

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
- Covers damaged/
Couverture endommagée
- Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée
- Cover title missing/
Le titre de couverture manque
- Coloured maps/
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur
- Bound with other material/
Relié avec d'autres documents
- 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
- 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.
- Additional comments:/
Commentaires supplémentaires:

- Coloured pages/
Pages de couleur
 - Pages damaged/
Pages endommagées
 - Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
 - Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
 - Pages detached/
Pages détachées
 - Showthrough/
Transparence
 - Quality of print varies/
Qualité inégale de l'impression
 - Continuous pagination/
Pagination continue
 - Includes index(es)/
Comprend un (des) index
- 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

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. 3.

BRANTFORD, DECEMBER, 1889.

No. 10.

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.

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,	\$1.50	\$1.75
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 cts,	1.00
Queen Rearing, by Henry Alley, cloth,	\$1	1.00

CLUBBING RATES.

The Canadian Honey Producer		
And Gleanings, semi-monthly,	..	\$1.30
" American Bee Journal, weekly,	..	1.30
" American Apiculturist, monthly,	..	1.10
" Bee-Keepers' Magazine,	..	80
" Rays of Light,	..	85
" British Bee Journal, weekly,	..	2.90
" Poultryers' Profit,	..	65
" Bee-Keepers' Advance,	..	80

PREMIUMS.

Single subscriptions are 40 cents per year.—Three subscriptions for one year at one time, \$1.00

This paper will be sent until an explicit order is received by the publishers for its discontinuance and the payment of all arrearages is made.

FOREIGN POSTAGE.—To all other countries in the postal union, 70 cts. All other countries except Canada and the United States which are free, 25c. per annum. All subscriptions must be for one year. Subscribing for two years will count as two subscribers.

ADVERTISING RATES.

Breeders Directory.—Breeders of Bees, Poultry or other live stock may insert a card for the year under this head @ \$2.00; if the card exceeds two lines \$1.00 per line extra.

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.	\$ 2.25	\$ 3.25	\$ 5.00
2 in.	3.75	5.50	9.00
3 in.	6.00	8.50	11.50
4 in.	7.25	10.50	13.50
5 in.	9.50	13.00	16.00
4 in. double column,	10.00	14.00	17.00
8 in. "	15.00		20.00

OUR BICYCLES FOR 1889.

THE BRANTFORD.

THE BRANTFORD RACER,

THE BRANTFORD SAFETY,

THE WARWICK.

THE WARWICK No. 1.

Every Machine Warranted.

MANUFACTURED BY

THE GOULD BICYCLE CO., Limited,

BRANTFORD, ONT.

DEPOTS:—

F. W. DOLL, LONDON.

S. T. WHITE, HAMILTON.

J. MARTIN, TORONTO.

R. B. BOYCOTT, MONTREAL.

ILLUSTRATED CATALOGUE FREE.

AGENTS WANTED.

In writing mention "The Canadian Honey Producer."

EDWIN SIMS,
 Conveyancer,
 Real Estate,
 Financial Loan and
 Insurance Agent.

LOANS EFFECTED,

DEPOSITS RECEIVED,

MORTGAGES AND NOTES

BOUGHT AND SOLD.

No. 21, George Street,

BRANTFORD.

In writing mention "The Canadian Honey."

Dadant's Foundation.

It is kept for sale by dealers in the United States, England and France, and in Canada by E. L. Gould & Co., Brantford, Ontario

We guarantee

EVERY INCH

OF OUR COMB FOUNDATION

Equal to Sample in every respect.

Every one who buys it is pleased with it! Write us for Free Samples unless you are in Canada in which case address, E. L. Gould & Co.

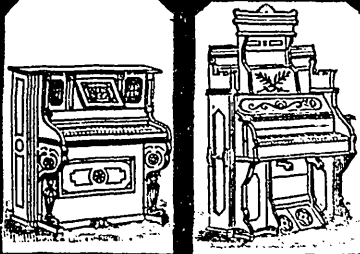
Price List of Bee-Supplies, and Specimen Pages of the new

REVISED LANGSTROTH BOOK,
 EDITION OF 1889.

Address,

CHAS. DADANT & SON,
 HAMILTON, HANCOCK CO., ILLS

"BELL"



PIANOS & ORGANS
ARE THE LEADING INSTRUMENTS
FOR PURITY OF TONE & DURABILITY
CATALOGUES FREE
W. BELL & CO. GUELPH, ONT.

**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.

A YEAR AMONG THE BEES.

A work of 128 closely printed pages. Being a talk about some of the implements, plans and practices of a beekeeper of 25 years' experience, who has for 8 years made the production of honey his exclusive business.

Bound in cloth, by mail, 75c.

DR. C. C. MILLER,
Marengo, Ill.

In writing mention "Canadian Honey Producer."

WANT TO exchange a nice Box Machine nearly as good as new with Tongue and Groover and Swing Saw. Cost when new \$150; also one Root four-piece section machine, cost \$35; one saw bench with arbor and saws and belts, two tables with boring attachment, cost when new \$40, also 20 feet two inch shafting with hangers, 12 cast iron pulleys from 10 to 30 inch, one grindstone, cost \$75, for a nice sound young carriage Horse.

Address, J. B. MASON, Mechanic Falls, Me.

In writing mention "Canadian Honey Producer'.

**BARNES' FOOT POWER
MACHINERY.**



Read what J. I. PARENT, of CHARLTON, N. Y., says—"We cut with one of your Combined Machines, last winter, 50 chaff hives with 7-inch cap, 100 honey-racks, 500 brood frames, 2,000 honey-boxes, and a great deal of other work. This winter we have double the amount of bee-hives, etc., to make, and we expect to do it all with this Saw. It will do all you say it will." Catalogue and Price List Free. Address W. F. & JOHN BARNES, 745, Ruby St., Rockford, Ill.

When more convenient, orders for Barnes' Foot-Power Machinery may be sent to BEE-KEEPERS' MAGAZINE, Barrytown, N. Y.

In writing mention "The Canadian Honey Producer."

The Queen Breeders Journal.

E. L. PRATT, PUB., MARLBORO, MASS.

A 16 page Monthly devoted to Queen Breeders and Queen Rearing. Price 50 cts a year. Send your name on postal and receive a sample copy of this bright, new journal. Address, The Q. B. Journal, 175 Main St., Marlboro, Mass.

**You have NO IDEA how nice the
Bee-Keepers' Magazine**

Is. Why not send for sample and see?
SAMPLE

FREE.

A 32 Page Monthly, 50c. per year. 9

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.

Do it if you dare!

Don't you send us your address unless you want to see a copy of THE BEE HIVE. It has 16 pages monthly, gives all the news in condensed form, costs but 25 cts. a year, offers a big line of bargains each month, and is full of "git up and git."

