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

Vol. VIII, No. 12. BEETON, ONT., SEPT. 15, 1892. Whole No. 320

# Queens

Queens

Untested Italian Queen \$1.00; 3 for \$2.50 4 for \$3 25.

Finest Comb Foundation in the Country.

Honey Extractors, Uncapping Knives, T Supers Sections and everything needed in the apiary

MYERS

BROS., Stratford, Ont.

## Garnolian Queens

I expect to continue the breeding of Choice Carnio in queens next season, and orders will be booked from date. No mone sent until queens are ready to ship. JNO ANDREWS, Patten's Mills. Wash Co. NY

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Tested Italian Queen in May, \$1.50 each. Snow while sections \$2.50 per thousand. Hoffman frames and a full line of Bee-Keepers' Supplies. Twenty page price list free. J. M. KINZIE, Rochester, Oakland Co.' Mich. b4 1y.

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Untested, 75c. Tested, \$1.00. Extra Selected, \$3. Six Queens for the price of five. Three Frame Nucleus with Untested Queen, \$3 50.

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b 24-1y, Avery, P.O., Iberia Parish,
MENTION THIS JOURNAL Louisiana, U. S.

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bred from pure mothers for the coming season, at a grade of prices to compare with that of honey production; and the utmost care should be taken to have them as good as any man can breed. Carniolans or Italians, untested, each, 75 ots.; 3 untested queens, \$2.00; 6 untested queens, \$3.60; tested queens from either yards, after the 20th of June, each, \$1.00 All queens that are known to be mismated will be sold at 50 cents each, including all "Yellow Carniolans."

For further particulars send for circular to JOHN ANDREWS, Pattens Mills, Wash. Co., N. Y.

## POSITIVELY

#### AFTER APRIL 30TH

I will ship Pure Italian Queens by return mail at he following prices  $\label{eq:property} % \begin{array}{ll} & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ \end{array}$ 

Warranted Queens, each \$100
Tested Queens, each \$1.50
Select, tested yellow to the tip, breeders', each 200

I refer by permission to the Editor of this journal who has purchased a number of Queens from  $m \stackrel{>}{_{\sim}}$ 

W. H. LAWS,

b 22-7m.

Lavaca, Ark., U. 8 .

#### FIVE BANDED GOLDEN ITALIANS.

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

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1000 pounds basswood honey at 7 cents, F.O.B.

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### DR, J. W. CRENSHAW,

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

Vol. VIII, No. 12. BEETON, ONT., SEPT. 15, 1892. WHOLE No. 320

#### GENERAL.

More about well-Ripened honey.

R. HOLTERMAN has done well in calling attention to this subject in the last number of the C.B.J. It is a mat ter to which the Ontario Beekeeper's Association ought to pay its respects in the most thorough manner at its next annual meeting. I have been writing about it in my department of the Montreal Witness, and cannot do better than ask you to insert an extract from an article of mine which appeared in the issue of the ournal just named of August 10th. It is as follows:—

"It is of extracted honey, more especially, that I wish to say a few things in this article. The term "extracted honey" covers many qualities of the product, from inferior grades of strained honey and honey adulterated with glucose, to the very best samples of clover and basswood honey. There are large quantities of extracted honey in the market which are a fraud and an imposition. Such is most of the strained honey, which is obtained by setting conglomerations of old comb, dead brood, and miscellaneous refuse from the hive to drain, the liquid resulting from this messy process being sold as a rare luxury and choice confection. Extracted honey largely consisting of glucose, a cheap and inferior sweet, is also an imposition on the public.

There is, moreover, a great deal of extracted honey in the market which is immature and unripe, owing to its having been taken out of the hive before the bees have finished the process of manufacturing it. Honey is not, strictly speaking, a natural product. It is made from the

nectar of flowers, which undergoes a mysterious process of manufacture in the stomach of the bees. Even after it is stored in the cells, this manufacturing process is not complete. The honey is not a finished article until the bees have capped or sealed it over with that pearly white wax which makes it present such a tempting appearance to the consumer. During this final finishing stage of the process of honey. making, the bees inject a minute portion of formic acid into the honey. This is, in reality, the poison of their sting. It will be a surprise to many to learn that, after all, the most important function of the bee's sting is not stinging. 1 have long been convinced that the bees put the finishing touches on their artistic cell work by the dexterous use of their stings, and, as I have said, they infuse a little formic acid into the honey. This formic acid gives honey its peculiar flavor, and also imparts to it its keeping qualities. The sting is really an exquisitely contrived little trowel, with which the bee finishes off and caps the cells when they are filled brimful with honey. While doing this, the formic acid passes from the poison bag, exudes, drop by drop, from the point of the sting and the beautiful work is finished. A wonderful provision of nature truly !

Now, since the extracting machine was invented and brought into use among bee keepers, it has been proclaimed as one great advantage conferred by it—that it saved the bees the needless work of capping over the cells, giving them time to gather and store so much more honey that the bee-keeper could afford to sell extracted honey much cheaper than comb honey. But the discovery has been slowly dawning on the bee-keeping world that honey which has

never been capped over is of inferior quality to that which has been fully and finally finished by the bees. Some bee-keepers have supposed that all such honey needed was to be evaporated by exposure to the air for a time before putting it into the glass or tin packages in which it is marketed. No doubt, honey thickens and improves under this evaporating process, but, after all, it lacks, to some extent, the infusion of formic aid which has been spoken of; and the more recent authorities on the subject. Prof. Cook among the number, advise bee keepers not to extract honey until at least one third of the cells are capped over. For my own part, I do not believe that honey is perfect until the bees have done with it. To have the very best quality of extracted honey, the extracting should be delayed until the work of capping is fully completed. This, as the old saying has it, "takes the gilding off the gingerbread." If honey, to be at its best, must be capped over before extracting, it cannot be afforded much cheaper than comb honey. Some bee keepers are of the opinion that it cannot be afforded any cheaper than comb noney to pay the bee-keeper a fair profit.

There is now a decided tendency among beekeepers to devote themselves more exclusively to the raising of comb honey. Most consumers are attracted by the pure, white, honey comb. and the f-w among them who do not want, as they say, "to che w wax," if they wish to secure honey of the first quality, will have to pay the bes-keeper for relieving them of the task of "chewing wax." In other words, they will have to pay for the best extracted article, nearly, if not quite the same price as that of the best comb honey. There are some bee-keepers, and I coafess that I am one of them, who doubt, whether, after all, the extractor has been a beneficial invention. Such a thing as adulterated honey was never heard of until this machine made its appearance. Now the market is flooded with it. Other evils have followed in its train and there are not a few who trace nearly all the ills bee flesh is heir to, to the advent of the extractor. Without going that length, I believe it will be good for the interests of the apiary if both producers and consumers direct more attention to comb honey."

W. F. CLARK.

Guelph, Ont.

#### Report

From the apiary of W. J. Brown 45 spring count, present count, 75, all in good condition.—Samples of honey obtained, five hundred pounds extracted, of thin and poor quality, chiefly gathered from buckwheat.

The season in this place (counties Prescott and

Russell) was never so poor before in the memory of the oldest beekeeper. Up to July 1st the bees had not more than one week of fine weather to work in: cold, wet and windy. I have been told by one beekeeper in Russell county that he had some starved out during the last week of June. The loss by many has been fifteen per cent.; while others, more fortunate, lost less.

