

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. 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 filming, are checked below.

L'Institut a microfilmé 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 filmage sont indiqués ci-dessous.

Coloured covers/
Couverture de couleur

Coloured pages/
Pages de couleur

Covers damaged/
Couverture endommagée

Pages damaged/
Pages endommagées

Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée

Pages restored and/or laminated/
Pages restaurées et/ou pelliculées

Cover title missing/
Le titre de couverture manque

Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées

Coloured maps/
Cartes géographiques en couleur

Pages detached/
Pages détachées

Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)

Showthrough/
Transparence

Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur

Quality of print varies/
Qualité inégale de l'impression

Bound with other material/
Relié avec d'autres documents

Continuous pagination/
Pagination continue

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

Includes index(es)/
Comprend un (des) index

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
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 filmées.

Title on header taken from:/
Le titre de l'en-tête provient:

Title page of issue/
Page de titre de la livraison

Caption of issue/
Titre de départ de la livraison

Masthead/
Générique (périodiques) de la livraison

Additional comments:/
Commentaires supplémentaires:

Pagination is as follows: p. 137 to 158.

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X



THE



CANADIAN

Honey Producer.

Its Reading Columns for the advancement of Honey Producers exclusively.

Vol. I.

BRANTFORD. SEPTEMBER, 1887.

No. 7.

The Canadian Honey Producer,

PUBLISHED BY
E. L. GOOLD & Co.,
BRANTFORD, - - - - ONTARIO.

Published Monthly, 40 cents per year.

TO CORRESPONDENTS.

The Subscription price of the Canadian Honey Producer is 40 cents a year. 3 subscriptions at one time, \$1.00 to one or more addresses. For further particulars see our Premium List.

Remittances for fractions of a dollar may be made in Stamps, Canadian or American. The receipt for money sent will be given with the address in the next issue of the paper.

When writing to this Office on business, correspondents must not write anything for publication on the same paper, as this causes much confusion and unnecessary trouble. Only one side of the paper should be written upon.

If we fail to credit with a subscription kindly notify us of the fact. There must be a mistake somewhere if any number does not reach you whilst a subscriber; by informing us we will replace the number unless the edition is exhausted.

Always give both name and Post Office when referring to any change in subscription.

TO CONTRIBUTORS.

We will always be pleased to forward sample copies to any.

We will thankfully receive for publication items of interest to Bee-Keepers, and we would like to have every issue of the paper contain at least one good article bearing directly upon the management of the Apiary for the coming month.

The Canadian Honey Producer one year with the following Books:

Cook's Manual of the Apiary, cloth, \$1.25 \$1.50
A. B. C. in Bee Culture, by A. I. Root, cloth, \$1.25, 1.40

A. B. C. in Bee Culture, A. I. Root, paper, \$1.00, 1.25
Quimby's New Bee-Keeping, cloth, \$1.50 1.75
Bees and Honey, by T. G. Newman, cloth, 75 cents, 1.00
Queen Rearing, by Henry Alley, cloth, \$1 1.00

CLUBBING RATES.

The Canadian Honey Producer
And Gleanings, semi-monthly, \$1.20
" American Bee Journal, weekly, .. 1.20
" American Apiculturist, monthly, .. 1.10
" Bee-Keepers' Magazine, " .. 60
" Rays of Light, " .. 85
" British Bee Journal, weekly, .. 2.90
" Poulterers' Profit,65

PREMIUMS.

Single subscriptions are 40 cents per year.—
Three subscriptions for one year at one time, \$1.00.
In addition to the above, any one sending us 15 subscribers will receive one of Alley's Queen Traps; and to any one sending 25 subscribers we will send one of our No. 1 Smokers. Postage or express must be paid by the recipient of premium. All subscriptions must be for one year. Any one subscribing for two years will count as two subscribers. The largest number of subscriptions sent in by any one up to 1st May, '87, will receive in addition one complete Blackburne hive for comb and extracted honey. The number of subscriptions must exceed 35.

ADVERTISING RATES.

10 cents per line each insertion, 5 cts. per line each following insertion.

Space will be measured by a scale of solid nonpareil of which 12 lines measure an inch and there are about 9 words to the line.

Transient advertisements must be paid for in advance.

They will be inserted until forbid and charged accordingly.

STANDING ADVERTISEMENTS.

	3 months.	6 months.	12 months.
1 in.	\$ 2.50	\$ 3.50	\$ 6.00
2 in.	3.25	5.50	9.00
3 in.	4.75	7.50	12.00
6 in.	8.00	12.00	18.00
7 in.	9.50	13.75	21.00
8 in.	10.50	15.75	24.00

E. SIMS.

J. J. SIMS.

E. SIMS & SON, Bankers, Conveyancers and Real Estate Agents.

Money Loaners on Real Estate at Lowest Current Rates.

MORTGAGES BOUGHT AND SOLD.

MONEYS RECEIVED ON DEPOSIT.

Lists of Farms and City Properties for Sale sent Free on application.

Real Estate sold on Lowest Commission.

GEORGE STREET, BRANTFORD, ONT.

Champion's Buggy Tops. PATENT PROPS.

This prop fills a long felt want. It is a device by which either the front or back joints of top may be separately worked from the inside. The driver can throw back the front of top, or lower the back and replace either from his seat—all done from the inside. Any one in the habit of getting in or out of buggies will certainly appreciate this improvement.

My Tops have met with universal satisfaction by the carriage trade, and have taken first prizes and diplomas wherever exhibited.

TOPS.

No. 1—Is a first-class rubber Top with superior quality of heavy brown back rubber, back and side curtains to match. Wrought rails and joints. Top prop nuts and rivets in either black, silver or ovoid. Black T. P. nuts sent unless otherwise ordered.—Price \$12.50. With Patent top props and handles extra \$2.00.

No. 2—Is the same as No. 1, with best steel tubular bow sockets. Price \$13.50. With Patent top props and handles extra \$2.00.

No. 3—Is a first-class rubber Top, lined with blue brown or green cloth, steel tubular bow sockets, second growth ash bows, wrought rails and joints. Is a very neat and durable top and will answer all purposes where a rubber top is required

and is the very best top in the market for the money. Price \$16.00. With Patent top props and handles extra \$2.00.

No. 4—Is the same as No. 3 with solid wrought rails. Back valance and lined back curtain. Price \$17.00. With Patent top props and handles, extra \$2.00.

No. 5—Is a superior heavy rubber Top with back valance and lined throughout Solid wrought rails and joints. Hand sewed finish. The best rubber top that can be made. Price \$22.00. With Patent top props and handles, extra \$2.00.

No. 6—Is the same as No. 5 with leather side quarters and back stays, and has the appearance of a first-class leather Top. Price \$28.00. With Patent top props and handles, extra \$2.00.

No. 7—Is an all leather top, of the very best quality and workmanship. Price \$40.00. With Patent top props and handles, extra \$2.00.

TRIMMINGS.

Leather Cushion, Drop Back & Fall plain \$10.00

“ “ “ sewed or pleated 12.00

Corduroy “ “ plain 8.00

Velveteen “ “ plain 8.50

HOW TO ORDER TOPS—Send width of seat from out to out on the top of seat.

CHARLES CHAMPION,

Hardware and Carriage Goods, Brantford, Ont.

Patented in Canada and United States,

THE CANADIAN HONEY PRODUCER.

Vol. 1. September, 1887. No. 7

The Toronto Industrial and Dominion Exhibition.

We are pleased to learn that the above exhibition promises to be far in advance of anything ever held in Canada before. Several buildings have been enlarged, but in spite of this every building is crowded to its utmost capacity, and many intending exhibitors had to be refused space. The Apiarian Hall will be in partnership with the Horticultural Hall. Much credit is due to the directors for the hearty interest they take in this department; every effort is made to satisfy every exhibitor and judges are appointed for this department who understand their duties. As proof of this we believe without exception, exhibitors were satisfied with awards last year. Messrs. McKnight and Emigh have successfully and ably assisted the association in carrying out the arrangements. There appears to us to be one deficiency in the prize list. For quality of honey, bee-keepers having had over 20 colonies during the season are not permitted to compete. It appears rather misleading that those having more colonies should not be permitted to compete. They have no advantage and such a prize might prove very misleading and prove an actual injustice to those excluded.

Amongst the exhibitors this year are Messrs. A. G. Willows, S. P. Hodgins, Martin Emigh, D. Chalmers, W. Thompson, J. J. Fyle, E. L. Gould & Co., the D. A. Jones Co., Jacob Spence, J. Smith, R. F. Holtermann and Ira Orvis.

BEES AND FRUIT.