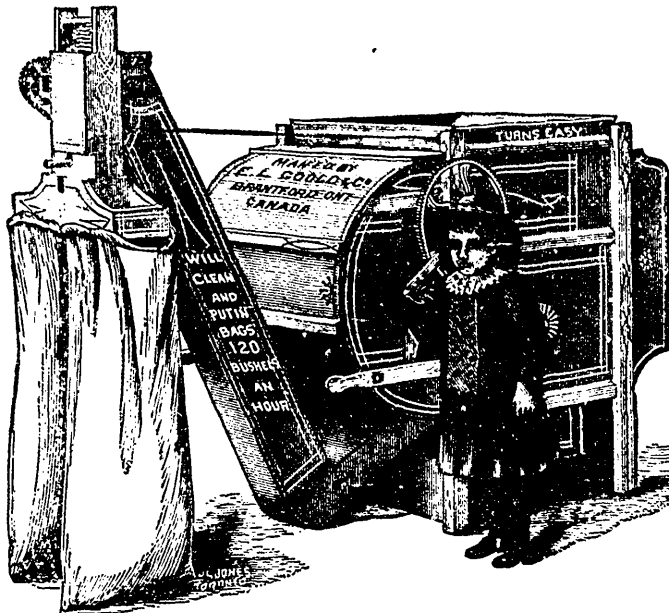
BEE HIVE, Andover, Con.

In writing mention "Canadian Honey Producer."

RUBBER PRINTING STAMPS for Bee-Keepers. Send for catalogue G. W. Bercaw, Fostoria, Ohio.

In writing mention "Canadian Honey Producer."

THE NEW BRANTFORD FANNING MILL, WITH BAGGING ATTACHMENT



Something New.

With this attachment on our mills the grain is cleaned and put in bags at the same time.

It saves grain, because it is not allowed to get on the floor.

It saves labor, because it takes less hands to do the work.

It is a splendid thing when one has no help.

It does not take up much more room than without it, and can be taken through the same sized doorway without removing it.

It can be taken off in one minute or put on in the same time.

It will clean and bag up from 60 to 120 bushel per hour. For price and further information write to

Agents wanted in all }
unrepresented districts. }

E. L. GOOLD & Co., BRANTFORD, Ont., Canada.

Tree Guards !

Protect your young trees from field mice by using Greening's Woven Wire Tree Guards. Size, 6 inches high by 5 inches in diameter.

Price, 3 Cents Each.

Sent to any address on receipt of price. Send 3 cent stamp for sample guard.

B. GREENING & CO.

VICTORIA WIRE MILLS,
HAMILTON, ONTARIO.

The AMERICAN APICULTURIST
Will be sent from October 1, 1888, to January 1, 1890, for 75 cents.

The details of a new method for REARING QUEENS IN FULL COLONIES without removing the queen, will be given to each subscriber. Sent for sample.

Address, AMERICAN APICULTURIST,
Wenham, Mass.

THE POULTERERS' 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, ^{SPACED} POULTERERS' PROFIT, YORK, PA.

RELIABLE
CATALOGUE
FREE

SEEDS

Our Illustrated and Descriptive Catalogue and Cultivators' Guide FREE. It contains all the latest novelties and standard varieties of GARDEN, FIELD, and FLOWER SEEDS, BULBS, ETC. Every Market Gardener, Florist, Farmer and Amateur should consult it before purchasing. Our stock is fresh, pure and reliable. Prices reasonable.

J. A. SIMMERS

SEED MERCHANTS AND IMPORTERS

147 King St. East, Toronto

Patent WIRED Comb Foundation,
Has no sag in Brood Frames and thin flat-bottom foundation, has no fish bone in Surplus Honey and bring the CLEANEST, is usually worked the QUICKEST of any foundation made. Circular and Samples free.

J. VANDEUSEN & SONS,
Sole Manufacturers, Sprout Brook, N. Y., U. S.

THE CANADIAN
HONEY PRODUCER.

Vol. 3. December, 1889. No. 10.

As stated in our last issue with this number expires the publication of the *Canadian Honey Producer*, and it is not without regret we have to make the statement. Every one will agree with us when we say the conditions as given in our last issue are such that we cannot hope to continue to publish a first class Bee Paper and rather than publish one inferior it is advisable to discontinue its publication. We in retiring wish our patrons and readers that which may be truly and in the highest sense best for them, be they seasons of prosperity or otherwise.

Our bees will be wintered in clamps outside. We are in the South West-erly part of Ontario and our bees here will have very many more opportuni-ties for cleansing flights than in most parts of Canada. Our cellar is not good and therefore thought it best to pack them in clamps. We are using sawdust. It packs better and the mice are not so liable to give trouble in such packing as in chaff. The clamps face the North West. The season has been a good one in spite of the long move in hot weather. Let us say here however many would have perished in that move had we not been with them to keep the entrances clear from dead bees.

The International American Bee Association Convention at Brantford will be a very large one. We trust many not attending will send their dollar as membership fee, and that a large sum may be set aside as a nucleus for a handsome sum to defray the expenses in connection with an Inter-national (not alone American) conven-tion of Bee-Keepers at no distant date to be it at the World's Fair, New York,

or some other place; let the Associa-tion decide this. The above idea is one which can be carried out, and more, it is one which doubtless would result in profit to all Bee-Keepers. So fellow Bee-Keepers help us with your dollar in a worthy cause.

Whilst not flinching in pointing out error, let us aim at harmony, peace and good nature at the great Conven-tion at Brantford, and let us remember that if one should so far forget him-self as to speak in a manner unbecom-ing no one else is justified in replying in that spirit. Let everything be said in the right spirit and all will be well, even should slight misunderstandings occur. We say this not because there is the slightest reason to believe that anything unpleasant will occur but because they sometimes do and a moment's reflection beforehand often aids one to self control.

James Heddon in reply to J. E. Pond's question.

"Is there anyone who can say that better average results have been obtained from the Heddon hive than from unpatented hives in use. Save and except the inventors and if so who are they." Says Senator R. L. Tay-lor, La Pieree, Mich., F. P. Styles, Haver-hill, Mass., and about ten equally prominent and expert Bee-Keepers say they have.

Mr. Heddon follows with an article for which we have no place, but insert this in justice to him.

Nov. 19th.—It will not be out of place to say if we have 300 at the Convention the reduced rates, will be single fare for round trip. The Secretaries of Societies affiliated have a few railroad certificates which should be used only when too late to have some from us; as otherwise they may be exhausted and one late in deciding to come may not be able to get one. There is a Telegraph Office here in Romney which we operate, so would get a message for one at the earliest moment.

Programme of the 20th Annual Convention of the International American Bee Association.

FIRST SESSION, 1.30 P. M. DEC. 4th.

Call to order by the President, Dr. A. B. Mason, Auburndale, Ohio, U. S.
Calling the Roll of Officers and Members.

Reception of New Members and Collection of Annual Dues.

Secretary's Report.

Treasurer's Report.

Report of Standing Committee.

Question Drawer.

SECOND SESSION, 7.30 P. M., DEC. 4th.

Addresses of Welcome and Responses.

President's Address.

Election of Officers.

Selection of time and place for holding the next Convention.

Miscellaneous Business.

THIRD SESSION, 8.30 A. M. DEC. 5th.

"Bee-Keeping an occupation for women," Miss H. F. Buller, Campbellford, Ont.

"Cellar, vs. Out Door Wintering,"

R. McKnight, Owen Sound, Ont.

Question Drawer.

FOURTH SESSION, 1.30 P. M., DEC. 5th.

"Shipping Queens," F. H. McPherson, Beeton, Ont.

"Disposal of the Honey Crop," Thos. G. Newman, Chicago, Ills., U. S.

Question Drawer.

FIFTH SESSION, 7.30 P. M., DEC. 5th.

"Cellar Wintering," S. T. Pettit, Belmont, Ont.