I am very happy indeed to hear of the good season enjoyed by my eastern friends, and at the report of Mr. J. Merkley, of Eastern Ontario, though we do not get either his postal or county address. I was under the impression, previous to his information, that the season was a total failure at the east. Of course, within range of my bees there is no basswood whatever, and during the fruit bloom, this season, any bee during to venture beyond the entrance of its hive, would be a "goner." Then the clover appeared to give out nothing; hence our only surplus was obtained from buckwheat, with a fair show for a fall flow from goldenrod, lady's slipper, asters, bouesets and other fall flowers. Last season was an extra good one here; so, I suppose, it would not do to have it good every time, as we might get so independent as to throw up all other pursuits. This is why I claim that agriculture and apiculture should go hand in hand.

Now, sir, as you have asked your readers to give you their opinious on the very important subject of "The Best System of Wintering Bees," I suppose we shall have to admit the aptness of the Irishman's axiom that "Every man has his own way for kissing his own wite." It is much the same in wintering bees. Some winter in cellars; some in attics; some in pits dug in the ground; some in hay mows; some on their summer stands; some in clamps; others, who have more honey to spare than your humble correspondent, go in for very elaborate houses; whils: that fellow, Awrey, out about North Bay, or the north pole (I forget which), used to bury them up in the snow until spring. By the way, Brother Jones, was that the result of your imagination which you had permitted to run away with you to that far distant locality? or do I hear you shout -" Halt, Brown! Don' go no far, or you will get out of breach."

Well, to return to this subject of wintering, I have only to repeat what I rold the readers of your valuable JOURNAL less than a year ago: In the first place I so that every hive has ample store of honey—not less than twenty five pounds. No sugar for me, no matter how cheap it is. Of course, I may change this

opinion yet, when convinced that I am wrong, for I am open to conviction. Then from the 28th October to the 8th November, after a fine warm, dry day, I carry them from their summer stands and set them on benches, about fifteen inches high, in the cellar under the dwelling house. I remove the board cover, but The hives are set close leave on the cloth. together on the benches; then I lay on top of the hives two one inch scantlings; then set another tier of hives on top, and same for three or four tiers, as the case requires. In this way I can put eighty hives in a ten by fifteen cellar six feet six inches deep. For ventilation I use an ordinary stove-pipe, attached with T and elbow to a stove in the parlor, and running down through the floor to the midddle of the bee-cellar, and within about fifteen inches of the cellar floor, which is only mother earth, the same material of which the walls are composed. Then I have a five inch board pipe running from near the bottom of the cellar and out to the open air, beyond the wall of the house. The floor of the dwelling-house is not air tight; consequently there are air passages there too. Now, by this means I can easily keep the temperature at from forty-five to fifty degrees, which is not, I think, a bad temperature for a bee-cellar. In wintering this way, the result was always good.

Of course, if I were living in western or southwestern Ontario, where the climate is so much milder than here, I would never winter in cellars, but on the summer stands with packing between the hive and cases made for that purpose. But with a temperature often reaching forty degrees below zero, as we have it here, give me the cellar in preference.

Yours truly, W. J. Brown.

Chard, Ont., July 25th, 1892.

#### The Aster.

THE aster has now commenced to bloom, and in low grounds where the land is wet, some localities are just a sea of flowers. We notice the bees working on it very freely, and if the weather should remain warm and favorable for a few weeks, a considerable amount of honey may be gathered from this source. Late boneset, is yet yielding quite freely. Snapdragon in some localities gives a considerable amount of honey. In one apiary which we visited recently the bees were gathering rapidly, yet our friend did not know from what source the honey came, and asked us if we could tell him, as the bees seemed to be filling up their hives very fast from some quarter. We said :- "Certainly. Do you not No rain should be allowed to get into the hive.

see on the thorax of the bee that white, floury appearance, or light-colored pollen, sticking to the bee?" He said, "yes; but where is that " Snapdragon, of course," from?" The little tuft of pollen hangs replied. on the top side of the flower, and, when the bee enters, the hair on the thorax rubs this off, and some of the particles of pollen are sure to fall down to the bottom of the flower to fertilize it. In passing from one flower to another. bees distribute the pollen in this way, and it assists more or less in preventing the inbreeding of plants. It is very interesting to watch them gathering from this source. It is just another illustration of the wise provision of nature.

THUNDER SHOWERS.

The frequent thunder showers in warm weather will assist very much in the secretion of honey in fall flowers. It is seldom we have a fall so favorable as this has been thus far; and in many localities, should the frost keep off, there will be a considerable surplus stored.

#### PREPARE FOR WINTER.

We hope our friends will be very careful and see that all their colonies have plenty of stores for winter. From now until the time when the bees are put in winter quarters, they should not be disturbed any more than is absolutely necessary in order to ascertain their condition. Plenty of stores is one of the causes of successful wintering. Year after year we have cautioned our friends, and every spring we hear the same tale-so many dead from starva-Every colony should be weighed to see that it has plenty; and if not, the necessary amount should be fed it to bring it up to the required weight. As this may be a late fall, it is well to give them from five to ten pounds extra, as the bees will consume more honey if the fall is an open one than when winter sets in early. All who intend to pack their bees out doors, should lose no time in doing it. Pack them while the ground is dry, and the weather is dry; and make no mistake in having your packing dry.

#### HOLD YOUR HONEY.

We would not advise any one to rush off his honey too rapidly while there is plenty of fruit on the market. Apples are likely to be quite scarce in the latter part of the winter and spring, and many other kinds of fruit are only half a crop, especially plums. There is consequently no danger but all the honey will find a market at fair prices before the next crep comes in.

### REPAIR YOUR HIVES AND FEED.

All hives with leaky covers should be repaired.

The dryer they are when the bees go into winter quarters, the better they will winter. Entrances should also be kept closed up, just allowing sufficient room for the bees to pass in and out. And when the bees are ripening their honey, if the entrance is almost closed during the night, it will assist the bees, providing the weather should be cold. But we hope that feed. ing will not be put off till cold weather comes on by those who have it to do. When feeding for winter, the bees should be fed enough in one or two days. Slow feedings mean loss of food, The back numbers of the JOURNAL tell of some experiments in this direction, which indicate very clearly that it is a great waste of stores to feed slowly.

THE INDUSTRIAL.

We are very pleased to note the very fine quality of honey shown this year at Toronto by the various exhibitors. Almost all the honey this year is of very fine quality, and there seems to have been little or no honey-dew up to the present.—ED.

Best Time and Mode of Wintering Bees.

EAR SIR .-- I have read a few numbers of the C.B.J., and like it exceedingly. I bought a colony of bees twelve months ago last June, with a clipped queen. When they swarmed, I put the queen into a glass tumbler until I moved the old hive away. When the bees started back, I picked up the queen, and, behold! she was dead (sun-struck. they say). Well, I thought if that was beekeeping, in conjunction with the stings I had received, I should prefer that some other person had them. They swarmed two weeks after, and got along splendidly, and I made seventy. five pounds of honey. I then put on a feeder, and fed fifteen pounds of sugar. I packed six inches of chaff all around the bottom and top. and commenced to feed them on the 25th of September. I fed the two colonies twenty five pounds in the spring, and they came out roaring. I tried the Heddon plan at swarming; I think it an excellent one. I have one swarm which has made three handred pounds of honey, and the old hive has made about fifty pounds. I then bought an old box hive full of bees which stood the winter without any protection. There were holes all around it, and they sent out a roaring swarm three days after mine that were packed in chaff. When they swarmed the second time, I drummed them out of the hive into a simplicity hive, with old combs, and set them on the second swarm, and I really don't see any difference between them

and the second swarm. The six colonies have now made seven hundred pounds of honey this season. They are hybrids; 1. would they be any better as honey-gatherers if they were Italians? They are a little cross at times, but not much. 2. Is the fall a good time to introduce queens? and which is the best way to introduce them? Wishing The Journal every success,

I am, yours, etc..

JOHN F. BETTRIDGE.

