengo, Ill.

FOR THE CANADIAN BEE JOURNAL

Mr. McKnight Cracks the Incorporation Nuts, and Pronounces Judgment upon the Kernels.

SIR, In *Gleanings* of 15th Feb. Dr. Miller steps into the breach caused by incorporation with the sword of defence in one hand and the pipe of peace in the other. He has polished up the former to an extent that its sheen throws the *calamut* in the shade. The material to burnish his blade has been gathered by him from the inception of the North American down to the present day. He invites us to a "pow-wow" upon ground we decline to occupy. "The same columns that admit the questions" is not the place in which we choose to meet him. We were once lured there by this suave "medicine man" only to be buried in oblivion, and we will not again "Listen to the voice of the charmer, charm he never so sweetly." We prefer to stand at a distance and "crack the nuts" he has thrown at us with the view to ascertain the character of their kernels. These nuts as they lie before me are six in number.

Nut No. 1 is "What right—what lone little right that Canada had before incorporation that she now lacks?" I answer: Before incorpo-

ration the bee-keepers of Canada at the annual gatherings met with their brethren of the United States on common ground and on equal footing. The pleasure and the privileges of those meetings were common to both. They were essentially meetings of "kindred spirits." The society was not then legally responsible in its character, and, notwithstanding its elaborate constitution, might embrace bee-keepers from England, Hong Kong, or Honolulu, so long as they paid their membership fee, and secured the enrollment of their names, and this, I apprehend, any respectable bee-keeper from either or all the aforementioned places would have had no difficulty in doing. Will Dr. Miller say the society's platform is as broad to-day as it was then? "None but citizens of the United States could become incorporators." The inference is, none but citizens of the United States can claim its privileges.

Nut No. 2.—"In what way is the North American any less broad and international, as far as the society itself is concerned, than it was before?"

My own impression is Dr. Miller is in doubt on this question, and wants "any one of the four" to clear it up for him. Let me try to do this by putting the question to him: Suppose the bee-keepers of New York, Michigan, Iowa, or any or all the States from Maine to Florida should organize as a legal body by paying their three dollars, and take out a certificate of incorporation, and each call itself the North American Bee-Keepers' Association, (I suppose they have the right to do this), where then would be the superior status of the Illinois Association? Its title I presume is not a trade mark it can monopolize. It has no patent right upon it that dare not be infringed. Granted it has the exclusive right to the title. Is it not competent for any other State to organize under the more comprehensive name of the "Universal Brotherhood of Bee-Keepers, and still another under that of the Oeumenical Council of Apiarists, and so on all along the line, and each include in its constitution the whole world? Could they not do this with as much reason as the present Association can include Canada? Whatever jurisdiction it may claim in its constitution, the North American is now essentially a State Society, and this newly blossomed "rose by any other name would smell as sweet." I view the Association as a State Society, so do my associates, I believe. What wonder then that Canada has withdrawn? She has no wish to come under the wing of Illinois as a suckling, and seek what favors the illustrious parent may have to bestow. She fancies she is as big as her would-be foster mother, and she "swarms out."

Nut No. 3.—"Will the meeting at Washington be any more local than its predecessors?" Its predecessors had a name but no "local habitation." The present Society has. No one should object, however, to its members going on an excursion to the Capitol. I predict for Washington the best bee-keepers' meeting ever held in the country, and the succeeding one at Chicago, better still; but do not forget to give *Washington* the credit in the one case, and the *World's Fair* the credit in the other.

Nut No. 4.—"What single thing has ever been done by the Society that it could not equally have done if it had been incorporated at its organization?" Nothing. But in like circumstances

—"What single thing could it have done, if it had been incorporated at its first organization—it has not done as it was? If incorporated at the beginning it could have sued its debtors, but no one owed it any money. It might have been sued, but it owed no one any thing. It might have purchased land, and built a hall to hold its meeting in, but it had no balance at the bank or money in the treasury to do this; so its life was as happy and useful in the one state as it would have been in the other.

Nuts Nos. 5 and 6 are "blind"—there is nothing in them.