BY E. ROBINSON, LONDON SOUTH.

As I am a beekeeper and an amateur fruit grower, I send you a few facts that may show the great importance of these industrious wonderful little insects.

First, the perfect fertilization of our fruits without delay is all important either by the

wind or by some insect. Now the wind may fail, or act against the desired end, as Mr. C. Darwin shows, in Origin of Species.—‘Some holly trees bear only male flowers which have four stamens producing a rather small quantity of pollen and a rudimentary pistil; other holly trees bear only female flowers, these have a full sized pistil, and four stamens with shrivelled anthers, in which not a grain of pollen can be detected. Having found a female tree, exactly sixty yards from a male tree I put the stamens of twenty flowers, taken from different branches, under the microscope and in all, without exception, there were a few pollen grains, and in some a profusion. As the wind had set for several days from the female to the male tree, the pollen could not thus have been carried.

The weather had been cold and boisterous and therefore not favorable to bees, nevertheless every female flower which I examined had been effectually fertilized by the bees, which had flown from flower to flower in search of nectar”(or pollen). So you see in the case of a reverse wind the bees may give us a better crop of fruit than we would get without them. The above teaches us that our perfect blossom strawberries (if not wanted) need not be planted every fourth or sixth row with our pistillate varieties, for if the bee can fertilise the holly at a distance of sixty yards why not our strawberries at the same distance?

Secondly, the bee surpasses all other insects in the amount of pollen used and in her manner of gathering it. Pollen she must have, and get it she will, if she falls in front of her hive with her load, perished with the cold; for it is one of the principal foods of the larva bee; the brood will fail to mature, starve and die in 24 hours without it (or its substitute) and when once breeding starts in the early spring, the old bees will go out in the cold, we weather to get it, thousands losing their lives by cold and never reach home, but still having fertilised thousands of blossoms in their chivalrous attempt to sustain the life of their young. (This is known to beekeepers as spring dwindling). The quantity of pollen used in a good colony is about 30 pounds I believe, as a queen will lay from 70,000 to 100,000 eggs in a season, and it is the principal food of the bee for the first 21 days of existence.

Then the mode of gathering the pollen is all important and interesting. The bee is covered with very fine hairs and when she alights on a flower the pollen adheres to the hairs; the bee then takes wing and hovers just above and close to the flower, while she takes the pollen of her body with her fore legs, and packs it on the thighs of her hind legs in little pellets, all the time scattering the pollen over the flower by the rapid motion of her wings. If she cannot pack the pollen (some kinds will not pack) she rolls herself in it. I have seen them so completely covered that they could scarcely find the entrance to their hive.

Thirdly, the complete fertilization of each plant by its own species.—A bee always collects her load from the same species of blossom whether it is strawberry, raspberry, apple, dandelion or clover, and if the season of one kind is drawing to a close she will come home with half a load of one kind rather than a full load of mixed pollen from many flowers. If a cell in the comb of pollen be cut open in a longitudinal direction it will be found packed in layers of different colors, and a beekeeper can tell what his bees are working on by the color of pollen they are bringing home. Thousands may be seen coming home in the season, some with light yellow, some with orange yellow, some with green and some with white pollen; but always with one color to each bee, thereby insuring a rapid and sure fertilization of a strawberry by a strawberry, a raspberry by a raspberry, &c. I think this of great importance to our strawberry growers, when we consider that our most prolific varieties are pistillate. I notice that Mr. Dempster grows the Crescent and that he keeps bees, perhaps they have something to do with his large crop of 6,000 quarts per acre.

A few more facts from that great naturalist, Charles Darwin, page 37, Origin of Species. 20 heads of Dutch Clover fertilized by the bees yielded 2,290 seeds, 20 heads protected from them produced not one. Again, 100 heads of Red Clover produced 2,700 seeds, same protected from bees produced not a single seed! Now, a good colony will number 50,000 bees and will consume in a year about 80 pounds, and give to the beekeeper about 100 pounds of ripe honey. And as ripe honey is at least double the weight of honey fresh and thin from the flowers, the bees must bring

home at least 365 pounds; add to this 30 pounds of pollen and 10 pounds of water and we have the total of 400 pounds; and as the bee carries about $\frac{1}{4}$ grain troy each trip, we have the large number of 9,216,000 journeys made by a good colony of bees. How many flowers must they visit and fertilise for the benefit of fruit growers!

Last but not least, *What kind of bees are best for the fruit grower?* It is the Italian, because they are more energetic, the queens are more prolific, and consequently they need more pollen and food; and they will venture out to get it when the common black bee, would not show itself. And as it is in the spring that the fruit grower needs the assistance of the bee, the Italian is the one, for it will be out sunshine or shower. Prof. Cook of Lansing, Mich., says: On May 7th, 1887, I walked less than half a mile and counted 65 Italian bees gathering pollen from dandelions, and only two black bees."

Western Fair Industrial and Art Exhibition.

The Western Fair Industrial and Art Exhibition will be held in London, Ont., Sept. 19, 20, 21, 22, and 23, 1887.

BEES, HONEY, AND APIARY SUPPLIES.

Exhibitors showing honey not the product of their own apiary, in competition for prizes, shall forfeit any prizes awarded, and be barred from exhibiting for two years thereafter.

Queens and colonies cannot compete for more than one premium.

Sec.		\$	c.
1.	Display comb Honey in most marketable shape, product of one apiary in 1887.....	5	00
	2d do	3	00
	3d do	2	00
2.	Display extracted honey in most marketable shape, product of one apiary in 1887.....	5	00
	2d do	3	00
	3d do	2	00
3.	Display of comb Honey in most marketable shape, by a lady, product of her own apiary in 1887	5	00
	2d do	3	00
	3d do	2	00

Sec.		\$ c.
4.	Display of extracted Honey in most marketable shape, by a lady, product of her own apiary	5 00
	2d do	3 00
	3d do	2 00
5.	Comb Honey, not less than 20 lbs., quality to govern	3 00
	2d do	2 00
	3d do	1 00
6	Extracted Honey, not less than 20 lbs., in glass, quality to govern	3 00
	2d do	2 00
	3d do	1 00
7.	Best granulated Honey, in glass, not less than 10 lbs.	3 00
	2d do	2 00
	3d do	1 00
8.	Crate comb Honey, not less than 20 lbs., in best shape for shipping and retailing	3 00
	2d do	2 00
	3d do	1 00
9.	Colony of Bees, properly named, must be the progeny of one queen, and exhibited in such shape as to be readily seen on two sides. Purity of race, docility, size of bees and numerical strength to be considered	3 00
	2d do	2 00
	3d do	1 00
10.	Display of Queens to be put up in such shape as to be readily seen by visitors (blacks not to compete)	3 00
	2d do	2 00
	3d do	1 00
11.	Best marked queen bee, bred in Canada	3 00
	2d do	2 00
	3d do	1 00
12.	Greatest variety in queens, put up in same shape as for display of queens	Diploma
13.	Bee Hive for all purposes in the apiary	Diploma
14.	Best Bee Hive for extracted honey	Diploma
15.	Best Bee Hive for comb honey	Diploma
16.	Honey extractor	Diploma
17.	Wax extractor	Diploma
18.	Foundation Mill	Diploma
19.	Foundation Press	Diploma

Sec.		\$ c.
20.	Beeswax not less than 10 lbs.	3 00
	2d do	2 00
	3d do	1 00
21.	Comb foundation for surplus honey, not less than 10 lbs.	3 00
	2d do	2 00
	3d do	1 00
22.	Comb foundation for brood chambers, not less than 10 lbs.	3 00
	2d do	2 00
	3d do	1 00
23.	Comb foundation machine, making best foundation for brood chamber on the ground	Diploma and \$2
24.	Best one piece section for honey	Diploma
25	Best dovetailed section for honey	Diploma
26.	Package for retailing extracted honey labelled	Diploma
27.	Bee Smoker	Diploma
28.	Bee Feeder	Diploma
29.	Display of apiarian supplies, exhibitor's manufacture	Diploma and \$2
30.	Largest and best display of honey bearing plants, properly named and labelled	Diploma
31.	Queen Cage, such as is admitted to the mails by postal laws	Diploma
32.	Honey Vinegar, not less than one gallon	3 00
	2d do	2 00
	3d do	1 00
33.	Extras	

For particulars address Wm. McBroom, Sec'y., London, Ont.

PRICES OF HONEY.

We have lately ascertained the prices of honey and quotations from a very large wholesale house in England who give prices of honey at Liverpool wharves as follows :

- Chilian, 35s. per cwt. (112 lbs.) about 7 1/2 c.
- Californian, 20s. 6d. " " 4 1/2 c.
- Jamacian, 30s. " " 6c.