St. Mary's, Ont., Sept., 1892.

We do not think the Italians much better as honey-gatherers, though we prefer them ourselves.

We would not advise you to change your queen late in the fall, as it is liable to be attended with much difficulty, such as robbing. We prefer to change during the honey queens harvest. Queens may be successfully changed late in the fall, or any time when the weather is warm enough, by an experienced person. But after the honey harvest fails, and the bees have killed off their drones, the opening of hives and hunting up queens has a tendency to start robbing; and when once they get a taste of honey they seem to bethoroughly demoralized; and come every colony in the yard is liable to take a hand in the fight. Where you have only two colonies, you could close the one up while you manipulated other, if you did it in a way that would prevent them from being smothered. It would perhaps be better to leave your queens in the hives until spring, and then make the change.

#### Pure Honey.

SOME BROTHEBLY WORDS FOR C. F. MUTH & SON BY FATHEER LANGSTROTH.

RIENDS:—Allow me to give my reasons for believing that pure honey and C. F. Muth & Son have such a natural affinity for each other that they will never be found warring against each other.

When my patent on movable frames was extended, in 1866, I indeavored to sell brass trademarks, each having its own number, for 25 cents apiece—one to be put on every new hive made under the extended patent. Mr. Muth, who was then just beginning his apiarian career, purchased trademarks for all the hives he made for his own use and for sale, until my patent expired. He had no personal acquaintance with me; but he believed that I had rights, and was determined to respect them. If the great mass

of beekeepers, who were benefited by my hive had done the same thing I should have been well rewarded for my invention. I had therefore, ample proof, more than twenty years ago, from Mr. Muth's dealings with me when I was too ponr to defend my legal rights, that he was an honest man; and his whole course as one of the largest (if not the largest) dealers in the United States in pure honeys has established for him a reputation for fair dealing of which any business man might justly feel an honorable pride. For the twenty-five years I have known Mr. Muth I have been a frequent visitor at his house, often spending days with him, and have been familiar with all his methods of putting up his heney, which, indeed, have always been open to the honey-world, as his place of business has been a great rendezveus where all bee-keepers might be sure of a hospitable reception. Now, if there had been any attempt to adulterate the goods in which he dealt, how could it possibly have escaped the notice of the hosts of beekeepers who were welcome at all times to inspect all his processes? or how could it have failed, sooner or later, to have been exposed by some of his many employes?

The only adulterants of honey which could ever be profitably used are sugar and glucose; and, as Mr. Muth deals in honey by the hundreds of thousands of pounds, he could not possibly adulterate his honey with either on so large a scale as to make it profitable, without the kind of business he was carrying on betraying itself by the sugar and glucose barrels which he would have been obliged to handle. The idea that Mr. Muth could adulterate, and yet escape detection, is too preposterous to be entitled to the notice I have already given it.

It is true, Mr. Muth deals largely in all kinds of pure honey—good, bad, and indifferent; for there is a large demand for all these kinds, even for the darkest and poorest, which is used in the manufacture of printers' rollers—nothing else being able to compete with it for such a purpose. Tobacconists and brewers are also large consumers of pure dark honeys, while the choicest qualities are purchased for making the famous honey cakes which keep fresh for nearly six months. A single maker of these cakes buys of the Muths a carload of choice honey—some 20,000 to 24,000 pounds — every five or six weeks!

Enough has been said to show not only that Mr. Muth is not the style of man out of which adulterators are made; but, apart from all motives of honor and honesty, heis a man of too much good business sense to engage in falsifications which, sooner or later, would surely be

detected, and would end in ruin of his extensive

But may not Mr. Muth be imposed upon by those who have adulterated honeys for sale, and thus become an innocent agent for imposing their goods upon the public? Now, as the only way in which honey can be profitably adulterated is by using sugar or glucose, such fraudulent mixtures can never be imposed upon such experts as Charles F. Muth & Son. Before I lost my exquisite sense of taste and smell I could always recognize any honey with which I had once become acquainted.

For the last four years Mr. Muth has associated with himself in business his son, Augustus G., who has been with him as an assistant ever since he has dealt in honey, and who shares the same honorable instincts with his father.

Those who are personally acquainted with C. F. Muth need no indorsement of his honesty by me or any one else; but as his good name has been called in question by those who do not know him, I have felt that it was a duty which I owed to my tried friend of so many years, and to the beekeeping public, to speak as I have.

If any honey bearing the label of C. F. Muth & Son has been found to be adulterated, I believe that either some mistake has been made in the analysis, or else it has been tampered with by dishonest parties. Dr. C. C. Miller is confident that Muth's labels have been counterfeited by dealers who wished to dispose of their bogus honey on the strength of his good name.

I close as I began:—Pure honey and Charles F. Muth & Son are words and things which have always gone together, and which I hope will very soon, with some suitable device which can not be easily counterfeited, become the legal trade-mark of a firm which has done so much for the bee-keepers of this country by affording a cash market for their products, and by setting their faces as a flint against all adulterers and adulterations.

L. L. LANGSTROTH.

Dayton, O., Aug. 25, 1892.

When is Honey Ripe? What is its Specific Gravity? What Weight per Gallon

FEW years ago Mr. Turner Buswell, of Maine, submitted the following questions to prominent dealers in honey:—"How dense is honey when it is ripe? What specific gravity? What degree of the saccharometer? What weight per gallon? In sugar refineries, when the syrup reaches a certain degree of the saccharometer, it is run cff for crystallization. I want to suggest that when honey is evapor.

ated to a certain degree, it should then be filled into cans and jars for market—in other words it is ripe. What do you consider to be a fair standard weight for both producer and consumer to which honey should be brought by curing?" These questions, with the following replies thereto, were published in the American Apiculturist, page 215, 1884:

CINCINNATI, O.

All the qualities of our northern honey that have come under my observation, range from eleven and a half to twelve and a quarter lbs. to the gallon. Clover and poplar are, perhaps, heaviest on the scales, when weighed with the saccharometer. Next come, perhaps, catnip, and our fall honeys. Linden seems to be the lightest. I had southern honey weighing only eleven and a quarter lbs.; but good qualities in the south came up to twelve lbs., like ours. You should not take into consideration, then, unripened honey, when making up the average weight, as the difference depends on the amount of water it contains, an addition we don't want. I consider twelve lbs. to the gallon a fair average weight of hopey.

Allow me here to state that I consider honey ripened when it keeps; i.e., when it retains its flavor and does not expand when it granulates.

The fact of honey being capped is no proof of its being ripened, as we often extract very thin honey from capped cells. It is also a mistaken idea that the flavor is improved by allowing the cells to be capped. Honey gets its flavor from the source from which it is derived; from nothing else. It ripens in an open vessel better than in a beehive, provided the vessel stands in a warm dry place, and enough surface is exposed to the air. A barrel with the bung out would allow of no evaporation, while a barrel with the head out, and standing on end, would answer the purpose. The length of time for a thorough ripening, depends on the consistency of the honey; but the longer the time is given CHAS. F. MUTH. it, the better the quality.

NEW YORK CITY.

Weight of extracted honey ranges from eleven to twelve and a half lbs. to the gallon, standard weight for producers and consumers.

THURBER WHYLAND & Co.

NEW YORK CITY.

White clover, basswood or buckwheat honey generally weighs from ten and three quarters to eleven and a quarter lbs. to the gallon. Cuban honey weighs ten and ten and a half; if fine quality, eleven lbs. Florida orange blossoms,

and California white sage weigh eleven to twelve lbs. Have never handled any honey that weighed less than ten, or more than twelve lbsper gallon. McCaul & Hildreth.

SAN FRANCISCO, CAL.