We never had any objection to our brethren across the border incorporating. We have no right to dictate to them what they should do. When I discovered a disposition at the Keokuk meeting to incorporate, I advised they should go to Congress for their charter, and thus make their Society a National Institution, with all the powers and prestige the nation's authority confers. but Mr. Newman then stated, and Mr. Root has subsequently reiterated the statement, that this could not be done—that incorporation must be effected under a State Law. I thought at the time it were a strange thing if this be so, but not being conversant with the laws of the United States, I took it for granted they were right. I am pleased to find, however, my suspicions then were well founded, for I find it stated in the *A.B.J.* of the 11th inst., page 218, under the caption *Congress*, that "Mr. Hatch, of Missouri, is seeking incorporation of the Society of American Florists." If the florists of the United States can secure incorporation from the supreme law, making power of the land, why not the bee-keepers? Dr. Miller, Mr. Newman, Mr. Root, and all the others concerned, will admit, I think, that the bee-keeping industry of the States is quite as important as that of the flower-growing industry. Nay, more, that the number engaged in growing flowers for market, and the commercial value of their annual output, sinks into insignificance when compared with that of bee-keepers'. They have more bee-keepers engaged in the extensive production of honey than any other nation on the face of the earth. There is as much brains in the business, too, as will be found elsewhere. There is more honey harvested in the States than there is in any other country in the world; and it is a marvel to me they have not ere this organized themselves into a National Society worthy the name, and put themselves in a position to exercise a combined influence commensurate with the importance of the industry in which they are engaged. It is not yet too late to do so. Let them take a hint from their neighbors the florists. Let them go to Congress, secure incorporation, organize a Grand Central Association around which the lesser bodies can cluster—thus strong and united they will be in a position to demand and enforce their rights. With such a Society, we, in Canada, would be delighted to affiliate if that privilege were secure to us. If not we would not grumble, but be glad to see such a society; we could not but benefit by it, if that benefit only came to us from reflection. Let them cease to content themselves with that impotent makeshift, the North American, which is very much like a chip in porridge—little good, little ill. My idea was, is, and ever will remain—the advocates of incorporation at the Keokuk meeting did

not appreciate the mistake they were making, but blindly carried it into effect, and now endeavor to bolster up their blunder by whatever arguments they can adduce in its favor; and by pelting "nuts" at those who pointed out to them the way of duty. The nuts when broken had a poor flavor, but the duty of cracking them was a genuine pleasure to

Yours, etc.,
R. MCKNIGHT.

FOR THE CANADIAN BEE JOURNAL.
We, Us & Co.

WELL, they have gone, did and done it, haint they? I mean those five that Mr. Newman says are in good company.

I see some of the five are havin' pains for their naughty behavior tord Canada. P'raps some Root tea would give relish. Wasn't it done sleek, anyhow? but the funny part is that they five should make up such a face after giving Canada the bad tastin' medicine. Must be the five knew 'twas bad to take—pretended they put 'lasses into it, didn't they?—five done all the talkin' right away quick, didn't they?—seems five knew their several parts to say, didn't they? They said "run," without laughin' much, and with tears in their fists, and their eyes doubled up, didn't they? yes, guess they did. Thought we believed it all—course they did. Purty big country this is for five to see it all at once, and do it all so quick without askin' nothin' of nobody; yes, guess it is. Golly, it tickled me to see Canada take that stuff without a wrinkle—yes, I was tickled at that. Canada took it—all she said was: "guess that's enough for now." Was goin' to argue a few little pints about the thing, but they're purty dull pints; guess I'll let 'em go. Has any one named it yet? Let's see. As I understand the product of the five, it's the North American Bee-Keepers' National Illinois, International, Incorporated, Affiliated Stock Company Association. Guess that's too much to give myself to—yes, guess it is. Pringle, you're a brick—yes, guess you are; but thar's suthin' 'bout ye that a feller likes jest the same. A feller likes to see kind hearts—yes, he does. You spoke of 'tendin' some of the meetins of that—that concern named above—presume they'd let you come—they'd be polite—they'd say—"why, brother Pringe, you needn't stand out thar, walk right in, you'll find a seat—a seat back there—make yourself as home." Hem, ah—by the way, Mr. President—(hem)—by the way, we have with us to-day, a visitor from Canada—(hem)—I move you, Mr. President, that we extend to him an advisory seat with us; hope—(hem)—that any advice he may have to offer for our benefit will be duly considered, if more important business does not interfere—(hem.)—Good boy, Pringle, they'll let ye in—they'll grin like a Chesy cat, you see. Yes, you was right about us common folks—we that aint in the ring, all like Canada—yes, we do. Let out them five that holler yep, and we're in good company, and there yet remains 64,999,995 people over here that likes Canada—yes, that's quite a number who don't hate you—you bet it is. Have them "slap-jack" cakes and honey ready for me, Pringle. I'm comin' over to go huntin' sometime with you.

JOHN F. GATES.

Ovid, Erie Co., Pa.

FOR THE CANADIAN BEE JOURNAL.
Cui Bono?