We also learn that quite a large quantity of Californian comb honey has been sold in some of our Canadian cities. The honey was purchased for eight cents per lb. in Canada. The duty is three cents per lb., so that the honey had to be laid down on the American side, but up to Detroit

for five cents per pound. What the freight rate for comb honey from California to Detroit would be we do not know but after paying freight, expense of sale, price of sections, which were very rudely made, and comb foundation, there would be very little left. The honey had a first class appearance and equal in this respect to any honey we have ever seen. When cut it proved to be of a good consistency, it was slightly amber colored, the flavor was markedly minty however and for table use unless a special taste for it was cultivated it would meet with very general disfavor. For flavoring and sweetening in cake it would probably be preferable to mild honey.

Chilian honey has been laid down in Toronto at I think 6c. per lb. It has a strong flavor.

A REPORT.

I commenced operations this spring by not handling my bees. I did not raise up quilts that were propolised but just left them down with a thick sawdust cushion, and had hives packed damped in sawdust; packing those that were strong on first of June. I put supers on. I use no metal excluders. The queen will lay in supers, sometimes when extracting I would replace those frames that had brood in them with empty combs or foundation. I use all workers combs and give brood to the strongest of the weak colonies that I made. I worked to get my bees in shape for linden flow, with us the clover was no good, and as the prospects were for short crops I did not let bees swarm, and as prevention, I ventilated; but if they did swarm I hived swarm on old stand and gave what was left to some weak colonies. This plan has given me good results.

I intend taking extracted honey next year. I had 61 swarms this spring, and I got 4000 lbs. of honey.—J. H. GRIFFITH, Kingsmill, Ont.

FOREIGN.

In the *Bienen Zeitung* for June we find that in Brazil, South America, whilst bee-keeping

is conducted in a very rudimentary manner it pays very well. In some parts a colony has generally the honey comb cut from it two or three times a year giving on an average 45 lbs. of honey each cutting. One colony increases, counting swarms from swarms to about 14 in a season. The Italian and Black bee is used. It is never necessary to feed bees as they can at all times of the year gather a sufficient quantity for present requirement.

Bees have several enemies chiefly birds and moths. The honey as produced at present is sold at a very low figure however, with the continuous flow throughout the year bee-keeping pays very well. The article closes with giving several instances where foreigners had risen from poverty to comparative wealth.

May in Germany appears to have been wet and stormy and the outlook for strong colonies to gather honey but poor.

The Alsassisch Lothruigische-Bienen Zuchter in an item from India states apis dorsata build one large comb under and attached to a limb of a tree or projecting rock.

The same paper speaks of burying bees during winter, one giving a 50 years, experience, another states the 10th of November, 1886, he with many doubts and fears buried six colonies. On the 4th, of April following the bees at once attempted to fly out being very lively.

He weighed the colonies before burying and after unearthing them. No. 3 consumed 12-5lbs., No. 7, 14-5lbs., No. 9, 22-5lbs., No. 10, 1 2-5lbs., No. 12, 1 2-5lbs., No. 16, 1 2-5lbs. There was very little mould no more than if they had been wintered in the open air. In speaking of the first cleansing flight he adds, there was but little excrement. Five colonies had very few dead bees, scarcely thirty per colony. Only No 9, which was the weakest, in the fall had about a handful of dead bees and this colony had consumed the most. This method commands the attention of bee-keepers, scarcely 2 lbs. per colony for 5 months, and no loss in population; the rest and quiet of the bees does not cause any loss in strength.

The government reports of crops show that Alsike clover has suffered less from the dry season than red clover.

For the Canadian Honey Producer.

APIARY CONVENIENCES.

G. W. DEMAREE.

A few days ago some friends visited my apiary, and found me "in the arbor reading the papers." The temperature was 102 in the shade, and the Sun was fearfully hot. "Here you are," exclaimed one of the party, "in this cool retreat situated at the south end of the apiary so that you can look down through the rows of hives and see where any swarm might start out from, and see nearly everything that goes on in the apiary, and have the sun's rays at your back so as not to interfere with the optic nerves, nothing could be nicer." He was speaking of a little arbor that cost about two hours' work several years ago, and perhaps a half-hour's work each spring to give it a new dressing on its top. This little "arbor" was made by driving some stakes into the ground by the side of a plank fence. It is six and a half feet high and has a lattice top to support some green brush. There is a dense shade tree on the south west of it, which casts its shadow over the arbor in the hottest part of the day. This little cosy refuge from the broiling sun is a real and substantial "joy" to this "deponent." I neglected to mention in its proper place, that the arbor is provided with a seat extending its full length on which a half-dozen persons may sit, or the weary apiarist stretch himself to his heart's content, if he can find time to do so. This individual finds the time this hot weather anyway. A short distance from the arbor stands a little closet about 3 feet square, perched on legs. It has a good water proof roof and a hinged door that can be locked if it is thought necessary. In this little closet is kept a few apiary tools, two or three "bee hats" for visitors, and for this "fusser with bees" occasionally. There is the smoker, some matches and smoker fuel, and too many things necessary in the apiary, to be mentioned here. This little closet saves me much walking to and from the shop. Close to this closet stands my "dark closet," a device of my own invention so far as I know. The "dark closet" is supported by legs 18 inches from the ground, it is three feet in depth, and may be made four or five feet in length, with 3 feet ceiling, and a good roof over it. It must be made not only "bee tight"

but "dark" if every inch of the inside has to be papered. The door must be in the centre of the longest way of the little building, and should be 2 feet square, hinged and made to fit nicely. There is a square hole cut in the centre of the door near its top 6 x 8 inches, and over this hole my (destined to be famous) "bee escape" is screwed fast to the door. It is a device so arranged that the bees can leave the closet through it, with the greatest ease and rapidity, but do not know how to return. The device is made of wood and glass, but is so *devious in its ways* that it cannot be described intelligibly on paper, without costly drawings, or I would describe it right here. All my inventions have been, and will be given to the bee fraternity. This dark closet with "bee escape" is a great help in apiary work. I can take off a half-dozen cases of sections, or cases of store combs, full of bees and honey and set them on end in this dark closet, close the door, and go about my business. The bees will pass out through the "escape" but cannot return to carry away the honey. I have put this little device to the severest test and it works perfectly. I can start robbing in the closet, rampant robbing in time of a dearth of honey plants, and after the bees are making things ring with their frantic roar over the stolen sweets, from the closet I can close the door, and the little "bee escape" cuts off the robbers from the interior of the closet as fast as they pass out, and leaves the coveted sweets safe within. To stand by and see the desperation of the struggling robbers after they have unloaded at home and returned, one would suppose that they would take no denial, but the little "bee escape" "holds the fort."

Just a little distance from the closet, situated where there is no shade to interfere, stands the solar wax apparatus, this solar wax separator is indispensable in my apiary. Before I invented the cylinder-form wax rendering pan, a large proportion of the wax waste of my apiary, went to loss. Now every scrap of comb, scrapings of frames, &c., goes directly into the solar wax melting pan. The solar apparatus can be made to serve a number of useful purposes besides purifying wax. It will reduce candied honey to the liquid state and leave it with all the smoothness and flavor of new honey, or more nearly so than by any

other method of heating it. Vessels of the granulated honey are set in the melting pan under the glass heater and left there till the honey is thoroughly reduced. Brood and store combs that become infested with worms and moth's eggs, can be heated in the solar apparatus till the worms and eggs are entirely destroyed without materially injuring the usefulness of the combs; of course it requires care when doing this.

Of the smaller conveniences to be seen in use, is a revolving comb holder, this is a light stool with four short legs for its support, and on this is adjusted by means of an iron bolt and screw top a comb holder, that revolves readily. This is used when caging queen, &c. Then there are several cases for carrying combs, frames filled with foundation, &c. And one wire cloth ventilated case for moving combs of brood and bees about the apiary when building up weak colonies, making nuclei, &c.

And I must mention the charming little implement used to fasten foundation starters in sections. This is an improvement of mine on the wriggling half failure Parker's fastener, with my improvement it does its work rapidly and completely. I could not continue this "bee talk" further here, for want of reasonable space, and I wish to say before closing, that I have not prattled away in this style for the purpose of telling how my apiary is fitted up, to gratify my "vanity" but rather to assist any inquirer after the latest improvements, as labor saving appliances.

A few weeks ago a specialist in bee culture from a distance, visited me, and after being showed through my apiary, remarked, "this is an educational apiary." I said, "yes, but it is practical education and practice is what is needed."

Christianburg, Ky., U. S. A.

USES OF HONEY.