"Ridding Hobby Horses, Bee-Keeping a Recreation from other Pursuits and an Antidote for Disease," Earnest R. Root, Medina, Ohio.

Question Drawer.

SIXTH SESSION, 8.30 A. M., DEC. 6th.

"Warm Hives, how best attained," S. Corneil, Lindsay, Ont.

Question Drawer.

SEVENTH SESSION, 1.30 P. M., DEC. 6th.

"Alimentary System or Apparatus

of the Honey Bee," Prof. A. J. Cook, Agricultural College, Mich., U. S.

Question Drawer.

EIGHTH SESSION, 7.30 P. M., DEC. 6th.

Question Drawer.

Installation of Officers.

Adjournment.

Thos. G. Newman & Son, are out with a Honey Almanac, a really excellent and novel idea, and they say the following: "The Honey Almanac for 1890 has 32 pages filled with interesting facts, figures and suggestions concerning the uses of Honey for Food, Beverages, Cooking, Medicines, Cosmetics, Vinegar, etc. Also, its effects on the human system are tersely noted; a brief refutation is given of the Wiley lie about manufactured comb honey; a short dissertation sets forth the mission of bees in fertilizing the flowers, and increasing the fruit product. Instead of being an injury to fruit, bees are the fruit-growers' best friends.

Beeswax, its uses, how to render it and its importance as a commercial product, is described, and 17 useful Recipes are given.

Each alternate page is an illustrated calendar for the month—making a complete Almanac for the year 1890.

This Honey Almanac places in the hands of bee-keepers a powerful lever to revolutionize public sentiment, and create a market for honey, by making a demand for it in every locality in America.

Wisdom would dictate that a million of them be scattered by the first of January.

Prices: \$2.50 per 100; 500 copies for \$10.00; 1,000 copies for \$15.00, delivered at the freight or express office here. The bee-keeper's Card will be printed upon the first page, without extra cost, when 100 or more are ordered at one time. Postage, 40 cents extra per 100. All orders can now be filled as soon as received."

We can recommend the almanac to our friends.

CONVENTION NOTICES.

Streetsville, Nov. 8th, 1889.

There will be a special general meeting of the Ontario Bee-Keepers' Association at Brantford, Ont. on the 4th, 5th, and 6th of December, in connection with the International American Bee Association. The meeting will be in the Y. M. C. A. Hall, Colborne St. One and one-third fare return trip may be secured on the Grand Trunk and Canadian Pacific Railways, by applying for certificates to R. F. Holtermann, Romney, Ont. Members of the Ont. Bee-Keepers' Association please take notice.

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

AN INTERESTING CASE.—Who is Director. We find at Owen Sound Mr. N. Smith of Tilbury Centre was supposed to be R. E. Smith the supply dealer, &c., of the same place. R. E. Smith was elected a Director. It will now be interesting to note which one will be at the Directors' meeting. A more serious aspect of the case is that for the Ontario Bee Keepers' Association. What will they do with it.

The next annual meeting of the Ontario Bee-Keepers' Association will be held in the city of Belleville on the second Wednesday and Thursday, 8th and 9th of January, 1890. All members are respectfully requested to be present. There will be a good programme prepared.

The place of meeting in the city is not known yet, but there will be timely notice given.

Railroad certificates for reduced rates will be sent to any persons desiring to attend the meetings if they will apply for them.

W. COUSE, Sec'y.
Streetsville, Ont.

The Cost of Moving Bees.

The Rambler read Bro. Doolittle's article in *Gleanings* for Aug. 15th, page 666, on the cost of moving bees, and was placidly happy to see Dr. Mason get punched in such fine

style. "Why, yes," said we; what a preposterous idea for a doctor to advance! No wonder he is baldheaded. We wonder if he runs loose, and boards in a schoolhouse, as the boys say. Well, we smiled along down the column until the rambler was hit. We "riz right up," shook our fist in the air, and said we, "It's an outrageous imputation. We never said we could prepare a swarm, load it, go five miles, unload, unprepare it, all in four minutes. What does Doolittle take us for—a telegraph, a telephone, or a streak of greased lightning?"

After this effervescence we calmed down, and finally grasped the situation. We immediately leaned back in our chair, put our feet on top of the bureau, and went into a clairvoyant condition, and saw Bro. D. prepare a swarm for moving. First he got a milking stool and calmly sat down by the side of a bee-hive; then that little ornamental pile of stones was carefully laid on a newspaper (wonder if he keeps them varnished;) shade-board, cover, quilt and several other fixings were also carefully removed; then each frame secured, ventilation provided, entrance closed, etc., then the milking stool and man were transferred to the next hive for another half-hours' work, 25 cts. an hour. No sir, we wouldn't work that way for \$1.00 an hour. If we did our hair would all come out, and we should be as baldheaded as Dr. Mason.

Now, to get a colony ready real quick, use a closed-end frame. The Rambler uses such a hive. It is provided with a stand that can be used as a ventilating-rim for wintering or moving bees. Put on the veil, take a smoker, an extra bottom-board and rim, approach the hive, lay the bottom board on the ground, upper side down, place the rim upon it. This closes the entrance. Place the hive carefully upon the rim; pass a strong cord—several having previously been tied in the form of a loop—around the hive; take a few twists in it, with a stout stick and the job is done, and quicker than we have been writing it. We then take up the bottom-board and rim that have just been vacated, and proceed to the next hive. We can fix a hive in this way in the Spring in two minutes; but if prepared in the swarming season it would take longer; but even then the work could be so systematized as to be done rapidly.

Now, in answer to Bro. D.'s 25-cent-per-hour query, I would say, yes. I will work for 25 cts. per hour, in any bee-yard in the country, for one, two, or three months; 25 cents per hour for each day of 10 hours means \$65 per month. But the bee-keeper making a speciality of the business must reckon his pay so as to cover the entire year. At 25 cents per hour it would amount to nearly \$800. Now, I wish to ask how many bee-keepers having 200 colonies, and making a speciality of honey production, have during the past five years, averaged \$800 per year.

The Rambler's experience has been somewhat varied. One year in the five has been an \$800 year, while the rest have been nearer \$200; the average has been nearly \$400, or 12½ cents per hour.

The study and close attention I have put upon the business has put little bearing upon the wages. My knowledge of bee-literature, anatomy, and botany in all their relations to honey production will not enable me to get a greater yield of honey than is obtained by the illiterate man who has learned to manipulate his colonies to advantage.

We think Bro. D. makes the mistake of ranking bee-keeping as a profession. The professional man knows every morning when the clock strikes the hour for his labors to commence, just the routine to be followed; his pay is assured, so much per year. His study and preparation have been with the knowledge that he is to occupy just such a position all the year round. If the institution fails, he is sure to find a position in another.

If the professional man is a doctor, and he is skillful, he is sure of good paying patients wherever he may locate.

To be ranked as a profession, bee-keeping must get beyond the many uncertainties that surround it; and while I am a bee-keeper, I must be controlled in the matter of wages by the pay I would receive by labouring for those who surround me, and we will guarantee that 75 per cent of the bee-keepers of today are drawn from the ranks of the farmers; and should they give up their pursuit, they would drop back into those ranks, accepting the pay of a farm hand, or tilling their own farm, as they might be favored by fortune. Even at present the Rambler knows many

bee-keepers who, after the busy season is passed, hire out as farm hands at \$1.00 per day, and are glad to do it; and if the seasons continue as they have for the past few years, many not having the education for other pursuits will have to resort to sawing wood, carrying the hod, or feeding pigs.