AN Incorporated Bee-Keepers' Organization is a big-sounding sentence, but *what good* does it do?—what effect can it have on the community at large—better, greater, or more comprehensive than is worked by an ordinary Bee-Keepers' Convention? Will there be a larger attendance at stock-holders' meetings that would be had, or are had, at Conventions? In the interim can a Board of Directors accomplish more, or in a more satisfactory manner, than do Committees? A Bee-Keepers' Organization can be made national, by making it a representative body, and as such can accomplish greater good than can be brought about in my judgment in any other way. In order to make a corporate body national, each State must incorporate its local association, and the corporation thus formed can unite in creating a grand body that will be representative; but, again I say, *what good* will come of it more than be effected, by forming associations and creating from them a grand body to be composed of representatives?

I ask for information. I am aware of both the good and the evil, too, that comes of corporations. Is the step that has been taken a well advised one? Do the stockholders in an Illinois corporation intend to attempt to make a law unto themselves? Has the industry of bee-keeping been set back or put forward by the creation of a State Corporation?

If bee-keepers were all business men—educated to business methods—a different result from what well may be expected, would follow; but the majority of them are far from being such, and the way and manner they have been swindled in years past put them on the defensive, and on guard against possible evils, and they will at once look for a "cat in the meal," and because they don't understand the "why of it," will say at once—"Cui Bono."

A. B.

From American Bee Journal.

Imbedding Wire by Electricity.

W. E. DAGES.

PLACE the wire frame over a smooth straight board, a trifle smaller than the frame, until the wire is 1/16 of an inch (or half the thickness of heavy foundation) above the board from end to end, then place the sheet of foundation on the wire; from 1/4 to 1/2 second, when the foundation will drop to the board, and the wire will be imbedded as perfectly as though it grew there. The colder the foundation the better. The battery I use for imbedding wire is an ordinary plunge battery—one I made myself from refuse electric light carbons. The battery complete cost me 10 cents, and a like amount was invested in the acids. The current is strong enough to heat a No. 30 wire, 6 feet long, to 200° or 250° Fahr. If I had much wiring to do, I would rig up a table where one man, after the frames were wired, could imbed from 5 to 10 frames per minute.

Morris, Ills.

The Ohio State Convention.

EXTRACTS FROM THE PRESIDENT'S ADDRESS READ.

The question of how to make our business pay best, is of vital interest to every one of us, especially at a time like the present, when competition with the sugar interests bear heavily on the prices of honey. The knowledge of economy in apiculture, and the art of producing the largest crops, is nowhere better elucidated than in our meetings.

Bee-keepers have no secrets, as is the case among the followers of many other pursuits. Perhaps all of us have gathered the most points from a personal exchange of ideas at bee-keepers' meetings.

The next question, and by no means the least, is—How can we market our honey best, and in what shape or manner offered, does it bring the best prices? These are the questions which bring us together, and the solution of which is exercising the brains of the best bee-keepers.

SPRING MANAGEMENT OF BEES.

Since extracted honey has almost become a staple article, every bee-keeper may decide for himself whether he should produce comb or extracted honey, or both. The main question with him is as to the best means to employ for the production of a large crop.

He may have the most prolific queens, his successful wintering may be an accomplished fact, and his colonies may be in a flourishing condition four or five weeks previous to the beginning of the honey harvest, but, misled by fine weather and the lively flight of his bees, he forgets that flowers, generally, yield no honey just at that period, and that the consumption of their stores is greatest when brood-rearing is at its best. Everything may seem prosperous to our sanguine friend until he sees dead larvæ at the alighting boards.

Upon examination he finds the hives full of bees, no stores, and little or no larvæ in the cells. The bees had found themselves short of food, hard times was staring them in the face, and, moved by the sense of self-preservation, they had sacrificed their young. They had pulled their larvæ out of the cells and out of the hives in order to make their stores hold out as long as possible.

His bees should have been fed four or five weeks previous to this time, and now they must be fed without delay, and they must have a plenty, so as to make them breed up again. But as it requires a time of three weeks before the first young bees will hatch out after the eggs are laid, and two weeks more before they become foragers, and as our honey harvests hardly ever last longer than four or five weeks, often less

than three weeks, the colonies will be in good condition again just in time to be too late for that season. The bee-keeper has lost the earnings of his year's labor, while, by a timely feeding, he would have secured a good crop of honey. It is just there where most bee-keepers make their mistake, and not beginners only commit that error.

The consumption of their Winter stores begins with brood rearing, and in the same ratio that the brood increases the stores decrease. The question whether more honey is consumed by out-door or in-door wintering is, therefore, immaterial. The difference is small. The old bees only are the foragers, while their young stay at home, taking care of the brood, preparing the cells for the reception of eggs and honey, ripen the honey, and close the cells when filled.

It is, therefore, of the greatest importance to have our colonies strong in old and young bees, and ready for the harvest at the time the season begins, which is, in southern Ohio, the latter part of May, the time white clover comes into bloom.

MARKETING OF THE HONEY CROP.