Recognizing the importance of securing additional outlets for honey at home, would it not be well to make a greater effort at exhibitions to show all the practical uses to which honey can be put in preparing foods. A display of this kind large enough to attract notice would not only draw the attention of various manufacturers to use honey in this way but it would attract the general public

and educate them to ask for foods so prepared and use them in their homes more generally. Whilst some foods require in their preparation only the best and mildest of honey others will do better or fully as well with the darker and more strongly flavored honeys, those are liable in retailing to block the road for the better honey, and any means devised to secure a demand for this inferior article will be a boon to bee-keepers generally.

Probably little that is new can be written upon this subject, but much that is not known to the general public and even much that is not generally known amongst bee-keepers. Honey can be used to advantage as a food owing to the nutriment which it contains at 15c. per lb. That it is a food without any refuse matter is amply proven from the fact that the bee during the larvæ condition feeds upon it without any excrement. Every particle of honey then can be assimilated by the system. Further it requires little or no digestion to prepare it for such assimilation as secretions from the bee which are added in gathering, storing and ripening have already prepared it for assimilation. These secretions and medical properties which it inherits varying according to the sources from which it comes make it very desirable as a wholesome, nutritious and economic food. Children crave for sweets, their systems require it to build them up and develop them in the very best possible manner. So many other sweets in this age of adulteration are positively injurious to children, and at best not in good condition for digestion and assimilation. Many children are inclined to catarrh this is not a local disease but is largely due to imperfect action of the pores of the skin. Honey used in moderate quantities as food is extremely beneficial. To this should be added a daily thorough wash of the body followed by a vigorous rubbing and abstaining from eating such food as may prove to be injurious with the individual. Honey is also strongly recommended for all pulmonary complaints, especially linçen, and may here also be used in moderate quantities and frequently. In reply to the question, is comb or extracted honey the most health giving, we would say where the wax (is separated from the honey before swallowing there should be no difference. But the

extracted honey should have been well ripened before taking from the comb, such honey is of course cheaper than the comb and a more economic food. Honey is rapidly becoming popular in place of sugars. Honey vinegar, honey cake, honey-biscuits, honey confectionary, fruits of all kinds preserved in honey, honey cured hams and bacon, honey ice cream, honey lemonade, honey pop, honey soap, all have a wide field before them, and have their advantages over the same food prepared with sugar or glucose. The British Bee Journal speaks of honey drop-biscuits, honey beverages, confectionery, sweetmeats, medical and pharmaceutical preparations, honey chocolate tablets, creams, champagnes, syrups, and cordials "a dubbin in which honey is an ingredient and which has been highly spoken of as a preservative of leather." It goes on to say the new beverage is termed "Mella," and while of a highly effervescent character is non-intoxicating. It is prepared for the market with the aid of the most approved machinery and we are informed it is intended to be retailed at a low price.

All these are means within our reach for the development of our home market. Bee-keepers should combine to display at exhibitions articles prepared with honey, this would not only have the effect of advertising and drawing attention to honey in general but would place before the people and educate them to the use of goods prepared with honey, and would draw the attention of manufacturers such as biscuit makers, bakers, pork packers, brewers, &c., to the fact that honey can to advantage be used in their business. Many preparations can to advantage contain the honey less desirable for table use and these grades of honey need not be placed upon the market so often preventing the sale of light honey.

Queries for September Number.

No. 16. Two colonies are taken in the spring of equal strength, &c.; and managed alike with the exception that one is kept from swarming and the other is permitted to swarm once. Which will produce the most honey, the parent and increase or the swarm having cast no swarm?

Two colonies only, prove nothing, but suppose you have ten on a side the take will be in favor of those that do not swarm,

provided always that both lots be handled in an intelligent manner. Both lots must be kept happy and made to believe that they have it all their own way.

The result will depend somewhat upon the nature of the season too, a very long flow will favor the swarming lot.—S. T. Pettit, Belmont, Ont.

In a good season when there is a good flow from Basswood I would get more honey from the one that swarmed once; or if they would not swarm by the first week in June I usually divide, put the bees with the queen on foundation, leave them on the old stand give the brood half, a young queen or queen cell; then they are both in good order for storing honey when Basswood comes in.—Dr. Duncan, Embro, Ont.

If they are both thrifty and strong the one that swarms *once* will give most surplus honey.—John Yoder, Springfield, Ont.

With me the one that casts no swarm.—A. D. Allan, Tamworth, Ont.

I have frequently had the opportunity to test this matter. I have found that much depends on the season in which the experiment is made. I believe as a general thing the colony and its increase (one prime swarm) will give the largest yield. Only colonies that have superceded their queens just before the swarming season sets in, or has been provided with a young vigorous queen at that time, can be depended upon to work through a good honey harvest without catching the swarm fever.—G. W. Demaree, Christianburg, Ky., U. S.

The swarm kept from swarming.—D. Anguish, Mohawk, Ont.

The parent and increase will gather the most honey if the season be a good long one, but short seasons, the non-swarms would gather the most honey.—W. Couse, Streetsville, Ont.

I have not had experience enough to say how it might be taken one season with another, but when as this year there have been very few good days for honey, the colony that does not cast a swarm is more apt to be in a condition to make the most of those few days than the colony that does. On an average this season I have taken nearly twice as much honey from the colonies that did not swarm as from those that cast one swarm and their increase.—Miss. H. F. Buller, Campbellford.

If the swarming impulse can be entirely prevented the one that does not swarm.—Prof. A. J. Cook, Lansing, Mich.

That “&c.,” includes so much that I cannot tell any thing about it.—Ira Orvis, Whitby, Ont.

The swarm and increase in a long continuous honey season, but if there is little honey after spring flow the colony not allowed to swarm.—Ellis F. Augustine, Aughrim, Ont.

The parent and increase—T. Piggatt, jr. Thedford, Ont.

It depends on the locality and season. Where there is only one crop, clover or basswood, the colony which does not swarm will give the most honey but where you have good yields from both clover and basswood I am inclined to think the colony and increase would give more honey.—Robt. H. Shipman, Cannington.

The “parent and increase.”—Will M. Barnum, Burr Farm, Angelica N. Y.

Would say not much difference, but prefer one swarm.—Will Ellis, St. Davis, Ont.

Have never tried it yet, but hope to do so next year. Since I have as many stocks as I want I live in hope that the now swarming method will give the most honey, just the query I wish to hear answered by those who, have experience.—Rev. D. P. Niven, Dromore, Ont.

Everything else being equal, the colony which don't swarm will gather and store most honey.—J. M. Shuck, Des Moines, Iowa.

If the colony is kept from the swarming impulse and not kept from swarming by breaking down queen cells, returning swarm and the like, but by giving ventilation, shade and room the colony that does not swarm. If these latter methods are resorted to the one that is permitted to swarm. Of course this is providing the season make it possible to secure honey.—Ed.

No. 17. I require to feed my bees to have sufficient stores for winter. When shall I do so?

In September.—S. T. Pettit, Belmont, Ont.

Feed your bees at once with good honey or syrup until they have about 20 or 30 lbs. if they are not strong in bees feed a little every day to keep the queen laying.—Dr. Duncan, Embro, Ont.

Feed now the sooner the better.—John Yoder, Springfield, Ont.

Early in September.—A. D. Allan, Tamworth, Ont.

I do my feeding for winter stores just after the first killing frost.—G. W. Demaree, Christiansburg, Ky., U. S.

As soon as possible.—D. A. Anguish, Mohawk, Ont.

As soon as possible after the honey flow is stopped.—W. Couse, Streetsville, Ont.

Any time in September. It is better to feed early than late.—Miss. H. F. Buller.

Just as soon as season ends.—Prof. A. J. Cook, Lansing, Mich.

I feed as soon as there is no brood in the hive. Put a super on top and set in it tin or earthen dishes that will hold 20 or 30 lbs. or whatever amount you wish to feed all at once. Feed granulated sugar syrup made of 10 lbs. sugar to 5 lbs water heated and stirred till melted. Sprinkle a little grass over the top of dishes when full.—Ira Orvis, Whitby, Ont.

Commence feeding after fall honey ceases and feed a little every evening until cold weather which will keep the queen laying until late in the season and you will have a large number of young bees to go into winter quarters with.—Ellis F. Augustine, Anghrim, Ont.

Before cold weather sets in so they can cap it.—T. Piggatt, jr., Thedford, Ont.

We usually pay but little attention to our bees during August beyond seeing that each colony that is to be wintered has a good queen. Sept. 1st, every colony is examined and supplied with sealed combs or fed otherwise.—Robt. H. Shipman, Cannington, Ont.