We think Bro. D. and a few others are putting the business of bee-culture upon stilts, too high for it. It will not bear this elevation. The great mass of honey producers have to work hard for small pay; and how to lighten the labor and increase the pay is a problem that gives much food for reflection to the

RAMBLER.

Good friend Rambler, we might have had an opinion that you were one of the slow and easy sort of people, as rambler's are quite apt to be; but if you can fix a hive in the way you describe, in two minutes, I guess we shall have to give it up. Have you timed yourself by the watch, or do you guess it would be about a couple of minutes? I agree with you in regard to wages. There is another point you have not yet touched upon. Those who get 25 cents an hour are usually located in the city, where expenses are far different from what it costs for board and lodging on a farm. Nowadays one is almost looked down upon if he looks for a hotel where he can get accommodations for only a dollar a day. Now, one who has to pay about a dollar a day for board certainly can not hire out for the wages paid to farm laborers. The average farmer gets board and lodging for perhaps less than 25 cts. a day, therefore he can afford to work at a low price. Whenever I get back from one of my trips I always feel an additional degree of satisfaction with both bed and board at home. We have just what we want to eat at home, and a good bed to sleep in. Our meals do not cost 50 cents apiece nor does a good comfortable bed cost half a dollar, or two dollars or more if you take a Pullman sleeper. Give me a farm or the suburbs of a country town, rather than the city with all its privileges.

The British Bee-Journal.
DE QUIBUSDAM.

May I, after a long interval, again offer a few remarks under this heading on some

matters of interest to which attention has lately been drawn in the *Journal*? I am not sure that I did not some time ago write on the subject of "Judging Honey," which has cropped up again. It is not too soon to think about it, if so be something may be settled during the forthcoming winter, and I venture to think, after some experience as a judge and as an exhibitor, that the judging should be by points. How is it possible sometimes to judge between rival stands of dahlias, for instance, without this method? But as this principle may be affected by local circumstances, such as the greater or less variety in the sources of the honey crop, it would appear well if bee-men from different localities would not hesitate to offer their views for what they may be worth. Mr. Gibbins says we have to judge an article "intended for sale," and this truth may be put more strongly by saying that we produce honey (at least the bees do, *sic vos non vobis*) for consumption—our own and our friends, if we have any to part with.

On this broad ground, then, it might be thought that in all cases "flavour" should carry the greatest number of points. But in the case of sections should not this be modified? The flavour of wax must to a certain extent combine with that of the honey. We may sample the latter almost alone without making an offensive mess of the exhibit, but the purchaser buys the comb honey for consumption. He looks for a well-filled section, with cells sealed to the wood, clean and tidy in appearance. What filthy things I have seen staged! They might have contained excellent honey, but the sight of them was too forbidding. Then let the judges look most keenly to "completeness and finish," to "attractive appearance" and "uniformity." The latter term I would apply not only to size of the sections (that, of course,) but to that of cell, and of apparent production about the same time and from the same flow. I would allow no dressing with ornaments. (Beauty when unadorned is adorned the most.) Let us have only a neat show-stand, in which completeness and finish can be plainly seen. To my eye evenness of the lot and individual finish constitute part of the attractiveness. I don't think 'density' need be more than recognized, and I would, in short, arrange the 20 scale thus:

Flavour and aroma.....	3
Attractive appearance.....	5
Completeness and finish.....	5
Colour of honey and combs, &c.....	3
Uniformity.....	3
Density.....	1
	20

Or I would be quite willing to give the '1' of density to uniformity.

In the case of bottles, where you have not to deal with wax, 'flavour' is of course more important, indeed the chief consideration, and it is hardly possible to contemplate a case in which the best-flavoured honey did not get the first prize. Of course it might have been so badly got up, and the bottles so imperfectly filled, &c., that it was 'nowhere,' while the owner was able really to supply the most delicious honey in the district. Here would be a case in which the consumer need not, and that of the judges would, differ. But no blame to the latter, for we are at the exhibition stand, not at the breakfast or tea table, and as the palate is affected by the sight, we look for the article being well put out of hand, and especially that it be of good consistency and brilliant. Aroma will be found to follow flavour and colour to a great extent. Not to continue my prolixity I would give—

Flavour.....	6
Colour and brilliancy.....	4
Consistency.....	4
Attractive appearance.....	3
Uniformity.....	2
Aroma.....	1
	20

Under "brilliancy" we encourage freedom from other matter which got into the article under old-fashioned methods. Consistency is important, because you do not want an article that runs all over your plate, as some well-sealed stuff does this year; and I would not let a dozen bottles lose on the ground of uniformity if they were made up of two half-dozen, each as good as the other, though differing in certain points, and evidently shown with an object. I own I can make nothing satisfactory of "density," and it would not be amiss if we had a *glossary* of terms used in judging.

I have not touched on the *standard* of

flavour, which varies with localities, and the taste of judges varies with it. Thus those brought together from distant localities can hardly be expected to agree, and there must be a certain amount of judges law. Many would not like strong heather; I cannot say that I appreciate Canadian linden, and should give the palm to something *distinct but mild*.

I can quite corroborate what you say under "Late Queen-cells." Michaelmas daisies, in their succession, are much frequented by bees, but they are never more busy on anything at any time than on *ivy* at present. Rain does not deter them, unless it be quite severe, and they work long hours. So lately as the 12th inst. I found old brood-nests quite filled with glistening nectar, except the few cells which the queens had been able to secure to lay in. One of these queens was a pure fertilized Carniolan, hatched early in July in the apiary of 'Amateur Expert,' who kindly sent her to me on August 17th. Writing respecting her introduction he said: If you have a very vicious stock, you will probably introduce this queen to them to cure their tempers. Allow me to warn you, you will not succeed. Bees partake of the characteristics of the workers who nurse them far more than they do of the mother that lays the eggs from which they hatch (I of course refer to temper and working qualities.) Perhaps some of your correspondents may like to remark, with your permission, on the influence of foster parents.—C. R. S.

South Cornwall, October 24th, 1889.

P. S.—I am shocked at the length to which I have run, but I am in your hands. I may, however, adopt the plea of another correspondent, as this is only the second time I have written during the year.

Gleanings in Bee Culture.

FUMIGATING HONEY.

DR. MILLER TELLS WHEN AND HOW TO FUMIGATE WITH BRIMSTONE.

So much has been said lately about brimstoning honey, and the plans in general are so troublesome I am now tempted to give my way, although I have given it before. It is a very simple matter. Just get some powdered sulphur, light a match and set fire to it, and that's all there is of it. No dipping rags in sulphur, nor any preparation what-

ever. Within two minutes after the sulphur is brought from the store I can have it slowly blazing away, needing no further attention till the last atom is consumed. Although there is scarcely any trouble about this, I take some pains to avoid any danger from fire. Let me give you the minutiae of my last experience, which does not materially differ from that of several years. We were getting our crop of honey ready for shipment; and trusting somewhat to what I had read of the experience of others, I had said, "This honey has all been taken off so properly, is so white and nice, and there is not one section in a thousand with a cell of pollen, that I don't believe there is any need of smoking it." But after scraping a good many sections we began to find here and there the tell-tale bits of powder that showed the little worms were at work there, even though we could not see them with the naked eye. So we concluded the remainder must be smoked before any more were packed in cases.