Honey varies a great deal in weight per gallon in this section, some being a good deal heavier and thicker than other lots. We think that about twelve lbs. per gallon is a good fair average for pure honey, either candied or clear-

GEO. W. MEAD & Co.

SAN FRANCISCO, CAL.

Extracted honey varies from twelve to thirteen lbs. Should consider twelve lbs. the standard weight to which honey should be brought by curing.

STEARNS & SMITE.

KANSAS CITY, Mo.

Honey varies from ten and a half to twelve and a half lbs., the average being about eleven and three-quarter lbs.; should consider twelve pounds a fair standard. Extracted honey expands in body a little by warmth. Honey weighing less than eleven lbs. I consider unmerchantable.

JEBOME TWITCHELL.

BOSTON, MASS.

Honey varies from twelve to thirteen lbs. Should consider twelve lbs. a good average.

BLAKE & RIPLEY.

CLEVELAND, O.

Extracted honey varies from eleven to twelve lbs. We should consider twelve lbs. a good average. The thickest sugar syrup we ever weighed was eleven lbs. If honey is pure and free from sugar, it weighs twelve lbs. when fully ripe. We have personally tested this matter time and again.

A. C. Kendal.

ST. Louis, Mo.

Honey in this market averages ten and half lbs. per gallon, and varies from ten to twelve lbs. Should consider ten and a half lbs. a good standard. W. T. Anderson & Co.

The gallon mentioned in the foregoing replies is the standard gallon of the United States, which is .83292 of the imperial gallon. From these replies it will be seen that the weight per gallon varies from ten to thirteen lbs. For the convenience of producers and dealers in our country I have made out the corresponding specific gravity, and the equivalent weight for

the imperial gallon, as follows:

Weight per U.S. Gallon	Corresponding Weight per Imperial G al.	Specific Garvity Water being 1.
lbs.	lbs.	lbs.
10	12 0059	1.20059
10 <del>1</del>	12.3061	1.23061
101	12.6061	1.26061
103	12.9064	1.29064
11	13.2065	1.32065
111	13.5066	1.35066
$11\frac{1}{2}$	13.8068	1.38068
113	14.2069	1.41069
12	14.4071	1.44071
121	14.7972	1.47072
$12\frac{1}{4}$	15.0074	1,50074
13	15.6077	1.56077

The specific gravity of sugar, containing the least amount of moisture, is 1,6000, or sixteen lbs. to the imperial gallon. To reduce one hundred lbs. of such sugar to a syrup, weighing thirteen and a half lbs. to the gallon we should require to add nearly seventy-one a half lbs. of water. It will be seen that some of the samples referred to must have been nearly as dense as granulated sugar. The editor of the British Bee Journal gives 1.370 as the specific gravity of well ripened comb honey, or a little less than thirteen and three-quarter lbs. to the gallon. Anywhere between sp. gr. 1.35000 and 1.37500 is good honey. Much lighter than 1.35000 is too thin, and heavier than 1.37500 is unprofitable, except at a proportionately inoreased price.

To reduce one hundred lbs. of honey weighing fourteen and a half lbs. to the gallon to a sample weighing thirteen and a half lbs. a little over twenty-eight and a half lbs. of water mast be added, or, stating it in another way, in evaporating one hundred and twenty eight and a half pounds of sp. gr. 1.35000 to a sample of sp. gr. 1.45000, twenty-eight and a half lbs. is lost in weight. Supposing the one hundred and twenty eight lbs. were sold at eight cents per lb., without further ripening, it would bring ten dollars and twenty-eight cents. To bring the producer as much, the one hundred lbs. would require to be sold at over ten and a quarter cents per lb. Similarly in evaporating sp. qr. 1.3500 to 1.37500; an increase of over half a cent a lb. in the price is required to make up for the loss in weight.

It is generally supposed that if the honey is left with the bees till it is partly sealed it requires no further ripening. This rule cannot be depended upon. I have seen honey fit for market a few hours after it was gathered. It is well known to close observers that the bees do not invariably wait till the honey is of a certain

degree of specific gravity before they begin to seal it. It is also known that the cappings are porous, and that sealed honey may be rendered more dense by being evaporated in the hive, or in dry air in a warm room.

It is impossible to accurately test the specific gravity of honey by measuring and weighing with the appliances usually found in the hands of producers. Any one intelligent enough to become a successful beekeeper can learn to test the density of honey by means of Baume's hydrometer. Seventy five cents will pay for the instrument, and a table for changing degrees to specific gravity may be constructed 145

from the following formula == sq gr. 145-B°

in which Bo represents the degree to which the instrument sinks in the fluid.

S. CORNEIL.

In the above article Mr. Corneil has made it clear that in these times of close prices, producers can no longer afford to guess at the density of their honey. We consider the matter of so much importance that we shall strike off a large number of copies of the article in circular form, which we shall sell at a merely nominal price. Producers who know exactly the quality of the goods they are offering can send one of these circulars with their samples to their wholesale men. If they are asking a full price they can point to the fact that they are offering very heavy honey, giving its specific gravity, and referring to the circular to back them up in asking the price. Farmers know when their wheat or barley overruns the weight, and the buyers use testers, and regulate the price accordingly. There is no good reason why honey should not be bought and sold in the same way.

#### The Coming Bee.

J. EDWARD GILES.

An article on "The Desirability of Producing a Larger Race of Bees," which was published in the Apiculturist for March, suggested the possibility of securing a cross between our common races of bees and the recently discovered "giant bees" of India, in such a way as to produce a new race which should combine the desirable points of both parent races.

The particular advantage hoped for from such a cross would be to secure a race which would be able to gather honey from red clover and perhaps from other flowers which now go to

waste, so far as the honey crop is concerned, because the bees which we now have are unable to reach the honey. An experiment of the United States Fish Commission on the breeding of fish suggests to me still another possibility in the breeding of bees. According to a recently reported interview, Mr. D. E. Crawford, of the United States Fish Commission, stated: "We have little doubt now that before two more years we shall have evolved what the seaboard public has been clamoring for for so many years-the boneless shad. Of course I don't mean a shad that is actually boneless, but one that will be to all intents and purposes as boneless as the flounder of this country or the sole of England. This will have been accomplished by the cross preeding of the shad, the flounder and a peculiar edible jelly fish which is a scaple food among the seacoast natives of Japan.

Our experiments, while at first rather discouraging, now leave but little doubt of turning out successfully. At first the crossing resulted in the production of a lot of jelly fishes with an el b rate outfit of bones, which was just what we did not want; but time and study showed us our mistakes, and now we have a few hundred half-grown shad with less than 18 per cent as many bones as the ordinary sort.

A few years ago, when the belief in the unalterability of species both of animals and plants was generally accepted, the attempt to alter the bony structure of the shad would have been regarded as a hopeless undertaking; but now that so much has been accomplished, no one can say what the limit of possibility is. Professor Goodale, of Harvard University, predicts the time when fruits of all kinds will be produced without seeds. There is ground for hoping that this result may be attained in the fact that the banana regularly grows without seeds, or rather with only radimentary seeds which appear as dark specks in the fruit, and so do not interfere in the least with our enjoyment of eating the fruit; and if these rudimentary seeds are planted in the ground, they refuse to germinate. Occasionally also an orange is found without seeds, and there are many other facts which give good reason to believe that before many years we may enjoy the pleasure of eating seedless fruits of several kinds.

If we are to have boneless shad and seedless fruits, it does not seem too much to hope that we may also have a race of stingless bees. It is said that there are at least two distinct races of stingles; bees in South America; but these races have not much value as honey gatherers, and moreover they build combs with very thickwalled cells, and probably they would not be

worth cultivating as compared with the Eurepean, Asiatic, and African races. But there is apparently as good reason to hope that these races may be used to give their one good quality of stinglessness to our common races as there was that the flounder and Japanese jelly fish could be used for the improvement of the shad.