It depends a great deal upon your locality. Commence to feed (and when you feed, feed “strong”) just before the cold weather sets in. Here in this vicinity we generally commence about the 1st of October.—Will M. Barnum, Burr Farm, Angelica, N. Y.

As soon as time will let you.—Will Ellis, St. Davids, Ont.

Before the weather gets too cold for them to take it and seal it over.—Rev. D. P. Niven, Dromore, Ont.

As early as possible after frost has killed the flowers. Nine tenths of winter losses among those who attempt to care for their bees arise from feeding and tinkering them after cold weather begins. Put in a big feeder and give them a supply at two feeds.—J. M. Shuck, Des Moines, Iowa.

Feed as soon as there is room sufficient in the hive by brood hatching, generally early in September.—Ed.

No. 18. I feed syrup (2 parts coffee and granulated sugar to 1 part water) 30 lbs. How much will the colony actually gain in weight or store for winter use? I feed at dark 5 lbs. and again at bed time 5 lbs each day.

The result will be different in different stocks.—S. T. Pettit, Belmont, Ont.

They will consume about one third in raising brood.—Dr. Duncan, Embro, Ont.

To save guessing try it, weigh the hive before feeding, and again afterwards, they will not gain much more, if any than $\frac{2}{3}$ in weight what you give them. But why feed sugar when honey is so cheap? Use up the natural product of the bees which is the natural winter feed and it helps to get rid of the surplus.—John Yoder, Springfield, Ont.

I have no experience I feed nothing but honey in the comb.—A. D. Allan, Tamworth, Ont.

I would judge from past experience about 20 lbs. The result is not uniform when feeding a number of colonies. The loss when feeding liquid food for winter stores is terrific.—G. W. Demaree, Christiansburg, Ky., U.S.

No experience.—D. Anguish, Mohawk, Ont.

Never experimented, so don't know.—W. Couse, Streetsville, Ont.

It would be easy for you to test the matter by setting your hive on the scales while feeding and note the difference in weight. I have never done so and cannot answer the question from my own experience.—Miss H. F. Buller, Campbellford, Ont.

Just about the weight of sugar used.—Prof. A. J. Cook, Lansing, Mich.

I do not know, but do not think they will gain as much as if fed according to my answer to No. 17.—Ira Orvis, Whitby, Ont.

Could not say.—Ellis F. Augustine, Anghrim, Ont.

Never practice feeding but if for winter would advise all granulated and the best, and feed as fast as possible when feeding for winter.—T. Piggatt, jr., Theford, Ont.

Twenty-five lbs, I should say but much depends on the queen and the weather.—Robt. H. Shipman, Cannington, Ont.

I do not know. If I should give any sort of decisive answer to this query it would of

necessity be all "guess work" and might be of more harm than good to the "querist," therefore I refrain from so doing.—Will M. Barnum, Burr Farm, Angelica, N. Y.

Practically I don't know, theoretically I would say store 25 lbs.—Will Ellis, St. Davids, Ont.

About 20 lbs. I think when stored and sealed over.—Rev. D. P. Niven, Dromora, Ont.

About 6 lbs. Better give 10 or 15 lbs. at a time and make short work of it.—J. M. Shuck, Des Moines, Iowa.

Judging from experiments would say 20 lbs generally not more. Would recommend feeding more each day than 10 lbs.; put on an upper story, in it place a pan, scatter grass in it to act as floats to keep bees from drowning. Throw back a corner of the quilt under pan and refill until 30 lbs. have been fed. Let the syrup be warm 80° to 90° and feed in warm weather.—Ed.

Mr. McKnight has favored the readers of the C. B. J. with a reply to Mr. Corneil's letter. Laying aside the fact that the communication has been sent to the C. B. J. and not to us, when any one will at once admit it should have been sent; but it appears to be only another method of securing an advantage and an unjust one. We would go on to say, if an ably written article (of its kind) ridicule a bold front, and suppositions are arguments and victory, we should indeed have reason to feel ourselves annihilated. But although at political meetings a great many admire the man who, if caught, puts on a bold front and sticks to what he has said, and consider him successful in carrying the day, we have no hesitancy in saying Mr. McKnight has mistaken the material upon which he is working. The intelligent reader will be attentive enough to see through such a dodge; and although ridicule to a great many means argument, Mr. McKnight is again mistaken as to the material he works upon, and although the reader may smile, this will not be argument. It is then ad-

mitted that Mr. Corneil appropriated, or as they put it, had offered him and took \$100.00 for his services while at the Colonial. The understanding was that the commissioners were to give their services free of charge, and were the argument to hold good that one commissioner received the money for duties performed as secretary, and that he should have had far more for these services, then he had a right to far more; then the other commissioners also had a right to receive remuneration for liquifying honey, and every other service—there is no distinction. The absurdity of this is only too visible, and we say the permission of the exhibitors should have been obtained to such a transaction, and was it asked of them, or were they informed of it? we think not. Then came a host of suppositions: on page 434 second column, quotation marks appear to be thrown in promiscuously, and at the close of the paragraph placed "*Honey Producer* again." Those who have the August number of the *Canadian Honey Producer* will readily see how misleading the quotation marks are. Again, any one will see in what a mere quibble the writer has refuge when he states, "Mr. Jones makes no statement of any kind at the banquet." When we say the banquet was in the afternoon and the banquet adjourned to the convention the same evening, there was simply a form between, and Mr. Jones was reported in the *British Bee Journal* as having said the Heddon hive was the most popular in Canada. And again it speaks of "Mr. Jones as having rattled away in fine style about his Heddon hive." I corresponded for the *British Bee Journal* at the time and drew attention to it, and no one ever stated in that paper that the matter had been misrepresented. Mr. McKnight has by a mere quibble given the "*quietus*" and the editor chimes in. Then comes an appeal to the Bee-Keepers' Association.

The explanation about the falsehood in regard to the weight of honey, is certainly the strangest of all. Every

one in the slightest conversant with the matter will remember that until almost the last moment the amount of honey expected to be sent was very large, and in speaking of freight, of course it would mean cases, honey and all. Mr. McKnight and everyone else also, knows how at almost the last moment the honey shipment was lessened, and Mr. McKnight also knows full well that when asked how much honey there was on exhibition, they did not offer to give freight weight, as enquirers wanted to know how much honey there was. This is however only a fair sample of the means used to contradict our statements. They are the only means that can be employed, but to implicate the name of one in so weak a manner, who esteems the truth, in a case of serious misrepresentation—is to merit only contempt.

Next the editor makes an appeal to the sympathies of his readers. This has on several occasions been offered as his most effectual weapon. Now, often reason will depart under such an appeal when it has withstood ridicule, a bold front and supposition, and our sympathies are enlisted on the side where right is not, even if done in so weak a manner.

We must again ask Canadian Bee-Keepers to judge calmly and rightfully, and they will decide our "treatment" is just and thus can never be "cruel," and we are satisfied to receive the "just deserts at the hands of Bee-Keepers of Ontario." Independent of what good we may have accomplished for our subscribers in the issuing of our paper, after it was noised abroad that we were about to publish a bee paper, and since publication we read in another paper an apology for the paper being as it was, the reason given being that one of its editors had been away—that the hive question must be dropped for a time—that any notices in short advertising goods would cease to appear in reading matter and be in a separate column. True, its readers will know of the spasmodic breaks it has from time to time made in departing from

the promised course, but they will have been observing and far seeing enough to value our publication, and the sympathy which this paper has endeavored to arouse will not prevent bee-keepers extending to us their patronage. This matter will be judged by its merits and if bee-keepers at large will act in their own interests they will one and all extend to us their patronage. Further, we have no desire to be witty or sarcastic but desire to touch upon this question in a manner becoming the gravity of it. We want bee-keepers to learn the truth of the matter irrespective of such personalities which are quite unnecessary.

Aug. 25th, this day noon the C. B. J. reaches us, and this p. m. the *Canadian Honey Producer* goes to press. We note Mr. Corneil's reply. There is only one item to which we have any reason to reply to. The statement:

"We were about to stage our honey. Mr. Pettit stated that although Mr. Holtermann had contributed nothing to the exhibit he requested it as a favor that an exhibit should be made in his name, composed of honey taken from the exhibits of the contributors, and Mr. Pettit appeared to favor him in this particular. The "other delegates" of course declined to permit him to get the credit of being an exhibitor at the expense of others. Query—has this fact any connection with the animus he has shown towards the majority of the commissioners?" C. B. J.