I said to my wife and Emma, "Now don't let me ever again omit fumigating. Those who say there is no need of it have different bees, or something different from mine, and it is just possible that, if they watched the matter closely enough, they would find some of their sections are wormy before they reach the table of the consumer."

So I got a pound of powdered sulphur. The roll brimstone is cheaper, but a great deal more troublesome to burn. The sequel showed that a pound was not enough for so large a room; and, to tell the truth, I don't know what is the right amount. If too much is used, some of the sections are made green; and even with too small an amount used, a few sections were slightly greened. It must make some difference as to the amount of honey in the room. Suppose you have a room measuring ten feet each way, and you find just the right amount to sulphur a single section, will it not require a less amount when you fill the room just as full as you can with sections? When the room is about empty, if it contains 1000 cubic feet of air it may be filled so full of honey that it shall contain less than half the air; and are you not to gauge the needed amount of sulphurous vapor by the volume of air to be saturated? If the honey is smoked within ten days or two weeks after leaving the hives, much less,

sulphur will answer than a month later. After the worms have attained full size it seems almost impossible to affect them with any amount of sulphur.

But, to return. I have an old kettle, worthless for ordinary purposes, which is placed on a dripping-pan turned upside down. The kettle has a capacity of perhaps 16 quarts, and is filled a quarter to a third full of ashes. On these ashes stands another kettle of much smaller dimensions. In this latter I put the pound of sulphur. Making a kind of little dish in the top of the pile, I stuck in it a lighted match, and as once there was a little melted puddle on which a blue flame was playing. I covered over the whole affair with a warn-out milk pan, both for greater security against fire, and so that it would burn more slowly. It was placed near a window, so that I could look in and see what was going on. The sulphur was lighted at about 6 in the evening. At 10 p. m. a line of blue could be seen burning away under the edge of the milk-pan. I then went to sleep and did not look at it again till 12, when it had burned out. Next morning doors and windows were opened some time before the room was aired out fit to breathe in.

ROBBER-CLOTHS.

Friend Root says he didn't see any robber-cloths when here. No, we didn't need any; and, indeed, robbers troubled very little this year. Still, we did need them later in the season, and they were then used, but not very much. In the revised Langstroth, Dadant & Son include among "the utensils needed for neat extracting on a large scale," two robber-cloths. Although I believe the robber-cloth is my own invention, I am always glad when it is not needed.

C. C. MILLER.

Marengo, Ill.

The editor in a foot note adds :

Well, doctor, if I had found evidences of worms in the sections, as you did, I should, without question, resort to the sulphur fumes; but so many have of late said they did nothing of the kind, and never saw a moth worm anywhere about the whole crop, that I had begun to think it was not necessary; and even now I do not believe I should think of fumigating until I saw some evidences of the moth worm. I would, however, keep an eye on the crop for several weeks after it is taken from the hive.

Membership to the N. A. B. K. A., An International Bee-Association at the World's Fair in 1892.

A letter just received from Secretary Holtermann will explain itself. It reads as follows:

FRIEND ROOT:—I should like to see the International American Bee-Keepers' Association what it should be; and it should have in its treasury, funds to defray the expenses of an international convention at no distant date, say during the World's Fair in New York, 1892. As I have before said, who knows the grand results which may be secured from a convention of bee-keepers of the World? To do this we must commence at once; and I propose that every one who can, shall send one dollar as membership fee to the international for the coming year; and as far as I am concerned, if the surplus be voted to me for the work of the past year, I will turn it over to the treasurer, to remain as funds of the association. Surely very many will be found who will indorse this scheme, or something like it, and send their dollar. We should no longer have an empty treasury.

R. F. HOLTERMANN.

Romney, Ont., Nov. 1889.

We most heartily indorse what friend Holtermann says. It has been said several times and with some truth too, that the N. A. B. K. A. in its meetings is largely a local affair. If we can not secure the attendance of representative bee-keepers from all parts of the United States, let those who are interested in the success of the Association send in their one-dollar membership fees. The programme as announced elsewhere in these columns promises to be interesting, and friend Holtermann has left no stone unturned to make the meeting a success. In regard to the international at the World's Fair, we feel sure that we ought to begin to think somewhat of the matter. We want an exhibit at that fair which will be a credit to our industry in this country. We also want an international convention, international in name and international in reality. It will be a fine thing if French, German, English, Italian, Spanish and American bee-keepers (and that includes Canadians too) could rub against each other in one grand brotherhood of representative world's bee-keepers. We should like to hear what our European cotemporaries think of the matter.

Since writing the foregoing, the following, from the pen of the president of the association, has come to hand :

FRIEND ROOT :—Please say in next GLEANINGS that several in Canada and the United States have suggested to me that it would be a good plan to request those who attend the convention at Brantford next month to take along with them samples of both comb and extracted honey, say one or two pounds, so that we may see and taste honey from different parts of America. Those not in attendance, and so desiring, could send theirs to the convention (care of the secretary, charges paid) each package marked, kind of honey, price in their market and owner's name. The convention could appoint judges if they thought best. I like the idea myself, and will "second the motion."

A. B. MASON, PRES.

Auburndale, Ohio, Nov. 7, 1889.

The idea is a good one, and we will second the motion, and we feel sure that every other member will do so by bringing along with him samples of honey produced in his locality. We should like to have the convention test some of the nice alfalfa honey mentioned elsewhere. We hope that friend Ball, or some other bee-keeper of that irrigated district, will favor the convention with their presence, or at least with samples of their beautiful honey.

VARIOUS MATTERS.

CRATING HONEY SO AS TO HAVE EACH CRATE WEIGH AN EVEN NUMBER OF POUNDS.

Years ago when I first began to put up honey for market, I paid no attention to having the amount in each crate weigh an even number of pounds, but I put an even number of boxes in each crate, and in weighing them I marked each crate by the quarter pound. That is, if a crate weighed 30 lbs. 3 oz. it was marked $30\frac{1}{4}$ lbs. ; and if it weighed 32 lbs. 6 oz. it was marked $32\frac{1}{2}$, thus making the $\frac{1}{4}$ the nearest to the one which it weighed. I followed this plan for several years, when I saw some labels advertised, to paste on each crate, which gave the weight of the gross, tare and net, in ounces. These seemed to me to be handy, so I sent and procured some of them, using them the next year. In sending in returns that year, not a single commission merchant said anything about the ounces, except to grumble about the way I had marked the honey, and advised me to

make my crates in the future weigh an even number of pounds, if I would obtain the best prices for my honey, and save them much annoyance and vexation. The next year found me making each crate weigh an even number of pounds, which thing I have kept up ever since, and in no single instance have I had returns made for a pound less than I shipped. As long as glass was used on each section or box, the matter was very simple ; for all I had to do was to sort out the thin glass into piles of the right number for a crate, and the thick ones in the same way, till I had the number of piles that I would have crates of honey. These piles were now weighed, and a label put on each one, telling what it weighed, so that, when the sections of honey were brought out for each crate, and placed on the scales, the pile of glass was taken which would make the whole weigh an even number of pounds when the glass was placed on the honey. By adding this to the tare of the crate I had the gross weight, or just what the crate weighed when it was all ready for market. Later, on when it was not desirable to glass the honey, I sorted the pile of honey all over, placing all the lighter sections in one pile, all of the medium in another, and all those that were extra well filled or the heavy ones in the third. I would now take all the sections for a crate from the medium pile, which would contain the larger bulk of the honey ; then if they did not weigh an even number of pounds I would exchange some of these medium sections for either the light or the heavy ones, as the circumstances might require, till the right amount was secured. I know this is a little work, but I have been satisfied that it well paid me for so doing. Having just crated my honey for market, and thinking that I had never given this item before, led me to do so now. Try it, brother and sister bee-keepers, if you have not already done so, and see if you do not think this a good way.