If we can cross our present races of bees with the giant bees of India and obtain a race with long proboscis and perhaps increased size (if that should prove to be of any advantage), and cross this improved race with the South American stingless bees, and by these crosses secure a race with all the good points of the Italian bee, with the additional feature of a lengthened proboscis and with the sting taken away, we shall then have a race of bees which it will be difficult to improve. It might be desirable to improve still farther by breeding out the swarming instinct, and there appears to be no reason why the swarming instinct cannot be bred out of bees as thoroughly as the sitting instinct has been bred out of certain races of domeseic fowls; but now that swarming can be so thoroughly controlled by the use of queen traps and automatic hivers, this point is not as important as it would otherwise be.

Of course no one knows as yet whether it will be possible to secure a cross between our common races and those of India or South America, and no one knew whether a cross could be secured between the shad and the flounder until the experiment was tried; but now that the experiment has succeeded, the process seems so simple that we wonder why it was not done before.

It seems to me that this matter is of sufficient importance, and the prospect of success sufficiently great, to justify the agricultural department of the United States in undertaking the cost of the experiments. The cost to the government would be trifling in comparison with the benefits which would be gained if the experiment should be successful; but very few individuals who are competent to do the work would have the means to carry out the experiments at their own expense, because a residence of a few years in South America would perhaps be necessary in order to study the habits of the stingless races in their native country; and to do this it might be necessary to domesticate the bees, if this has not already been done.

I have not seen the statistics of the last census; but according to the census of 1880 the honey crop for 1873 amounted to twenty-five millions pounds, or about half a pound for the year to each inhabitant of the United States. At an average price of ten cents per pound, the value

of the honey crop for that year would be about two and one-half million dollars. If we had a race of stingless bees, the value of the crop would soon be doubled, for many would be induced to go into the business of bee keeping who are now deterred by fear of the stings or who live in thickly settled villages, and hesitate to keep bees for fear that their neighbors will consider their pets a nuisance. Even in the oldest and most thickly settled States the number of bees could easily be doubled without exhausting the honey supply; and in suitable places, by planting special crops, there is no limit to the amount of honey which could be produced. Some may argue that an increased supply of honey would mean lower prices, and that since it is not easy to find a market for the present supply, it would not be possible to dispose of a larger quantity; but experience shows that as the supply of any article of food increases, the demand always keeps pace with the supply. In the memory of men who are not yet very old, it was formerly very difficult to find a market for tomatoes, but I remember a few years ago talking with a farmer who was then preparing a load of tomatoes for market, and he remarked that it was at that time easier to sell a waggon load of tomatoes than when he first began to raise them to sell a peck. The reason why it is difficult to sell honey is that people generally have not learned to use it. Eight ounces per year for each person in the United States seems a very small quantity, but I presume that a large percentage even of that quantity is sold through the drug houses for medicinal purposes.

I have described what I believe is "the coming bee," and it seems to me that there is nothing impossible or unreasonable in the ideas advanced. If a proper amount of enterprise is shown, I see no reason why we should have to wait many years before the ideal is realized, because breeders are now beginning to understand the science of breeding and are giving up the old haphazard methods, and, therefore progress is certain to be much more rapid than it has been in the past .- American Apiculturist.

#### Prizes at the Industrial.

ELOW we give a list of the prizes awarded at the C dustrial Fair, Toronto. We were prevented from being on the ground for more than a short time this week, and as we have so much matter for the Jour nal, we thought we would delay a fuller description of the honey exhibit till next issue.

The committee consisted of the following gentlemen: R. McKnight, F.A. Gemmell and Geo. Vair.

#### CLASS 88.

- Sec. 1. Best display of 100 lbs. of extracted granulated honey in glass.—1st, George Laing, Milton, \$10; 2nd, R.H. Smith. Bracebridge, \$6; 3rd. W. Alfords, Ottawa, \$4.
- 2. Best display of 500 lbs of liquid extracted of which not less than 250 lbs. must be in glass, quality to be considered .- 1st. -R.H. Smith. \$20; 2nd, E.L. Goold & Co., Brantford, \$15; 3rd J. B. Hall, Woodstock, \$10.
- 3. Best display of 500 lbs of comb honey, in sections—quality to be considered,—1st, J. B. Hall, \$25; E.L. Goold & Co., \$20; 3rd, George Laing, \$12.
- 4. Best display of 20 lbs. of comb honey in sections-quality to be considered that is to say, clean sections and well filled.—1st,J.B.Hall, \$10. 2nd, R.H. Smith, \$6; 3rd, Geo. Laing, \$4.
- 5. Best display of 100 lbs. of extracted liquid linden honey in glass, quality considered .- 1st, Geo. Laing, \$8; 2nd, E. L. Goold & Co., \$5; 3rd, J. B. Hall, \$3.
- 6. Best display of 100 lbs. of ex. liquid clover honey in glass, quality considered.-1st, E. L. Goold & Co., \$8; 2nd, J. B. Hall, \$5; 3rd, R. H. Smith, \$3.
- 7. Best beeswax, not less than 10 lbs. (manu facturers of comb foundation excluded).—1st, George Laing, \$6; 2nd, R. H. Smith, \$4; 3rd, W. Alfords, \$2.
- 8. Best foundation for brood chambers.—1st, E. L. Goold & Co., \$3.
- 9. Best foundation for sections.—1st, E. L. Goold & Co., \$3.
- 10. Best apiarian supplies.—1st, E. L. Goold & Co., silver medal and \$10.
- 11. Best style and assortment of glass for retailing extracted honey .-- 1st, E L. Goold & Co.. silver medal.
- 12. Best section super for top storey and system of manipulating, product to be exhibited in super as left by the bees .- 1st, J. B. Hall, \$3; 2nd, Geo. Laing, \$2; 3rd, E. L. Gcold & Co. \$1.
- 13. Best and most practical new invention for the apiarist, never shown before at this Exhibition, 1st, E. L. Goold & Co., \$8; 2nd, I. B Hall, \$5; 3rd, R.H. Smith, \$3; 4th, E.L.Goold.
- 14. Largest and best variety of domestic uses to which honey may be put, prepared by the exhibitor or a member of his household, illustrated by samples of the different things into which it enters as a component; for example. say one or two samples each in canned fruits. cakes, pastry, meats, vinegar, etc.-1st, R. H.

Smith, \$8; 2nd, Geo. Laing, \$5; 3rd, R. F. Holtermann, Brantford, \$3.

15. For the most tasty and neatly arranged exhibit of honey in the Apiarian Department, all the honey to be the production of the exhibitor -\$25 of this prize is given by the Ontario Bee-Keepers' Association.—1st, J. B. Hall, \$30: 2nd. R. H. Smith, \$20; 3rd, Geo. Laing, \$10.

16. To the exhibitor taking the largest number of 1st prizes for honey at this Exhibition, 1892.—1st, J. B. Hall, silver medal.

FOR THE CANADIAN BEE JOURNAL.

R. EDITOR,—Enclosed you will please find a letter from Mr. N. Awrey, Commissioner to the World's Exposition. which is only one of many which he is sending to the various bee-keepers of the province; and, judging from his activity in the matter, he is determined that if the honey exhibited at Chicago is a failure, it will not be through any lack of energy on his part. It behoves us therefore to render him all the assistance we possibly

If there are any suggestions which will benefit the beekeepers of Ontario and assist the commissioner, it will be regarded as a favor if they are given in pages of the Journal or otherwise. as soon as possible. I need not at present say anything further, as the letter speaks for itself. I observe that it contains much of what was published in a former article by Mr. Pringle, a copy of which, by the way, was also sent me at that time; but for lack of time I did not forward it when received.