The marketing of honey proves often as difficult a matter as its production. Bee-keepers can form no "trusts," and their abilities and individual tendencies are differently developed. They seek a market where they can best find it. But the object of all should be to offer their honey in neat, clean packages.

Comb honey should always be put up in neat glass cases, or in neat cartons, as the case may be. It should be properly graded as to quality. The sections should be clean, and no combs of dark color should be mixed with the white. The front row exposed to view, should always be a fair sample of the contents of the case.

One pound sections ($4\frac{1}{2} \times 4\frac{1}{2}$) are the most saleable, while smaller ones are in no demand. Two pound sections also, nicely filled with white combs, find a ready sale in our market. We make but little difference, if any, in the price of the two. Consumers make a decided distinction between clover and basswood honey, while such is not the case with comb. Comb honey is a fancy article, and must be white. Its attractive appearance, principally, insures a ready sale.

HONEY AND SUGAR COMPETITION.

Extracted honey seems to have become a staple article in spite of all the obstacles put in its way. The bounty on sugar, with the exclusion of honey, discriminates against the production of bee-keepers, and is an injustice which Mr. McKinley and his committee would not have been guilty of had they been posted on the sub-

ject. It is of vital interest to a large class of industrious and loyal citizens to have honey come in under the same laws protecting the production of other sweets. Bee-Keepers must spare no efforts to have justice done them in this respect.

WORLD'S FAIR APIARIAN EXHIBIT.

The participation of Ohio bee-keepers in the Columbian Exposition should be considered by the convention.

I recommend the appointment of Dr. A. B. Mason, of Auburnville, O., as General Superintendent of the Bee Department at the World's Fair. Dr. Mason is a man of experience, and possesses the confidence of the bee keepers of the country.

I recommend, also, that a committee be appointed to confer with the Agricultural Commission as to space, and the appropriation due to the bee-keepers. It seems to me that an appropriation of \$5,000 would meet the requirements worthy of the State and the bee-keepers of Ohio. It is necessary to impress upon the General Government the magnitude at stake of the bee-keeping interests of the country.—*American Bee Journal*.

FOR THE CANADIAN BEE JOURNAL.

Mr. Newman's Reply to Mr. McKnight

Chicago, March 9, 1892.

DEAR SIR,—The only thing that seems to require any comments from me on McKnight's article is the sentence about the incorporation of the American Florists of Missouri, which was sought to be done in the U. S. Congress by Mr. Hatch, as noted on page 218 of the *A.B.J.* That was intended to be a *special incorporation*, by act of Congress. The North American Bee Keepers' Association was incorporated under the general law, and required no separate act of either Legislature or Congress. That is the difference between the two. If it had been considered of sufficient importance to have a "special act of Congress" to empower the latter association to do business, own property or accomplish other difficult undertakings, we might have applied for such an act, but it would have cost a large sum of money, instead of simply the \$3.00 which the association paid. No one suggested, either at Keokuk, or elsewhere, that a special act of Congress was desired. The only talk was about incorporating under the existing general laws.

As Mr. McKnight suggests that if such is desired, it is not yet too late to be accomplished. The convention at Washington can take the matter into consideration and do whatever may seem best, when assembled. I have no preference one way or the other, but seek only the general good.

THOS. G. NEWMAN.

From "American Bee Journal."

Temperature of Bees in Winter Quarters.

C. W. DATTON.

LAST October I prepared four colonies for Winter by contracting the brood chamber to six combs and putting on a solid inch

thick honey board, and letting the bees seal them down tightly. The latest flight the colonies had was on Nov. 16, and they were carried into the cellar on November 20, where the temperature ranged from 32° to 40°. Fifty thicknesses of paper were spread over each honey board.

After they were placed in the cellar they remained very quiet, but towards the last of January the honey boards began to become concave on the upper sides by warping, and there came cracks between the lines of propolis at the edges so that I could look in and watch the actions of the bees. The bees remained absolutely quiet. I could see their bodies projecting above the top bars, but there were no bees clinging to the cover board.

There were indications of moisture present in the form of large drops of water here and there on the cover, and also on the combs. This was the cause of the warped boards. By inserting the bulb of a thermometer into the cracks, and letting it drop down amongst the bees at the top of the cluster it indicated 61°. When the crevices were entirely stopped with paste so that no air could escape, the temperature remained at 64° in one colony, and 61° in another, and another 65°.

By the 10th of February, with the paste removed, I saw moisture attached to the honey board the whole width of the hive, just over the cluster where the bodies of the bees could be seen projecting above the frames, bringing the bees and moisture within one-fourth of an inch of each other.