NON-SWARMERS.

I see in GLEANINGS of Sept. 15th, that the editor thinks that the plan I gave to prevent swarming would be the same as "hiving the new swarm and setting it on top of the old one, then in a few days destroying the queen-cells below and shaking the bees and queen in front of the lower one." Not so ; as, in this latter case, the bees and queen are on

the brood which they had before they swarmed; while in the plan I gave, the bees below would be building comb in the lower hive the same as would any swarm hived in an empty hive, while the brood above would be hatching (with few bees to cover it) and coming down below, so that the strength of the colony would be kept at the highest pitch all through the honey harvest, while during the first 21 days the queen would have all the cells built by the bees to occupy with eggs. I think all will see that the two plans are very different; the first having an uncertain element in it, while the latter places them in that certain condition generally enjoyed by all new swarms during the first 25 days after they are hived.

CUTTING OPEN QUEEN-CELLS TO SEE WHEN
THEY WILL HATCH.

On page 754 of same number of *Gleanings* are found some of the points of merit the queen-cell protectors possess; but there is one thing not mentioned there which has been of some service to me, which I believe has never been mentioned. All remember how, in former years, they have been grieved when obliged to spoil one of two nice queen-cells which were built so near together that they could not be separated without cutting into one of them so but that the bees would tear it down and drag out the immature queen. Well, I was not long in finding out that a queen would hatch just as perfectly from a cell having one side gone, if the same was placed in a cell-protector, as she would had the cell been whole, for I have had scores of them hatch perfect queens from such mutilated cells. After finding this out it occurred to me that, if I did not know just when a queen would hatch from a given cell, all I had to do was to remove it from the protector (or do the same before it was put in) and open the cell at the side near the base, look at the immature queen, and put the cell back in again. From curiosity and for experiment I have many times opened a cell to that extent that I could turn the queen out in my hand, look her all over and place her back again; and where care was used I have never known one to fail of hatching a perfect queen afterward. After having looked inside of a queen-cell several times, or turned the embryo queen out in your

hands, any one can tell almost to within a fourth of a day when they will hatch. This gives quite an advantage over the past, for many times we have waited for days for the hatching of a cell which finally never hatched at all, on account of the larva dying from some cause or other. G. M. DOOLITTLE.

Borodino, N. Y., Oct. 7th, 1889.

The American Apiculturist.

Extracting.—When to begin and
when to stop.

JAMES A. GREEN.

If a beginner in bee-keeping should ask me the above question I should be strongly tempted to answer, "Never begin at all and stop right there." I would not say this, because I am not one of those who say uncompromisingly "the extractor must go." I believe the extractor has its place and it is an important one. I should be tempted to say it, because it seems to me that many beekeepers are producing extracted honey at a loss not only to themselves but to others; perhaps more especially to the others. But there are many situations where the production of extracted honey will be found more profitable than that of comb, and the proper combination of the two systems will give better results than either alone. However, this is not the place to discuss this question. We will suppose that you have decided to produce extracted honey.

The proper time to begin extracting is when all the crop has been stored in the hives and the hurry and worry of the honey-flow are over.

To begin with, your hives should be capable of being tiered up to any desired height. A hive that will not admit of this is not suited to the profitable production of honey and is especially unsuited for extracting. When honey begins to come in put on a set of empty combs. As soon as this becomes nearly full, raise it up and put another set on between it and the brood-chamber. Continue this as long as any honey comes in.

At the end of the honey-flow you have your honey piled up on the hives and can extract it at your leisure. By giving an abundance of room at all times there is no interruption of the labors of the hive and no honey is lost for want of a place to store it. Swarm-

ing is very largely if not entirely prevented. You are not hurried to take care of the honey during the busy hours of the honey-flow and can thus care for more bees if you choose. It is true that this method of producing honey, which was made public by the Dadants, requires a larger stock of hives and combs than when the honey is extracted whenever the bee-keeper thinks it is fit—which is generally too soon—but these will pay a large interest on their cost and will be found cheap in the end.

With me, the time to stop extracting is when I have all the surplus combs emptied of honey.

It should never be found necessary to extract from the brood chamber, and if this is not too small I generally find enough honey for winter stores.

Dayton, Ill.

American Bee Journal.

Comparison of Italians and Blacks on Red Clover.

Do Italian bees work on red clover more than the black bees do?—P.

Yes.—M. Mahin.

Yes.—A. B. Mason.

Yes.—J. M. Hambaugh.

Yes.—Mrs. L. Harrison.

I think so.—R. L. Taylor.

Yes they will.—J. P. H. Brown.

Yes, decidedly.—C. H. Dibbern.

It is so reported.—H. D. Cutting.

Yes, undoubtedly.—Dadant & Son.

Yes. My experience says, five to one.—G. M. Doolittle.

Certainly! There is no doubt about it, in my own mind.—J. M. Shuck.

We have but very little red clover in Louisiana, but I never could detect that bees ever gathered from it.—P. L. Viallon.

Yes, more than the black bees; but not more than Syrian or Cyprian bees.—A. J. Cook.

Yes, I think that they do.—A. J. Cook.

Yes, I think that they do; but neither works on it to any extent.—Eugene Secor.

It is so claimed, but I suspect that the difference is not so very great.—C. C. Miller.

Yes, sir, they do; but they do not work on

red clover as much as certain crosses between the two races.—James Heddon.

All the evidence is in favor of such an idea. As for myself, I have never tested the matter, all that I know is, Italians under the same conditions, give me far better results than blacks.—J. E. Pond.

I think that they do. Some years back I had a fine Italian queen (from a noted breeder in New York) whose colony stored 100 pounds of comb honey, all from a 30 acre field of red clover, about $\frac{1}{2}$ mile away. A number of black colonies that I had, failed to store any surplus. I believe, however, that there are strains of brown bees with a trace of Italian "brood," that do good work on red clover.—G. L. Tinker.

In my locality Italians work on red clover more or less every season; and in my experience of over forty years, I have never seen a pure black bee at work on red clover blossoms. Further, I have made inquiry of a number of old men of observation, and I have never met a man who has seen black bees at work on red clover. I am aware, however, that black bees do sometimes work on red clover in the North, where it grows much less luxuriously than it does in Kentucky.—G. W. Demaree.

It is said that Italian bees have tongues long enough to reach the nectar in red clover. They may get honey from it in a dry time, when the clover heads are small. Once we had a ten-acre field of red clover away out at the back of the farm. Mr. Chaddock told me that the bees were "just roaring" on it. I did not go out to see, but I went to the hives and everything was quiet. There were partly-filled sections on the hives, but they did not get any fuller, and I watched them day after day. I think that the bees smell the honey in the red clover, and try to get it—perhaps they do get a little, but not enough to put in the sections. The best plan is not to count on honey from red clover, and then if the bees do get any honey from it, consider it an accident and be thankful.—Mahala B. Chaddock.