Yours etc., F. A. GEMMILL,

Stratford, Aug 9th, 1892.

The following is the text of the communication received by Mr. Gemmill, very similar in all respects to that published by us in our issue of July 15th. We give it below, however, as it contains some features not contained in our last letter :-

Drag Sir-By an arrangement made with Prof. Saunders, the Dominion Commissioner. the responsibility of preparing an exhibit of honey falls upon me as Ontario Commissioner. This work can only be done by having the active co-operation and sympathy of all engaged in the business. The Chief of the Department of Agriculture of the World's Columbian Exposition has laid down certain rules, which must be followed by exhibitors from all parts of the world in this Department. He has classified the honey as follows :-

1st.—Clover and Basswood.

2nd .- White sage. 3rd .- Buckwheat.

4th.—All light honey, other than enumerated in classes one and two.

5th .- All dark honey, other than enumer-Exhibits of honey, proated in class 3. duced during 1892, must be placed on exhibition before April 20th, 1893. Exhibits of honey in classes 1, 2, and 4, produced during 1893, will be received between July 15th. and August 15th. of the same year, and in classes 3 and 5, between August 15th. and September 1st. 1893. The following information must accompany each exhibit :-

A. Kind of honey .-

B. Name of exhibitor.

C. Place where produced.

Character of soil in locality where pro-1). duced.

Variety of bee. E.

F. Name of plant from which honey was produced.

G Yield per colony.

H. The average price of product nearest home market.

The Chicago Commission are building cases, which, according to their regulation, have to be paid for by the exhibitor; but by an arrangement made with Prof. Saunders, he has agreed that this cost shall not fall upon the exhibitors of honey, as the Dominion Government will pay for all the cases used. In order that we may secure the space necessary for an exhibit, it is necessary for me, at a very early date, to get from you, as well as other bee-keepers, an answer as to whether you intend to exhibit. We will send the exhibit to Chicago and return it free of cost to you, as well as provide some man to care for it while in Chicago. Knowing this, I trust that I will hear from you in a very few days, of your intention to exhibit in Chicago, as I would like to see our honey industry brought prominently to the attention of the people of the whole world. Individual exhibits of comb honey will be limited to one hundred pounds, and it may be made in any manner you desire. Individual exhibits of extracted honey will be made in glass jars, and must not exceed fifty pounds; but in this case you can either have. one jar, or you can divide your exhibit to suit yourself and consult your own taste. You may have the fifty pounds in several jars if youprefer. Individual exhibits of beeswax must not exceed fifty pounds, and should be prepared in a shape to add attractiveness to the exhibit. A limited number of bees will be allowed, but I do not imagine many of the beekeepers of the Province will avail themselves of this privilege.

Trusting that I am not appealing to you in vain to assist me in making this exhibit worthy of our Province. I remain,

Yours, very truly,

N. Awrey. Ont. Com. World's Col. Exp.

F. A. GEMMILL, Esq., Stratford, Ont.

For THE CANADIAN BEE JOURNAL.

#### Feed, Feeding and Feeder.

WOULD prefer always leaving my bees plenty of honey of their own gathering for their winter supply. To those unacquainted with bee-keeping, this may seem an easy matter, provided the yield has been sufficient; not so, however, as many bie-keepers can testify. Although I use a hive holding from sixteen to eighteen frames, yet, only one-half of these are used for brood rearing and to contain their winter supply. Unfortunately in this locality the honey season closes before the queen ceases laying in the fall; the consequence is that when the cells are empty of brood, there is no honey to take its place—the only alternative, therefore, is to feed or exchange frames that have little or no honey in them for those that have. The latter plan is out of the question. It would be very unwise to disturb the brood nest in this way. I might say that by arranging the frames for the brood nest and winter supply, if you have the two outside frames with deep cells, so deep that the queen cannot reach to the bottom of them or at least the greater part, there need not be much feeding required, many of my colonies on nine frames having from twenty-five to thirty-five pounds of honey. Occasionally, however, there are some that have much less, so that in order for them to have thirty pounds each I may have to feed ten pounds to many. I regret to say there are some who leave their bees as little honey as possible in order to make a profit by feeding sugar syrup. One editor (I hope there are no more) actually advises this. He says: "Let us so manage our bees that the close of the season finds them destitute, because we have taken away the ten cent honey, and it can be replaced with three cent syrup!" I am of the opinion that such advice as that is opposed to bee-keepers' best interests, and is misleading. I do not believe that sugar syrup can be sealed in the combs for three cents per pound, nor do I believe that the average bee-keeper can get ten cents per pound for his honey, extracted of course. If all the bee-keepers of America were to adopt this plan the markets would be glutted, and the prices would be lowered. I would say, then, do not deprive your bees of honey unnecessarily; but if the frames that have been selected for the brood chamber do not contain sufficient for wintering them, of course feed sugar syrup in preference to honey. It is my belief that leaving our bees destitute of honey in order to feed sugar syrup tends to make them troublesome to our neighbors and to the grocery and confectionery stores. I know that since I have followed the plan of leaving them all they would store in the

brood chamber proper, I have had no complaints whatever from our merchants, as the bees always have ample for immediate use, and frequently sufficient for winter. I would say that I had a very pleasant surprise one year. The clover continued to yield honey in September. The queen began to slacken her laying, beginning, of course, in the outside frames, then just as fast, though slowly, did the bees fill up the cells with honey so that when the time came for weighing the colonies, I could scarcely believe the scales were correct when they registered from thirty to forty pounds of honey in eight and nine frames.

About the middle of September I therefore proceed as follows: I select the first cool day, and proceed to weigh the colonies, deducting the weignt of the hive, and one and a half pounds for each frame up to ten frames. This will, I find, equal the weight of the frames of comb, what pollen they may contain and the I mark it down in a little in which I keep a record of all the colonies. I then feed enough to make thirty pounds. Some will tell you this is far too much; well, in former years I have been satisfied with twenty-five pounds, and have lost about three per cent. from starvation-not very many; but if by feeding five pounds extra to each I can prevent this, I think it is better. Some would say: one hundred and sixty colonies five pounds each extra, is eight hundred pounds—more than four or five colonies are worth. But stop: the five pounds extra will be fully repaid by those that may possibly have done without it, as they will do better, build up faster, and your mind will be freer from anxiety regarding them. I would say that the safest plan is to weigh them again in the middle of October, after feeding has been done and broodrearing ceased. It may be that in September many colonies having young queens had considerable brood which was not allowed for, and perhaps considerable of the feed has been consumed. If your colonies should contain from twenty to twenty-five pounds then I should consider it ample.

#### TO PREPARE THE FEED.

Tak an ordinary boiler, and put in say, forty pounds of water, and, as soon as it boils, drop in eighty pounds of best granulated sugar, or double the weight of the water, and stir occasionally, and as soon as it boils remove it to cool somewhat, say, to blood heat before feeding. The better plan is to keep plenty made, so that by mixing the hot with the cold you are saved the annoyance of waiting. To convey it to the colonies to be fed, use a large can with a tap to it, place it in a wheelbarrow or small waggon; take with you an imperial quart measure or other

vessel that you know the weight of syrup it will hold, and then give the amount required to each. As regards

THE FEEDER.