Here were the tightly-sealed covers, and comparatively no covers to the brood chambers, with a difference between the two modes of only 3°. If this is the real temperature of healthy bees, I wish to inquire where the force is to come from that produces a circulation outward through the entrance situated at the bottom of the hive. The idea that a healthy colony will keep the inside of the hive warm and dry from their natural warmth is a mistake, and exists nowhere except in the imagination and theory. The thermometer does not reveal any such fact. Now, I do not say that there are no colonies which will not show this amount of warmth; indeed it was only necessary to turn my back to these tested colonies, and place the thermometer about half an inch from the cluster of a colony which was affected with diarrhoea, and the mercury jumped at 80°.

Seeing that these colonies were doomed to destruction from the accumulation of moisture, they were carried out of the cellar into a bee repository where the temperature has not yet been down to 50°, or above 65°; usually standing at 62°.

When I lifted the boards and papers off the hives, water literally ran off from them, and the hives showed that moisture had condensed on the combs and inside of the hive, so as to run down and soak through the joints at the bottom.

Two hours in a temperature of 62° rendered the hives dry. The brooding chamber remained uncovered for awhile, and then there was spread over them two thicknesses of newspaper.

To this covering one of the colonies objected, and manifested their intentions by getting uneasy and gnawing three or four holes in the papers, directly above the cluster of the bees. and a nice cluster of bees came up above the pa-

per, and then the colony became very quiet. In the three or four days following this the temperature was lowered from 62° to 56°, and all but three or four bees of the cluster had retired to the inside of the papers.

On account of some manipulations I wished to make with some other colonies, I continued to lower the temperature toward 50°, and as these bees had gone inside the hive, I thought a lower temperature would be cold on them, and I accordingly laid on the top of the papers a new half inch pine board that was warped so as to leave a space under it like a Hill's device.

In lowering the temperature it was necessary to be absent about two hours; when I returned and was surprised to find this colony (previous, so still) now making a great uproar. On raising the board it was found to be warped exactly the opposite from what it was when put on, and hundreds of bees crowding in under it, and the paper had been removed for a space larger than my hand. The board was set on one edge against the hive, and there was immediately began the contented hum, and march back into the hive.

Although I brought a bright lamp and set it on one corner of the hive, only one or two bees paid any attention to the light. The temperature was then 52°. When the bees had become settled a piece of writing paper was laid over the hole the bees had now made in the papers, and it was soon torn, and as the bees went at it in great force, it was crowded entirely out of the way, and the bees went back amongst the combs and became quiet, and did not enlarge the hole they had made in the paper.

One thing of importance noticed, when the bees were in this uneasy state, and trying to remove the cover was, that quite a number of bees, perhaps 50 or 75, crawled out on the cover papers, away from the rest of the bees, and dropped their excrement, just as the bees in a diarrhetical colony will crawl upward above the entrance to the hive and void the same.

There is a peculiar motion among the individual bees when they leave the cluster for this purpose—they seem to have only one idea or thought, which is to get out and separate from the rest of the bees. They came threading their way through, turning this way and that, to get past other bees, while the main throng were marching the other way, keeping up a joyful hum. They appear about as heedless (or, perhaps, as headless) as people escaping from a burning building.

After evacuation they remained motionless as if contemplating whether to wander further away from the hive and die, or return and undertake to live in it again. Hearing the hum of contentment set up by the other bees, they would turn their heads to one side and then to the other, and then scrambled back toward the brood combs quite lively.

The bodies of these bees were not excessively distended. They could take wing easily and fly all around the room. Now the question comes up: Was this diarrhoea or healthy evacuation of the intestines?

It looks to me as if there was some kind of atmosphere in the hives that caused it, and that the board and paper I laid on caused it to accumulate in the top of the hive. The entrance, $\frac{1}{2}$ x 16 inches, was wide open. Our, supposed to

be, best authorities say that "noisome gases and vapors escape at the bottom of the hive." When the coverings are removed, the stench from the colonies rises to one's nostrils.

It looks as if this may have been a healthy colony. Still it would have been charged as being afflicted with diarrhoea. I have noticed some diarrhetical-appearing colonies which seem to be in bad condition, that lived until Spring and then built up to good colonies. Other times they dwindled out in spite of all that could be done. One seems to be tenacity to life, and the other tenacity to death; yet they are mistaken for the same sort of affection.

As I was about to close this article the thought came to me to test the temperature of this colony in both its quiet and disturbed conditions. On going to the colony, now, after it had been quiet five days, I found the thermometer where I had left it above the cluster, lying on top of the brood frames, with bees on both sides of it, and two or three around the bulb, and it registered 59°. When it was raised one-half inch above the frames it was 58. Another thermometer which leaned against the hive and rested upon the floor of the repository registered 57°. Four feet above the floor it registered 60°. Twelve hours ago it was 64°.