As far as one transaction in this matter is concerned and as far as we know the facts are as follows: We intended to send some honey to the Colonial and after inspection, decided that our honey was a little inferior to Mr. Pettit's, besides we had purchased the balance of Mr. Pettit's crop, therefore decided to sell that produced by ourselves—send empty cases to Mr. Pettit and send a small quantity to the Colonial. We were very busy at the time and everything not on paper in the shipping department was liable to be forgotten and the cans were not sent. Mr. Pettit wrote to us once near the date of ship-

ping, "Your honey cans have not arrived." It was too late. We wrote asking him to let us have some of his own and mailed him labels for 10 lb. and five lb. cans to Toronto, and further said, if you give the Queen some honey as an association, be sure and let some of mine be with it." We think Mr. Pettit dropped us a card stating "all right." After Mr. Pettit's return we asked him if the Queen had received any of our honey. Mr. Pettit said he had mentioned it and said some of the honey he had brought was to be taken, but the present had been made to the Queen, and he did not know whose honey had been sent. So we never had the pleasure of saying we had our honey upon the Queen's table, and so never said or gave it a second thought. So much for our "animus."

Some may say it was not strictly right. We did not produce the honey in any case. But it was ours, purchased by us, and the owner could exhibit; production was not the condition at all. We know Mr. McKnight purchased 1000 lbs. of comb honey from Jacob Alpaugh and exhibited it, and I know of no one who censured him for that act. True, our sole object was to be able to say the Queen dined off our honey; his was more. But this matter only shows what desperate resources the trio have recourse to.

Could our reply appear alongside of the charges, for this paper is the paper for Mr. Corneil's reply, we would not care, but the object of the trio is to have an undue advantage in the C. B. J.; but we are right, we have felt this, and it should satisfy us.

Notes from Will's Bee Yard.

THE SEASON.

The season here has been very hot and dry; the most extreme I ever knew. Bees came through only fair.

My crop is about one half. Our spring was very cold, bees built up slow. I began this spring with 50, ran 25 strongest for Comb Honey, and the 25 weakest for extracted. Increased to 80. Intend packing all in chaff

on their summer stands, and shall winter exclusively on Honey—no feeding for me when I have honey.

SEPARATORS OR NO SEPARATORS.

Well Friends, do you believe this fall I almost concluded to discard separators. I visited a Bro. Bee-Keeper about a month ago, and he I found took his comb honey without Separators. It caught me quick. Most of it was nice and straight, he uses no honey board between the top bars of frames and the bottoms of sections; I've tried that and they built too much brace comb for me so now I use Heddon's honey board. Since I visited him I have had calls from other Bee-Keepers and also dropped around to see others. *This narrow section business* being my principal theme, so the other day I went in to see neighbor—Said I, "old boy, do you know what I am going to do. I am going next spring to run without seps." He chirped in and said, "I had better just lay them up as I might need them again." "Why," said I. He laughed at me, and told me that his bees put in too much pollen, where there was no separators, and was more in favor of separators then ever.

One day last week a Bee-Keeper was down for a few minutes and I knowing he this season was trying narrow sections without seps, I plied my question about the pollen in the sections. He said at once that where there was no seps there was more or less pollen. I've got cooled off. My section honey this year had only one section that had pollen in it, and it had only one cell, that section was graded No. 2 honey.

SIMPSON HONEY PLANT.

A few years ago I sent to A. I. Root for a 5 ct. packet of seed. I planted it and soon had a fine bed of plants. I have forgotten whether it bloomed the first season or not, but when it did the yellow jacket worked on it more than the bees, so I did not bother any more with it. But some plants kept coming up every year and seeding again. Down at the honey house door are several fine plants and to see the bees working on them, makes a fellow feel good. I tried scattering seed in waste places but it did no good, it needs good rich damp soil.

MY CHOICE.

1887 finds me in favor of hybrids, a cross

between the Italian and the generally despised black bee. I am not very particular as long as they have not too much black in them; pure blacks I do not like at all and pure Italians don't care to go into the sections, and with me the crosses generally go right in. I have several Italians, a few blacks, but principally crosses and the best queen I have is a Hybrid. I've had Italian queens from the best breeders and they all seem about the same, not equal to the Hybrid.

P. S. To-day I examined a few colonies and found the combs full of brood in all stages; this suited me immense, as I like a good stock of young bees for to commence winter.

WILL ELLIS.

St. Davids, Aug. 16th, 1887.

For the Canadian Honey Producer.

Editor Honey Producer :

Burr Farm, Angelica, N. Y., Aug. 6th, 1887.

Dear Sir :—Owing to the long protracted drouth the honey crop of this neighborhood is a complete failure.

Buckwheat is yet to come, and we may get a quarter crop but it is doubtful.

Judging from the reports in the different bee journals it is quite evident that there will not be so much honey to dispose of this fall as there was last, and therefore prices ought to come up.

There is no use getting discouraged.

I am well pleased with the HONEY PRODUCER.

I wish you prosperity and a long and useful life.

WILL. M. BARNUM.

Queries for October Number.

No. 19. By having movable frame hives can I keep my stock of bees from increasing without killing them off in the fall?

No. 20. For outside wintering in clamps with chaff on top should I remove the propolized quilt and put on a clean one?

No. 21. Can I put too much packing on hives in clamps for winter packing. If so what depth of saw dust or chaff should I put on?

Queries for November Number.

No. 22. By what time should I have my bees packed in clamps or put in bee home or cellar?

No. 23. Do I need underground ventilation for bee-house of cellar when I have a pipe going upward from floor of such a repository and reaching above roof of home.

No. 24. Can we sell honey for more money in a year of scarcity, if so how much more?

ON THE WING.

The busy season in the apiary and other business has prevented our soaring amongst bee-keepers for some time. It was with great pleasure that we found ourselves at the apiary of Mr. Ira Orvis, whose home, farm and apiary are situated some three miles from Whitby.

Mr. Orvis first kept bees in 1860, using only the box hive. He first used a movable frame hive (the Thomas hive) in 1881, the frame of which has one side bar longer than the other, the width is 13 in., depth of longest side bar 15 in.; 8 frames to the hive. He made the two sides of the frame equal in length and also experimented with the Baxter hive; the size of frame is about the same as that of the hive last named. Mr. Orvis visited some American bee-keepers, and now uses only the eight frame Langstroth hive; the frame used is the improved Langstroth. He takes about equal parts of comb and extracted honey, having this season some six to seven thousand lbs. to date, Aug. 1st, with more to extract and otherwise take from the bees.

When the bees swarm he gives them one or two frames of brood, filling the balance of the brood chamber with dummies. The new hive is set upon the old stand. The queen which has issued is put back in the old hive and the latter placed at right angles to the new colony. The new hive is allowed to raise a queen cell but this latter is broken down again before the queen hatches and more brood given. It will be seen that by this method little brood requires attention, the bees will not soil sections on account of having travelled over dark combs, and at the close of the honey season, the bees may be united with the old hive or be permitted to have a queen and the dummies in the brood chamber be replaced by combs for brood rearing, a section $4\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{2}$ in. is used, no separators are used in the Heddon super; he does not want the broad section frame super however. In order to permit bees to get into the section next the wall of the hive every super is cut away at top and bottom on inner side.

The Italian bee is a great favorite with Mr. Orvis, his experience with other races and their crosses being unsatisfactory. The cellar arrangement for wintering is such that each

colony can be removed from the cellar without disturbing any other colony; the temperature of the cellar runs from about 45° to 50° . Every effort is made to keep the bees in the cellar as long as possible; this year they were taken about 15th April and some were returned for two weeks. The colonies in the apiary at one time faced East; they now all face South, and the sections on all sides appear to be filled out more equally, and the rain does not beat into them as formerly.

Judging from the nice white comb in the sections one would certainly conclude that Mr. Orvis's method of taking comb honey was first class and for quality and quantity it would be difficult to excel his record for the year.

We may say, Mr. Orvis has over five acres in sweet clover upon which the bees were working very busily. There are not many extensive apiarists in the vicinity of Whitby; quite a number, however, who keep ten or twenty colonies. Alsike clover is grown in abundance. Contrary to the experience of most bee-keepers Mr. Orvis prefers the honey from white clover to that from Alsike.

Christianburg Ky., U. S., Aug. 10, 1887.—It has been amazingly hot and dry here. It was 104° in the shade at 2 o'clock p.m. yesterday. Our great drouth was broken last night by copious showers to our great relief. The present season has been poor here; nothing like it for years past. Only the best colonies gave some surplus. Expensive feeding will be necessary this fall, unless the season is more favorable to bring on fall pasturage than I can hope for now. Success to you always. Yours, &c.—G. W. DENAREZ.

Convention Notices.