If you want a cheap, home made, serviceable feeder, one that with care will last a life-time you simply make a box about two inches deep; let one side or end be double, with a bee space between, but have the inside piece about three-eights of an in. lower than the remaining sides and ends. Make it large enough to cover eight or more frames. To render it water-tight, have some melted wax, and pour from one to another until all have been waxed. You cen make a float of wood, or of cut straw or hay, or you can make partitions in it, leaving them up from the bottom but the float will answer every purpose. It is well to have covers to fit on the feeders to be used if the weather is cool. Before putting on the feeder turn back one side of the quilt or covering over the bees, and place that part of the feeder with the double side or end over this, so that the bees may have access to the feed with very little waste of heat. It is not necessary to have one feeder for each hive, but I would have at least one for every three, so if you can make your feed fast enough you should be through in about one week's time,

G. A. DEADMAN.

Brussels, Ont.

For THE CANADIAN BEE JOURNAL.

#### Wintering Bees.

OU have chosen a very important subject this time, indeed—more important than your last; for if we can succeed in wintering our bees without loss, we shall not have many empty combs to preserve for future use. Now, in order to winter with little or no loss, and have them strong early in the season, I should proceed about as follows:

As soon as the honey season is about over (which is early in September), examine each colony, and ascertain whether it will have honey enough to carry through the winter. An experienced hand can tell by simply lifting the hive. A novice should look in and make sure that each hive contains not less than twenty-five pounds of good aealed stores; if any are found with less they should have combs of sealed honey given them, some of which should be kept on hand for that purpose.

Now, as soon as the nights begin to get cool, each hive should be placed in an outside case made for that purpose, four or five inches larger on all sides than the hive, and about six inches deeper. This outside case should have an entrance

to correspond with the one in the hive when in place, and a bridge should be placed from the entrance to the hive to the outside case, so as to allow free passage for the bees in and out of the hive. When the hive and bridge are in place, remove the cover and put on a honey board having a bee space, or any other arrangement which will give the bees free passage over the tops of the frames. Over that place a coarse linen cloth. Now fill in the space around the sides and over the top with wheat chaff, cork dust, or other suitable packing. Then elevate the back of the case about four inches, which allows the rain to run off, as well as any bees that may die during the winter to tumble out or be removed with ease. Put on the cover, (which should be flat), and then leave them alone till spring. Don't even thump on the hive to see if they will hum-it disturbs them.

Bees prepared in this way will winter with an average loss of not over five per cent. This system has the advantage over cellar and clamp wintering in two particulars: First—they require no care whatever during the winter; and second—your bees are protected from the cold winds in the fall before it is time to place them in the cellar or clamp; and again, in spring, when placed on summer stands.

It also has two advantages over wintering in chaff hives: First—it enables you to use nice, light, portable hives; and last, but not least, it costs less.

A suitable outside case, all painted and complete, should not cost over seventy-five cents.

A. W. Brown.

Port Rowan, Ont.

For THE CANADIAN BEE JOURNAL.

Annual Meeting of the Ontario
Bee-Keepers' Association.

 $oldsymbol{\mathbb{T}}$  T has occurred to me that as our annal meet. ings are to a great extent local in their character, notice of the next meeting to be held in Walkerton should be published in the various local newspapers in that section of the country. as I am quite satisfied, had such a course been pursued in the past, that the meetings would have been more largely attended. Hence I have written to Mr. Couse, the Secretary of the Association, asking him to correspond with the individual members of the Executive Committee to consider the matter, and agree to advertise as suggested. I may at the same time add that I am not one of those who think that the best meetings of the Association are a thing of the past, by any means; on the contrary, I believe such are yet to come; and it only remains for us to judiciously advertise in order to secure the end.

As a matter of course, the Canadian BEE JOURNAL is not to be exempt from such patronage, as it certainly deserves it; yet at the same time. Mr. Editor, you cannot but agree that there are a large number of local bee-keepers in all sections who do not take a bee paper of any kind whatever, and therefore have no means of ascertaining when or where the Association meets except through their local paper. I trust we will have a large meeting at Walkerton, as I know for a fact that the Bruce County people are an enthusiastic and energetic class of beekeepers, having resided in the County for some years, where (by the way) I found—shall I say my silent partner in life?—who was born and lived all her life in Teeswater, some seventeen mile. from Walkerton, until about ten years ago; and as Mrs. G. has expressed her intention of attending the next meeting. I hope the bee-keepers, both directors and others, will bring their "betterhalves," and thereby brighten the meeting with their presence, and if need be, their good counsel as well. I would also suggest that our Walkerton friends favor those in attendance with some vocal and instrumental music to enliven the proceedings. This hint, I am sure, is all that is necessary to act upon. As most of all our honey exhibit will be from next year's crop, an opportunity of thoroughly discussing the best methods of shipping, etc, can be suggested, as it is not thought advisable to call any special meeting for the purpose, in view of what Mr. Awrey, the Commissioner, has already done, and is now doing. F. A. GEMMELL.

Stratford, 1st Sept., 1892.

In reference to the above letter we heartily endorse our worthy President's remarks in regard to giving our annual meetings more publicity; and we would be very sorry to think that our best meetings had been held. When we remember the fact that there are now double the number of people keeping bees that there were a few years ago, why should we for one moment think the attendance at our annual meetings would be less? We must remember that these meetings will be just what we make them. The suggestion thrown out by Mr. Gemmell of advertising the meetings in local papers, and for the "Walkerton friends to favor those in attendance with some vocal and instrumental music," we think a good one. Being personally acquainted with a number of the Bruce County apiarists, we have no hesitation whatever in saying that no pains will be spared to enable all who visit Walkerton to enjoy themselves and have a pleasant time.

FOR THE CANADIAN BEE JOURNAL.

Queen Clipping.

IS IT ADVISABLE TO CLIP THE QUEEN'S WING?

HERE is quite a difference of opinion among bee-keepers as to the advisability of clipping the queen's wing. Although I have practised clipping for some years, yet this season I sometimes (when I did not find heron the issuing of the swarm), had doubts whether it was best. In our experience, when a swarm issues the queen is found at the entrance, or near it. There is generally some one on the look out and she is caged, while the bees will usually cluster near on a bush or tree. The queen is put with or near them, if within reach, till they settle when they are hived and placed where wanted. and all is satisfactory. But they don't always act that way; sometimes they will commence to go back to the old stand instead of clustering. and, if a hive is ready to put in place of the old one, they will hive themselves and make a good colony. Some bee-keepers report that clipped queens are more likely to be superceded than if not clipped. I find that if no one attends to them at swarming time, and they go back after one or two attempts, and find, the queen there, they are apt to supersede her; but the loss of a queen at the commencement of the honey harvest is small compared with the risk of losing the swarm as well. I have not found, however, that clipped queens are disliked by the bees, or that, if properly done, it impairs them in any way. I have clipped them in all sorts of ways. Sometimes, when they are walking on the comb, it may be done, and they will scarcely know it. My wife has a way of holding them by the shoulders with the finger and thumb of the left hand, and with a sharp pair of soissors olip off part of one wing; but as my fingers are large or I am afraid of pinching them too much, my way is to pick up the queen by the wings with the right hand, catch her by the feet with the left, and then clip off lengthwise part of one wing and then let her go. With a little practice it does not take more than a minute of time, and there is less risk of hurting them than by any other way I know of. Lately I had all doubte settled about the advisability of clipping by a swarm with a young queen not clipped going to parts unknown without first clustering, and another swarm that clustered on a very high branch of a tree that was very difficult to get at; and this coming after so being used to clipped queens, when one could hive a dozen or more swarms a day without risk or discomfort, made me resolve that I would clip all queens in future without hesitation as soon as they proved them-R. H. SMITH. selves good layers.

acr The Canadian Bee Journal.

#### A Letter from Chatham,

R. EDITOR,—I received a card some time ago, asking me for something for the C. B. J. I had fully intended to answer it immediately on receipt of the same; but a rush of business has prevented me from taking an earlier opportunity.