Not disturbing the thermometer lying on the frames, a piece of newspaper was quietly laid over it, and then several thicknesses of quilts over the paper. After ten minutes the mercury had risen from 59° to 61°. At the end of 45 minutes it was 68°, with considerable excitement. At 75 minutes it marked 78°, and was still on the rise, and the quilts and paper were taken away.

Two healthy colonies were tested under quilts, and in one the temperature was 63°, and in the other 61°. Two colonies which were afflicted with diarrhoea three weeks ago, and kept up an uproar for ten days before they were set in the warm repository are now comparatively quiet, and the temperature under the quilts was 64° in the one, and 66° in the other. One of them objects to any covering to the brood chamber.

As Mr. Muth speaks on page 191 of being tired of speculative articles, and having advanced more or less theory in some former communication, in this I have intended to deal with facts only.

Clinton, Wis., Feb. 23, 1992.

FOR THE CANADIAN BEE JOURNAL.

Report From Bruce County

DEAR EDITOR,—I am happy to report that my bees are in first-class condition. They had a grand cleansing fly on the 21st, 22nd and 23rd. I took the opportunity to examine them, and found them all with plenty of stores, and strong in bees, with considerable brood and some young bees hatched. I never saw them better at this time of the year than at present. Bee-keepers here are commenting on the action of the O.B.K.A. in regard to the N.A.B.K.A. They were sorry to sever the tie, but when they read Mr. Pond's letter on first page of the C.B.J. of the 15th, I think they will see that it was the proper thing to do.

A BRUCE BEE-KEEPER.

Walkerton, Feb. 26th, 1892.

THE CANADIAN BEE JOURNAL

ISSUED 1ST AND 15TH OF EACH MONTH

D. A. JONES, - - - EDITOR.

*Devoted Exclusively to the Interests
of the Honey Producer.*

SEVENTY-FIVE CENTS PER ANNUM IN ADVANCE

ADVERTISING RATES.

\$5.00 per inch, or one-fifth single column \$8.00 per annum. Special contracts made for large spaces.

Address all communications to

Publishers **CANADIAN BEE JOURNAL.**

BEETON, ONT.

EDITORIAL.

We have received T. Phillips & Co's. (Orillia) Spring Catalogue.

In a private letter from Mr. Gemmell, he says his bees are in fine shape.

Colwick & Colwick, of Norse, Bosque County, Texas, sends us their Spring Catalogue.

Rev. W. F. Clarke sends us a pithy letter *re* Affiliation. Our JOURNAL was "up" before its receipt. It will appear in our next.

S. May, Littlewood, will please look in enquiry column for April 1st for answer to his query.

We are asked the following questions: "Is the domestic bee indigenous to America? If not, is there any reliable information extant touching its importation or introduction?" Will some of our readers furnish our subscriber with an answer in our next issue.

The Fourth Annual International Fair will be held at Detroit, Mich., August 23rd, 24th, 25th, 26th, 27th, 29th, 30th, 31st, and September 1st and 2nd, 1892. For further particulars, address—Jas. E. Davis, Secretary, 204 & 205 Hammond Building, Detroit, Mich.

There are many good and valuable things in *Gleanings*, but the most interesting to us is the account of Mr. A. R. Roots' (senior editor of *Gleanings*) trip

across to the Pacific coast. We are glad that Mrs. Root joined him on the coast, as she will be a great assistance to him. We hope when he returns through the Sunny South that he will be fully recovered to his original strength and vigor.

"The production of Comb Honey" by W. Z. Hutchinson is now out of print. "Advanced Bee Culture" is designed to take its place. It is a new work by that well known authority. Price 50 cents.

We have just received a letter from our President, Mr. Gemmell, calling our attention to the fact that we have omitted to publish the names of the officers of the Ontario Bee-Keepers' Association for 1892. This is certainly an omission on our part which we must apologize for. Elsewhere will be found a list of officers and directors. It certainly would be very inconvenient for our readers not to be able to write our President, Mr. Gemmell, on foul brood matters.

Remember next issue commences vol. 8—price \$1.00 per annum. All subscribers paying arrearages and renewing before April 15th, can have the C.B.J. for 75c. This will give every subscriber an opportunity to see the C.B.J. in her new clothes. Elsewhere, under the heading—"To Our Subscribers"—you can see exactly how your subscription stands. If the explanation is not sufficiently clear, or if there is anything wrong in your wrapper number, write us.

A subscriber in the N.W.T. asks us—"If bee pasturage nine miles from a colony is too far to expect bees to gather." Between the apiary and the pasture there is a ridge or knoll fringed and topped with scrubby trees. On the further side in the bed of a creek there is unlimited pasturage. The distance is none too far for vigorous young bees, but as they grow old, frayed wings and heavy loads often compel them to drop for a rest. Many never rise, but die. We have read of bees flying further in Texas and other States for pasture, and we know of no reason why they should not store honey in the North-West.