The Norfolk Bee-keepers' Association will meet at Simcoe on Saturday, Sept., 3rd. Notice of hour and place will be given later.

C. W. CULVER, Sec'y Treas.

The Brant Bee-keepers' Association will convene at the Court House, Brantford, on Saturday, Sept. 3rd, 1887, at 2 p. m. All interested in bee-keeping are invited.

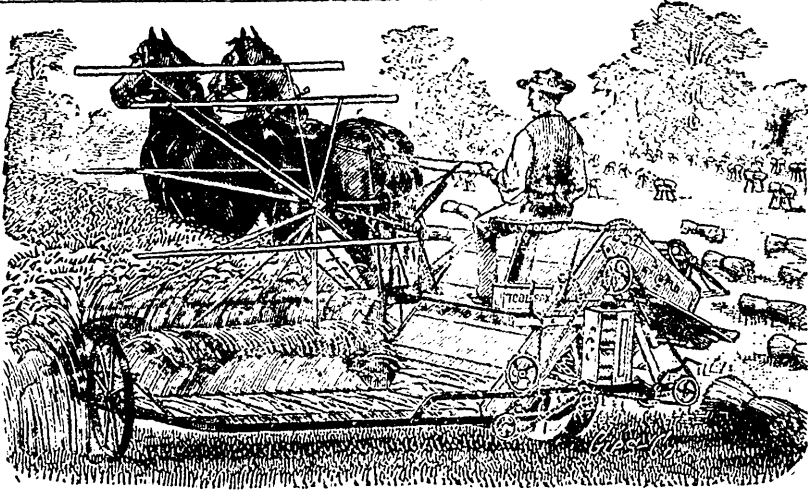
R. F. HOLTERMANN, Sec'y Treas.

The Lambton Bee-keepers' Association will meet in the town of Petrolia, on Thursday, Sept. 1st. All interested are requested to attend.

J. R. KITCHEN, Sec'y.

The Ontario Bee-keepers' Association will meet in Toronto, (probably city Hall,) Sept. 15th, 7 p. m. to meet with Mr. Thos. Wm. Cowan of England. All members should attend.

WM. COUSE, Sec'y Treas.,
Streetsville, Ont.



THE BRANTFORD LIGHT STEEL BINDER No. 2.

This Binder is the newest production of "The Age of Steel," and is guaranteed to be the lightest weight and lightest draft Steel Binder in the market. Examine it and you will be convinced that it is the best, simplest and most economical Binder that you can procure. For sale by courteous Agents everywhere. Manufactured only by

A. HARRIS, SON & Co., LIMITED. BRANTFORD, ONT.

BEEKEEPERS' MAGAZINE.

32 Page monthly.

25 Cents per year.

Sample copy free.

Address,

BARRYTOWN, N. Y.

LOOK!

The most beautiful Illustrated Catalogue of Bee-Keepers' Supplies will be sent you free by writing your name plainly on a postal to
ASPINWALL & TRESDEWELL,
 Barrytown, N. Y.

RAYS OF LIGHT.

Devoted to the interests of the Bee-Keeper and Poultryman. Sample copy Free, Subscription 50 cts. a year. Pure Italian Bees and Queens Thorough-bred Poultry, Eggs in season. Send for catalogues.

J. J. MARTIN & CO.,
 North Manchester, Indiana.

WE WANT MEN

To sell our family Bibles containing both versions in parallel columns from Genesis to Revelations. We have the best bound, most comprehensive, and cheapest Bibles in the world, will pay big commission to local men, or large salaries to experienced agents.
BRADLEY, GARRETSON & Co., Brantford.

ESTABLISHED 1885.

Beeswax Headquarters.

We have constantly on hand a large stock of Domestic and Imported Bees-wax in original shape, which we offer to manufacturers of Comb Foundation at lowest prices. We guarantee all our bees-wax absolutely pure. Write to us for prices.

Address, **R. ECKERMANN & WILLY,**
 Beeswax Bleachers and Refiners. Syracuse, N. Y.

HOW TO WINTER BEES.

The October Number, 1886, of the **AMERICAN APICULTURIST** contains **ELEVEN ESSAYS** on **WINTERING BEES**, from eleven of the best known Bee-Keepers in the World. Sent free. Address,

HENRY ALLEY, Wenham, Mass.

12 BEE HIVES FOR 30 cts.

Made from clear lumber; no knot holes, frauds, or chaff in one of them. Send for sample.

Box 101,

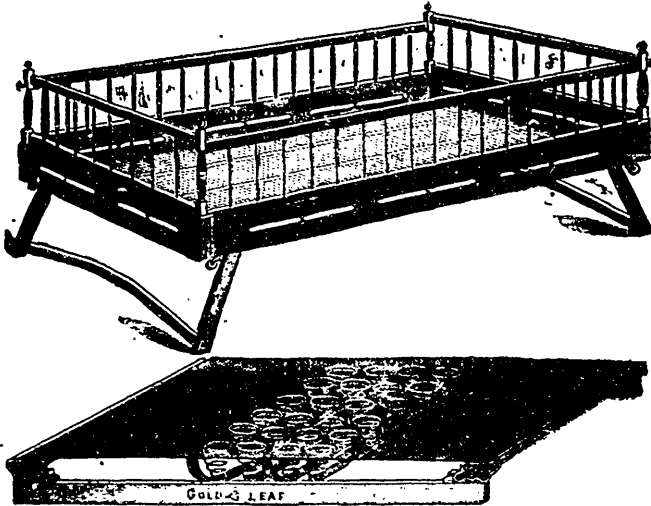
E. H. COOK,
 Andover, Conn.

2nd HAND MACHINERY.

Catalogues sent on application.

H. W. PETRIE, Machine Dealer.
 Brantford, Ont.

LONG BROS., Brantford, Ont.,



MANUFACTURERS OF

Woven Wire
Mattresses,

Children's Folding
Crisps,
Woven Cots,
Upholstered Cots,
and Parlor Folding
Beds, etc.

All purchasers will find
them of the best grades
in the market.

Also manufacturers of the
Brant Creamer,

Used with or without ice, for both summer and winter use. Will positively save their price in one season. Our market Butter carries is the delight of all who use them, will hold from 36 to 100 lbs. according to size. Send for price.

1879. QUEENS AND BEES. 1887.—We are ready to ship Bees and Queens. Nucli and Bees by the lb. a specialty. Over 200 Colonies to draw from. No Circular this season. Untested Queens, \$1.00; six for \$5.00; Bees by the lb. same price. Frames of Broodsame as Queens and Bees Langitroth or Simplicity or Gallop.
Address, T. S. HALL, Corinth, Miss., Alcorn Co.

Lorne Iron Works Dalhousie Street, Brantford.

E. & F. SCHMIDLIN,

Makes a specialty of Saw Mandrills, and all kinds of Special Machinery.

Send for prices of our Iron Saw Table, rip and cross cut, a complete Machine.

Repairs of every kind promptly attended to.

We make all kinds of Punches and
Dies for Tinware.



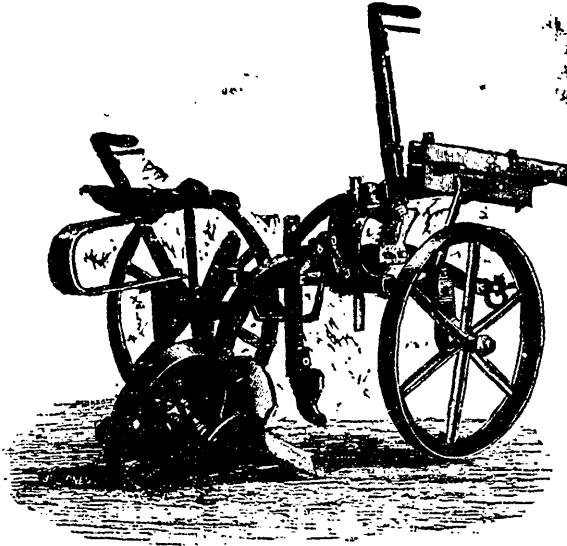
E. & F. SCHMIDLIN.

Cockshutt's New "J. G. C." Riding Plow,

Showing Landside view and Rolling Coulter attached.

Covered by Three Patents,

Issued 1883, 1884, and 1885.



NEW DEPARTURE

Involving the King Bolt Principle. Strength, Compactness, Simplicity, the prominent feature.

Send for and read every word of our "J. G. C." Pamphlet,
Issued January 7th, 1887.

MANUFACTURED IN CANADA ONLY BY THE
COCKSHUTT PLOW CO., LIMITED.,

MANUFACTURERS OF
Chilled and Steel Plows, Sulkys and Gangs.