I see a marked improvement in the C. B. J., of late, and am so well pleased to find many new names attached to really good articles that I feel disposed to say to the authors—" Let us have more of them."

There are many bee-keepers who are experts and acquainted with many short cuts that we do not always find in our Bee Journals, but whom we seldom see in print. Now I have been talking as if I had been an old writer for these Journals myself, although that is not the case, and this is almost my first letter. I will therefore give you a short report of the honey crop in this section, which is good.

The honey flow about here did not amount to anything of value, except during the few days of fruit bloom, or until about the 1st July. Clover then commenced to yield abundantly; basewood came in about the 10th, and by the 20th a good crop of honey of the best quality was secured Very little was gathered after that until buckw wheat began to yield its nectar. Some of our beekeepers report nearly as much from this source as from the basswood and clover crops. At the present date (September 12), goldenrod and other fall flowers are furnishing great quantities of nectar; and if the weather continues at all fa. vorable, the probability is that our bees will go into winter quarters with hives full of honey and plenty of young bees, which is one of the best conditions for safe wintering.

For a few seasons past, I have been putting comb honey up in sections holding a quarter pound or less—or, rather in sections two inches square. As these find a ready sale at our fall fairs, I am taking a quantity of them to the Western Fair at London. The operation of filling them is diffarent from that usually practised; and at some future time when I have more leisure than I have just now, I will fully explain the modus operandi, should you desire it. I have mentioned my device to Mr. Awrey, our Commissioner to the World's Fair, and he seems very much pleased with the idea of sending a number of the packages to Chicago.

W.A. CHRYSLER.

Chatham, Ont., Sep. 12th, 1892.

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#### EDITORIAL.

Mr. A. McLean, of Thurso, Que., writes us:-"Bees in this locality have not done well this summer. first part of the season was cold and windy. July and August have been very wet, so wet that bees could not work. My colonies are fairly strong; but did not swarm until July 20th. Since that time we have had considerable rain, too much to allow them to gather honey. Mine are the native black bees, and they did fairly well last year. I expect it will be necessary to feed many of the new swarms this fall."

MR. D. ANGUISH, of Southwold, writes us: -" Bees have done very well with me this season, averaging eighty pounds per colony, comb and extracted. I have about two thousand pounds of choice comb honey, and intend to make a display at the London exhibition."

Readers of the C.B.J. should remem-

O.B.K.A., it will pay for the BEE JOURNAL for one year and their membership in the O.B.K.A. This is an exceptional offer, and every bee-keeper should avail himself of the opportunity.

Mr. A. Dalmage, of Glenora, writes us :-- "I have nine colonies of bees, and have extracted one thousand two hundred pounds of honey. If the weather continues favorable for a few days longer I will easily take a few hundred pounds more."

We notice in our communication from friend J. E. Frith, of Princeton, that a hurricane has been doing considerable damage in his neighborhood, it having destroyed his barn and mixed up his bees considerably. In referring to it he says:-"I never saw such a However, as soon as friend Frith gets everything arranged, the readers of the C.B.J. may expect an interesting article from his quill.

We are pleased to note that Mrs. Jennie Atchley, so favorably known among beekeepers, has taken charge of a department in the A.B.J., "In Sunny Southland." There is no doubt but its many readers will profit by her writings. Friend Yorke is leaving no stone unturned to give the readers of the A.B.J. good value for their dollar.

We give in another column a portion of the prize list awarded at the "Industrial." In a future issue we expect to have a full description. The weather was not so favorable as might have been expected. A large number, however, in the surrounding country took advantage of the reduced fares and thereby increased the gate receipts considerably.

Has the thought not struck some of our many readers in whose localities there are no local bee associations that it would be to their interest to form themselves into an association and affiliate with the O.B.K.A. Remember, in union there is strength.

Friend Deadman, of Brussels, has kindly forwarded us a large photo ber that by forwarding \$1 to Wm. showing a portion of his extensive Couse, Streetsville, secretary of the apiary. Readers of the C.B.J. may expect in some future issue to get a glimpse of friend Deadman, his family, and the home of his industrious workers.

We return thanks to the numerous well wishers of the C.B.J. for their kindness in forwarding us manuscript for its columns. We are pleased at all times to have articles of interest forwarded to us for publication. Come along, friends, let us hear from some more of you.

We are pleased to be able to announce to the beekeepers of Australia and adjacent islands, that Mr. H. L. Jones, Goodna, Queensland, has been appointed agent for us, and will receive subscriptions from those who may wish to subscribe, at the low rate of five shillings per annum, post free.

Mr. A. H. Bennett, Barrie, informs us that he has disposed of his entire apiary to Mr. Hughes.

And so C. Dadant thinks the fecundity of the queen commences generally to diminish only at the end of the third year, and sometimes not till the fourth. Do you think so, doctor?

Dr. Miller has secured a queen of those big Florida bees, and thinks, if she lives through the winter, her bees may have the red clover all to themselves next year. He seems to rest assured that he will have a crop from one colony at any rate the coming season.

The Punic bee fad is pretty well exploded.

We wonder if there is any truth in the report that the World's Fair is to be postponed another year owing to the cholera epidemic?

You ask, "Does advertising pay?" Listen to what an advertiser who placed an advertisement in the C.B.J. for one insertion, says:—"I have sold all my queens by that advertisement."

We very much regret that we will find it necessary to publish the name of a certain supply dealer in Western Ontario who has received queens from some of our friends across the line, and has also had work done at this office, and refuses to pay for the same. We have had a number of inquiries as to his financial standing. We have taken the trouble of writing him no less than three or four times, but have received no satisfactory reply. We give this hint, and, unless accounts are straightened up, it will be necessary to warn our numerous subscribers against trusting him with any of their cash.

The beekeepers of Australia are waking to the fact that it is high time for them to put their foot down on adulterations. We think their government might take a chapter from some of the Ontario statutes.

A subscriber writes us asking for the address of the Rural Californian, which we give as follows:—C. M. Heintz, Room 42, Lanfranco Building, Los Angelos, Cal.

### TO OUR AGENTS.

E address these few lines to our agents to thank there of interest they have taken in the C.B.J. during the past eight months, and for the energy which a few have already displayed in securing subscribers for us. Now that the fall fair season is here, we would like to secure a representative at each fair, one who will take subscriptions for the C. B. J., and to whom we will pay a liberal commission. We trust to receive a hearty response from all who attend these fairs. We will send sample copies free to any address our agents may send us. will save them the trouble of carrying a large bundle of Journals with them on the train, etc. All who wish to represent the C. B. J. at their own or neighboring fairs should communicate with us at once, giving dates, post office addresses, and, where possible, names of the secretaries of the fairs they may attend. Experience is not necessary: any bright young man or woman can make a nice little sum of money by representing us at their local fairs. wish to secure at least 1500 new subscribers this fall; and to do this we ask the co-operation of all well wishers.

#### ONTARIO Bee-Keepers' Association.

Organized Sept. 17th, 1880.

Incorporated March 1586

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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

Fear. 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 the Association.

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.

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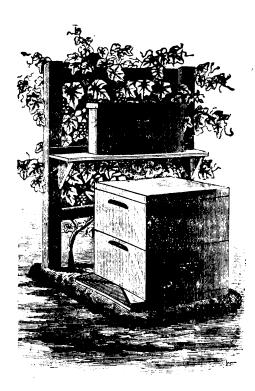
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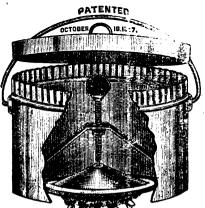
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### m. e. hastings.

Patentee and sole Manufacturer, New York Mills Oneida Co., N.Y.