Yes, they certainly do; but neither Italian nor black bees work on it, generally, to a very great extent, unless the bloom has been hindered by cold weather, and the stem of the flower is shortened thereby.—The Editor,

The Bee-Keepers' Advance.
**Several Aids to Wintering—All
 fail when the Food is Poor
 and the Bees can't fly.**

BYRON WALKER.

Friend H. your letter of recent date, together with REVIEW for August, at hand. Yes, you have reason to be proud of this number, in fact the REVIEW is a decided success in the field it aims to fill, and deserves a liberal support.

I agree with the correspondents referred to, that in introducing the special topic for the September number, you have covered the ground so fully, that but little remains to be said; and although I have had a large experience covering nearly all sorts of packing, and methods of preparation, there is really not enough remaining to be said to make it worth while to attempt an article on the subject. I will merely mention a few points that I have found important.

A wide entrance to the outside box, taking care that this is not deep enough to admit mice. An entrance protector made of two right-angled triangular pieces of inch board and a piece of thin board as wide as the longest side of these blocks and a little longer than the entrance to the outside box. This stands on a projection of the bottom board during stormy weather, and also serves a good purpose as an alighting board when needed. High, close wind-breaks on the north, east and west sides of the winter quarters; that on the north side being much longer than the others. This serves not only as a protection from winds, but helps also in raising the temperature at times favorable for giving the bees a flight. Hives, of course are supposed to face the South, when by raising the covers and giving the hives a pitch to the front, this object is facilitated. Shading the hives during Winter and Spring, when otherwise the bees will be likely to fly, when cold winds or light snows render this undesirable. Dark colored packing boxes put together with Quinby corners. This shortens the labor of packing and unpacking, and adapts the parts for use as shade boards during summer. Of course the covers of packing boxes must be water tight, and material for packing likely to retain moisture (such as fine sawdust) is to be avoided es-

pecially at sides and ends. More than one inch space beneath frames is not desirable, and is likely to hinder building up colonies in the Spring. The top packing should be so arranged as to allow of a free circulation of air above it, and also, so as to be quickly handled in a body to aid a rapid examination.

The absence of good stores when the opportunity for occasional flights during winter can't be had, will be certain to render all other precautions useless.

Wauzeka, Wis., Aug. 16th, 1889.

The Bee-Keepers' Review.

**Good Stores and Protection tell
 the Story of Successful Out-
 Door Wintering.**

J. H. LARRABEE.

In any discussion of the subject of out-door wintering, Vermont should, I am sure have a voice. All over the state, but more especially in the Champlain valley, bees are wintered out of doors. Whether those who inaugurated this system did so with a full knowledge of all the advantages to be obtained with light hives and cellar wintering, I know not, but the fact remains that scores of bee-keepers here practice this method with scarce a desire for a change.

It may be that, as Mr. Elwood said recently in the *Review*, our valley is favorably situated, the cold being tempered by warm breezes from the lower Hudson region, but an examination of the meteorological observations of the signal station at Burlington would convince many that this effect is not too apparent.

But there are other reasons beyond the control of the average bee-keeper, why our bees winter so successfully.

The character of the honey used for winter stores is generally of the best, as so little fall honey or honey dew is obtained that the major part of the winter stores, if of honey, must be of the white honey crop. This same lack of autumn forage also renders late breeding light and frees the combs of much surplus pollen. It is no rare occurrence to find no brood of any kind in the hives by the first of October.

Winter flights are very desirable at a proper time, but may be injurious. A good

flight during December is beneficial, but one between January 10th and the middle of February is often extremely injurious as breeding is induced; and should no flights occur until after the first of April, as often happens, dysentery may be the result.

If spring protection is of sufficient importance to repay all the trouble of providing, packing and cases for large apiaries like Mr. Heddon's then should we who winter in chaff hives, congratulate ourselves upon having obtained this protection without an hour's extra labor.

The increased consumption of stores in outdoor wintering is, I am quite sure, not as apparent at the opening of clover bloom as on the first of April; as honey is, I contend, consumed in much larger quantities at this season by colonies wintered in the cellar than by those wintered in the open air.

One word more with regard to the method of packing in use here. The material may consist of almost any porous non-conductor of heat; chaff and planer shavings having the advantage of lightness, are the general favorites. Care should, I think, be exercised that the packing be perfectly dry, that it may absorb as much of the moisture of the bees as possible, moisture being feared next to poor stores as a cause of winter loss. The packing is held in place by an outer case consisting of two rims of about ten inches in width each, with a good gable roof on top. These rims are about three inches larger inside than the brood chamber, leaving that amount of space for the packing.

After the close of the honey season, the bees are left as much as possible to themselves, the only care being that they have sufficient stores for the winter, until about the first of November, Fall "tinkering" and excitement being avoided as detrimental. At this time the brood chamber cover is removed and a piece of burlap or cotton placed upon the frames and the top filled with packing to the depth of about six inches. Formerly this super packing was used loose but now sacks, or trays with cloth bottoms, are used to hold the chaff or shavings. These sacks are very handy in Spring when upon some warm day it is desired to examine many colonies. The packing is not removed until settled warm weather, and then only from

the top, the sides remaining packed throughout the year. This packing at the sides I consider an advantage even during the sultry days of basswood bloom.

In answer to the argument of cumbersomeness, I will simply say that nearly all of the improved methods of management at all seasons of the year may be practiced with chaff hives without the moving of a single one. How this may be done could form the subject of many long articles.

Last winter I wintered ninety-six colonies out of doors in chaff. On the first of April all were alive, one was queenless and one dwindled during April as a result of late "tinkering."

Larrabee's Pt., Vt., Aug. 20th, 1889.

American Bee Journal.

Bee-Stings for Rheumatism.

Dr. Terc, of Vienna, Austria, has again tried bee-stings on rheumatic patients. Upon saturating the patient's system with the bee-poison, the rheumatism disappeared—not to return again for a long time. Dr. Terc has applied his remedy in 175 cases, and has inflicted 39,000 stings, and now keeps a colony of bees on his premises, to be employed in this work. So says an exchange.

American Bee Journal.

Doolittle on Queen-Rearing.

Queens can be reared in the upper stories of hives used for extracted honey, where a queen excluding honey board is used, which are as good, if not superior, to queens reared by any other process; and that, too, while the old queen is doing duty below, just the same as though queens were not being reared above. This is a fact, though it is not generally known.

By employing these methods, colonies are never queenless, and no queenless bees need be bothered with, by uniting them with other colonies, or otherwise.

If you desire to know how this can be done—how to have queens fertilized in upper stories, while the old queen is laying below—how you may *safely introduce* any queen, at any time of the year when bees can fly—all about the different races of bees—all about

shipping queens, queen-cages, candy for queen cages, etc.—all about forming nuclei, multiplying or uniting bees, or weak colonies, etc., or in fact everything about the queen business which you may want to know, send for "Doolittle's Scientific Queen-Rearing ;" a book of 180 pages, which is nicely bound in cloth, and as interesting as any story. Price, \$1.00.

Gleanings in Bee Culture.

A COLONY TOO LARGE.