OFFICE AND WORKS:

South Market Street,

BRANTFORD, Ontario, Canada.

W. F. COCKSHUTT, President.

BRANCH HOUSES.

I. COCKSHUTT, Vice-President.

A. Harris, Son & Co., Winnipeg, Man.

J. CHALLEN, Secretary.

Nicholles & Renouf, Victoria, B. C.

J. M. YULE, Treasurer.

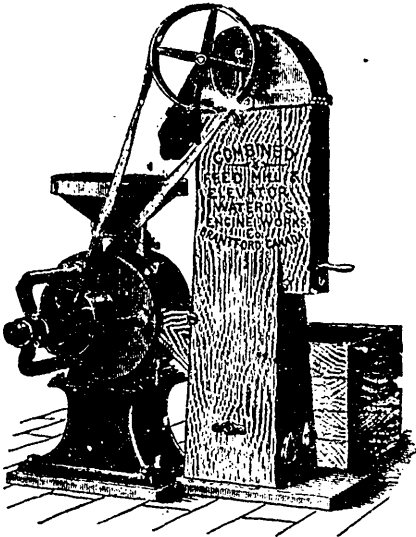
Tippett Burdett & Co., St. John, N. P.

GEO. WEDLAKE, Mech. Supt.

If no Agent selling our Plows in your locality send for our Descriptive Pamphlets to our address,

COCKSHUTT PLOW Co. L'td, BRANTFORD, ONT.

STANDARD CHOPPING MILLS WITH ELEVATORS



As shown, are now fitted with a Shaking Screen to take out all Straws, Stones, Nails, Cyl. Teeth, etc.

SAVING WEAR ON STONES.

These Mills use the very finest

FRENCH BUHR STONES

Acknowledged by all the best grain grinders in the world.

12-inch Mill can be run by a 2 to 10-horse power.

20-inch Mill, 6 to 12 H. P.

Capacity, 2 to 30 bush. per hour.

Mill Picks and Proof Staff Given Free.

Send for full particulars.

154 St. James St., Montreal.

30 St. Paul Street, Quebec.

WATEROUS ENGINE WORKS Co.,

Brantford, Canada.

St. Paul, Minn., U. S. A.

Brantford Soap Works.

USE
A. Watts & Co's
I V O R Y
B A R
S O A P.

THE POULTERS' PROFIT.

Is always creating a surprise in the Poultry Fraternity by springing upon them a special prepared issue. Always something new in journalism—Lively, full of vim and fresh—Only 50 cents a year. Address,

POULTERS' PROFIT, YORK PA.

BEE-KEEPER'S' GUIDE,
OR
MANUAL OF THE APIARY.
11,000 SOLD SINCE 1876.

The twelfth thousand just out. 10th thousand sold in just four months. 2,000 sold the past year. More than 50 pages and more than 50 costly illustrations were added in the 8th addition. It has been thoroughly revised and contains the very latest in respect to Bee-Keeping.

Price by mail, \$1.25. Liberal discount made to Dealers and to Clubs.

A. J. COOK, Author and Publisher,
State Agricultural College, Lansing, Mich.

SEND FOR

Our special low rates on Honey Cans Sections, Hives, Foundation, Bee-Keepers' Supplies.

S. P. HODGSON,
Hornings' Mills.

Carpets,
Oil Cloth,
Matting,
Curtains.

SPECIAL:
Black & Colored
Silks, Satins,
Velvets,
Brocades.

Fine Wool,
Dress Fabrics,
French
Cashmeres.

Gloves, Hosiery,
Laces
Ribbons,
Corsets, Scarfs.

Jerseys,
Shawls,
Travelling
Wraps.

Parasols, Fans,
Bags,
Waterproof
Cloaks.

Cottons, Linens,
Sheetings,
Damasks
Napery
Cretones.

Manufactured on the Premises,
COSTUMES,
MANTLES, MILLINERY.

WILLIAM GRANT,

Direct Importer

OF

British & Foreign

DRY GOODS,

Fine Woolens,
Gentlemen's Furnishings, &c.

—o—
MANUFACTURER OF

**MILLINERY, MANTLES,
COSTUMES,**

Ready-made and Custom Clothing,
SHIRTS, COLLARS, &c.

**COLBORNE STREET,
BRANTFORD,
CANADA.**

FAMILY MOURNING.

Walking Sticks,
Umbrellas,
Carpet Bags,
Valises.

SPECIAL:

Fine Custom
Tailoring.

Shirts of all
kinds made to
Measure.

Collars and Cuffs
made to
Measure:

Constantly in
Stock
Fine Underwear
in Silk,
Cashmere,
Merino,
Balbriggau,
Lamb's Wool.

Gloves
In Kid, Dog,
Napa,
Buck and Lisle.
Handkerchiefs,

Braces
Scarfs, Bows,
Socks in
Endless Variety.

Lawn Tennis,
Criketing,
Boating,
Bathing Suitis.

Hats in Felt,
Silk and Tweed,
Pith Helmets,
Caps in Cloth,
Silk and Lustre.

THE
'NEW BRANTFORD'
 Fanning Mill.

The Simplest, Lightest Running, the Fastest Cleaner, and Most Durable Fanning Mill in America. Thousands will testify to their Superiority.
 We deliver them freight paid at any station.

MANUFACTURED BY

E. L. Goold & Co., Brantford,
 Ontario, Canada.

SPECIAL.

DEAR SIR.—I enclose cheque in payment of Fanning Mill, I am quite satisfied with the machine, it is quite the best I have seen, and I have tried a good many.

Agents wanted in all unrepresented districts.

SUFFOLK LODGE, OAKVILLE, Jan. 2nd, 1886.

Yours faithfully,

GEORGE BUNBERY.



SMOKERS' BEST MAKE.
 OFFERS FOR MAY.

THE CANADIAN HONEY PRODUCER for 1 year and ½ oz. CHAPMAN HONEY PLANT SEED, only 65 cts.

COAL OIL STOVES

We have all kinds of Coal Oil Stoves at bottom prices; also, oven and furniture for cooking purposes. Prices on application. Two Burner Summer Queen as illustration, \$4.00.

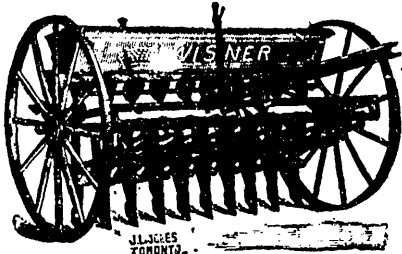
FOUNDATION MILLS.

Root Foundation Mills 10 in. at Brantford, \$26.00. All other kinds Prices on application.

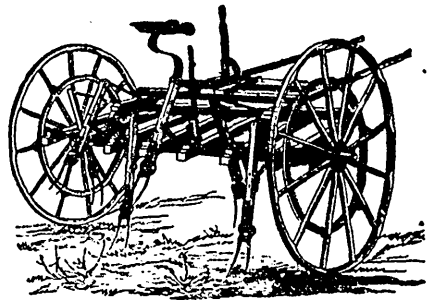
Perforated Metal 11 cents per foot, per 10 square feet, \$1.00. Comb Foundation and Sections. Honey Extractor best.

The Celebrated "Wisner" Machines.

Tubular Iron Frame.



Patent Spring Hoe.



Wisner Grain Drill.
POSITIVELY UNEQUALLED.
Thousands in use in Canada.

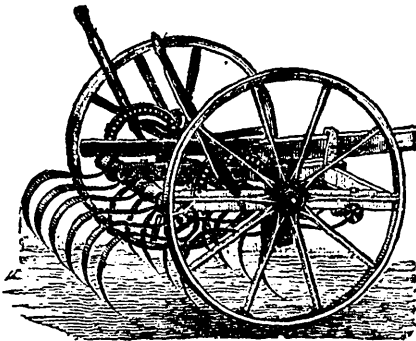
Wisner Tedder.

We guarantee all our Machines
to give satisfaction. Send for

ILLUSTRATED CATALOGUE.

Examine the "Wisner" Machines
before purchasing.

In ordering mention Canadian Honey Producer.



Spring Tooth Cultivator.

J. O. Wisner, Son & Co.,

BRANTFORD, ONT.

HONEY CANS. HONEY CANS.

HONEY CANS.

60 lb. each, 50c.; per 10, \$4.80; per 25, \$11.25;
per 100, \$42.00 as per catalogue.

Also, 30 lb. cans, 15 lb. cans.

Ross self-sealing cans and screw top cans all sizes.

Labels best on the market.

SEND FOR CATALOGUE.

E. L. GOOLD & Co., BRANTFORD, ONT.