Hibernation has been under discussion in bee journals in the Republic to

the south of us for some time. In Gleanings for Jan. 15th, under the heading "What is Hibernation," Mr. G. M. Doolittle, of Borodino, N. Y., gives his opinions. Gleanings corroborates these opinions. We exhausted the subject in 1886 when under discussion, in an article written by Mr. P. H. Elwood, who drew upon the observations of L. C. Root, Marshall Hall, and others, and "settled" the question for all time to come. The reproduction of this article would doubtless explain to many of our new beginners what Hibernation in a bee really is, and we will reproduce the article if any one wants it.

..

Our next number will be issued in new clothes. It will contain a frontispiece of four prominent apiarists of Ontario. The issue of the 15th of April will contain a frontispiece of notable journalists in bee literature, and future issues will contain cuts of members of the O. B. K. A. and the N. A. B. K. A. We are making arrangements to have original contributions in every number from practical as well as scientific bee-keepers, and we will endeavor, through the directors of each division of the Province, to let one division know what the others are doing. There is nothing wonderful about the opinions of our subscribers received when mailing subscriptions or renewing, or when making enquiries privately about some knotty point in apiculture. Opinions differ in the estimate of nearly every thing that comes before the observation of mortals, and they differ regarding our BEE JOURNAL. When we receive flattering notices we are prone to carefully fold the creases out of the letter, fyle it away almost reverently, and murmur "that man has a level head." When we receive a *billet doux* abusing us for lack of new ideas in our columns, finding fault because we scissor too much, or scissor too little, we gently loll back in our easy chair and ask ourselves this consoling question "What kind of reading matter would suit these grumblers any way?" But we digress. We are personally acquainted with hundreds of apiarists who are just as capable of contributing articles to a bee journal as the majority of writers on other subjects are, whose weekly or monthly contributions fill the pages of

other journals devoted to some other industry. Why cannot we enroll you on our lists of contributors? Every now and then something crops up that is at variance, or seems to be at variance, with existing theories or facts. The observer is too indolent or too busy to make a note of it at the time. The incident is forgotten. Ten chances to one others have noticed the same exception and would like an explanation. The opportunity to educate each other is gone. In conversation with bee-keepers we are often asked puzzlers. We answer them off hand, and forget about the question, and the answer. We would like in future, if such queries could be sent to us for answer in the C. B. J. We want contributions from the bone and sinew of the bee industry. Our columns are always open for anything pertaining to the "busy bee," and if the space we devote to such enquiries, incidents, or remarks, cannot be made interesting, it will be the fault of our contributors, not ours. Let us hear from every one who reads this.

From American Bee Journal.

What constitutes an Italian Bee.

THE committee of the North American Bee Keepers' Association, on a standard of excellency for Italian bees, reported as follows:

Italian bees must adhere to the combs when properly handled, and not cluster about or rush around and fall to the ground. They must have three bands, of a color ranging from golden yellow to leather color. They must be quiet when well handled, and in time of scarcity must place their honey in a compact shape.

Schedule of marking, in a schedule of 100 points:

- Comb building, 10.
- Honey gathering qualities, 40.
- Prolificness, 20.
- Wintering, 15.
- Gentleness, 10.
- Color, 5.

The report was accepted and adopted.

FOR THE CANADIAN BEE JOURNAL.

The New Method.

I AM still flooded with inquiries. People that know me personally are willing to take my word about the method, but those who do not know me seem to be a little dubious, and how could you blame them when there is only a small per centage of the people who is prepared to accept the method? I will not offer it for sale this Spring, but will give it to a few practical bee-keepers for trial this season, then you will hear what they have to say about it. I think this is the best course to take at present.

St. Thomas, Ont.

JACOB ALPAUGH.

ONTARIO Bee-Keepers' Association.

Organized Sept. 17th, 1880.

Incorporated March 1886

OFFICERS FOR 1892.

PRESIDENT, STRATFORD
F. A. GEMMELL,
VICE-PRESIDENT, NASSAGAWAYA
A. PICKETT,
SECRETARY, STREETSVILLE
W. COUSE,
TREASURER, HOLBROOK
MARTIN EMEIGH,
AUDITORS, BRANTFORD
D. ANGUISH, J. B. HALL, WOODSTOCK

DIRECTORS.

- District No. 1.—W. J. Brown, Chard.—Stormont, Dundas, Glengarry, Prescott and Cornwall.
- District No. 2.—J. K. Darling, Almonte.—Lanark, Renfrew, City of Ottawa, Carleton and Russell.
- District No. 3.—M. B. Holmes, Delta.—Frontenac, City of Kingston, Leeds, Grenville and Brockville.
- District No. 4.—Allen Pringle, Selby.—Hastings, Prince Edward, Lennox and Addington.
- District No. 5.—S. Corneil, Lindsay.—Durham, Northumberland and Victoria.
- District No. 6.—Wm. Couse, Streetsville.—York, Ontario, Peel, Cardwell and Toronto.
- District No. 7.—A. Pickett, Nassagawaya.—Wellington, Waterloo, Wentworth, Halton, Dufferin and Hamilton.
- District No. 8.—F. A. Rose, Balmoral.—Lincoln, Welland, Haldimand and Monck.
- District No. 9.—M. Emeigh, Holbrook.—Elgin, Brant, Oxford and Norfolk.
- District No. 10.—R. McKnight, Owen Sound.—Huron, Bruce and Grey.
- District No. 11.—J. B. Aches, Poplar Hill.—Perth, Middlesex and London.
- District No. 12.—Jones, —Essex, Kent and Lambton.
- District No. 13.—D. A. Jones, Beeton.—Algoma, Simcoe, Muskoka and Parry Sound.

A General Meeting of the members shall be held once a year and shall be known as the Annual Meeting.

Every Affiliated Association shall receive an annual grant out of the funds of this Association. The amount of such grant shall be fixed by the board from year to year.

Each Affiliated Association shall be entitled to the privilege of two representatives at the meetings of this Association in addition to those who are already members of this Association, and such representatives shall be entitled to all the rights and privileges of members of this Association.

Any County or District Bee-Keepers' Association in the Province of Ontario may become affiliated to this Association on payment of five dollars, which shall be paid to the Secretary on or before the 1st day of May in each year, but every Local Association, so affiliated, must have on its membership roll at least five members who are also members of the Ontario Bee-Keepers' Association at the time of its affiliation and must continue to have a like number of its members on the roll of this Association while it remains in affiliation.

County and District Associations seeking affiliation should notify the Sec'y, Wm. Couse.

All members of this Association will receive the CANADIAN BEE JOURNAL gratis.

GARNOLIAN QUEENS

I expect to continue the breeding of Choice Carniolan Queens next season, and orders will be booked from date. No money sent until queens are ready to ship. JOHN ANDREWS, Paten's Mills, Wash. Co. NY

140 Colonies Bees.

If you want to buy write me, I will ship tested Italian Queens, June 1st., for \$1.25, each. Untested soon as laying, reared from selected stock, \$1 00 each, or 6 for \$5.00. Discount for cash. Orders booked now.

G. A. DEADMAN,
Brussels, Ont.

b 24-ly.

WANTED.

Snow White Basswood for sections.
Address,

E. L. GOOLD, & CO.,
Mfgs. of Bee-Keepers' Supplies,
Brantford, Ont.

b 23-4f.

DOGS AND COMB FOUNDATION.

Brood Foundation, 50 cts. per lb.

Section Foundation, 60cts. per lb.

L. JONES,

DEXTER P O. ELGIN COUNTY, ONT.

SILK DRESS
FRENCH
TO INTRODUCE IT.

New Discovery by Accident

HAIR ON THE NECK, FACE, ARMS OR ANY PART OF THE PERSON
quickly destroyed and permanently removed WITH QUEEN'S ANTI-HAIR OIL. By a most wonderful discovery, made in France, it has been found that while compounding a solution, a part was accidentally spilled on the hand, and on washing afterward it was discovered that the hair was completely removed. It is perfectly harmless, and so simple any child can use it. Lay the hair over and apply for a few minutes, and the hair disappears as if by magic. No scientific discovery ever attained such wonderful results. Thousands who have been annoyed with hair on their FACE, NECK, and ARMS, attest its merits. It cannot fall, and the growth is high, as the hair on the hair removals they require one or more applications before all the roots are destroyed although all hair will be removed at each application without the slightest pain or injury when applied or ever afterward. Young persons who find an embarrassing growth of hair coming can also use it. Harmless as water. Price of Queen's Anti-Hairing Oil per bottle, sent in safety mailing boxes postage paid by us, (securely sealed from observation.) Send money or stamps by letter with full address written plainly. Correspondence strictly confidential. This advertisement is not to be taken as representing Queen's Ointment. It is a new discovery. Every bottle guaranteed. In case of failure or slightest injury to any purchaser. We will pay \$500.00 SPECIAL.—To ladies who will introduce and sell among their friends 25 Bottles of Queen's Anti-Hairing Oil with a silk Dress 15 yards best silk. Extra large bottle and samples of silk to select from sent with each order.