I have a swarm of bees in an eight-frame Simplicity hive. I think the swarm is too large to winter in the lower story. Will it be all right to leave the super crate on during winter, nearly half the boxes being capped? I winter in the cellar. I don't care to divide the swarm, as all of my hives are full of bees from top to bottom. This swarm has made three crates of capped honey since August 16, a good per cent of it being from second-crop red clover grown for seed.

F. B. DAY.

Leaving the section on top will answer just as well, and, in fact, some years ago a great many reported having had better success in wintering where the sections were left on all winter than where they were taken off. I never saw a swarm too large for wintering, or summering either, in my opinion; but I think I should leave the extra powerful colony out in the air, unless, indeed you have a cellar well ventilated and pretty cool. Be sure they have stores enough. If there is any doubt about it, perhaps another story filled with combs of honey would be safer, especially as your hives are only eight-frame. Of course, it will cost something to winter such a colony; but my experience has been that when wintered, they are worth two ordinary colonies, and sometimes even three.

Honey Almanac for 1890.

Just the thing needed to create a demand for honey at home. Bee-keepers should scatter it freely. It shows the uses of honey for Medicine, Eating, Drinking, Cooking, for making Cosmetics, Vinegar, etc; also uses of BEESWAX. Price, 5 cts.; 100 for \$2.50; 500 for \$10.00; 1,000 for \$15.00.

THOS. G. NEWMAN & SON,

923 & 925 W. Madison St., - CHICAGO, ILL.

The Illustrated HOME JOURNAL

An Elegant Monthly for the **FAMILY AND FIRESIDE,**
At \$1.00 a Year.

Printed in the highest style of the art, and profusely embellished with Magnificent and costly Engravings.

THOMAS G. NEWMAN & SON,
PUBLISHERS
923 & 925 West Madison St., CHICAGO, ILLS.

It is a moral and intellectual educator, and is invaluable in every library, as well as a very attractive and inspiring ornament in every drawing-room. Each issue contains 36 pages.

Its stories are elevating in tone, as well as charmingly thrilling and captivating; its historical and biographical sketches are fascinating and delightful; its Department for "Our Young Folks" is enticing and alluring; and its miscellaneous matter exceedingly interesting. All who examine it are sure to become regular subscribers. It captivates them all.

A Sample Copy will be sent free, upon application to the publishers.



(16-page Weekly) - \$1.00 a Year.
IS the Oldest, Largest, and Cheapest WEEKLY BEE-PAPER in the World. SAMPLE FREE.

THOMAS G. NEWMAN & SON,
PUBLISHERS
923 & 925 West Madison-Street, - CHICAGO, ILL

SPECIAL OFFERS for 1889.

WE CLUB

The CANADIAN HONEY PRODUCER with the following Papers:

	Regular Price	Club Rates
The Weekly Globe and Canadian Honey Producer,	\$1.40	\$1.15
The Weekly Globe and Rural Canadian (2 \$1 papers) and C.H.P.,		1.50
The Weekly Mail and Farm and Fireside, and C. H. P.,	1.40	1.15
The Weekly Empire Premium Bust and C. H. P.,	1.40	1.15
The Montreal Weekly Witness and C. H. P.,	1.40	1.00
If the Premium Picture, 'Christ before Pilate,' is desired with the Weekly Witness, 25 cts. extra.		
The Canadian Live Stock Journal and C. H. P.,	1.40	1.15

PREMIUMS.

Any one sending us the following number

yearly subscriptions for CANADIAN HONEY PRODUCER at 40c. per year will receive the following :

8 subs a C.H.P., 1 year Montreal Weekly Witness.
10 " " " The Weekly Globe.
10 " " " The Weekly Empire.
13 " " " Weekly Mail and Farm and Fireside.
10 " " " Canadian Live Stock Journal.

NOTICE.—All subscriptions must be paid for in advance. Renewals may count the same as new subscribers. All arrearages must be paid for before advantage can be taken of these premiums.

Look Here!

75 cts. pays for the WESTERN APIARIAN AND QUEEN BREEDER'S JOURNAL. Only Bee Paper published on the West Shore.

WATKINS & McCULLUM.

Box 87, Plansville, California.

CARNIOLAN BEES.

Pleasantest Bees in the World.

Hardest to Winter.

Best Honey Gatherers.

In order to introduce not only the bees but our paper, "THE ADVANCE,"

We offer to any one who will send us \$1.25, a copy of our paper and a nice Carniolan queen. The queen alone is worth \$2.00.

Ad dress,

"THE ADVANCE," Mechanic Falls, Me

FOUND AT LAST.

A preservative that will keep eggs perfectly fresh the year round. It costs a little over a cent a dozen to preserve them. For particulars, address,

DR. A. B. MASON,
AUBURNDALE, O., U. S.

In writing mention "Canadian Honey Producer."

Bee Books AT OR BELOW COST!

	Regular Price.	You can have for.
Quimby New Bee-keeping,	\$2.00	\$1.40
Dzerzous Rational Bee-keeping,	2.00	1.40
Dzerzous Pamphlet,	15	10
The Blessed Bees,	75	50
Bees and Honey, by Newman,	75	50
A. B. C. Bee Culture Paper, (old edition.)	1.00	75
Langstroth on the Honey Bee,	2.00	1.40
Cook's Manual of the Apiary, (old edition.)	1.25	90

We have a small stock of the above books which we are anxious to dispose of. In ordering mention this list unless you desire others.

Address, E. L. GOOLD & CO., Brantford, Ont.

BEEES FOR SALE.

Twenty Colonies of Bees in first class condition for sale. All or a part may be purchased. Apply,

E. L. GOOLD & CO.,

Brantford, Ont.

DO NOT READ THIS

But if you are in need of supplies of any kind send to J. and R. H. Myers for their catalogue, or send 70cts. for 1 Clark "Cold Blast" Smoker, free by mail.

Our Foundation is made from "selected yellow" Bees-wax.

Yours truly,

J. & R. H. MYERS,
STRAITFORD CITY APTXK.

Box 94.

The Bee-Keepers' Review.

A 50c. Monthly that gives the cream of Apicultural Literature; points out errors and fallacious ideas, and gives each month, the views of leading bee-keepers upon some special topic. Three samples free.

W. Z. HUTCHINSON, Flint, Mich.

50 Colonies of Bees for sale—L. Frames.

Address,

WILL ELLIS, St. Davids, Ont.

Foundation Press.

We have for sale a GIVEN FOUNDATION PRESS, DIES PERFECTLY NEW and for the Langstroth Frame. Price on application.

Address,

E. L. GOOLD & CO.,

Brantford, Ont.

PELHAM FOUNDATION MILL, SECOND HAND.

Makes first class foundation. MUST BE SOLD. Price, \$10.00. A bargain.

Address,

E. L. GOOLD & CO.,

Brantford, Ont.

JAPANESE BUCKWHEAT.

Bee-keepers we can supply you with a limited amount of the above buckwheat, celebrated as a honey producing plant and producing large and abundant grain per acre.

Per bushel, \$1.75; half bushel, \$1.00; quarter bushel, 50 cts.

Orders filled in rotation until exhausted.

WILLIAM GRANT,

DIRECT IMPORTER OF

British and Foreign Dry Goods,

Fine Woollens, Gentlemen's Furnishings, &c.

MANUFACTURER OF

Millinery, Mantles, Costumes, Ready-made and
Custom Clothing, Shirts, Collars, &c.

COLBORNE STREET, BRANTFORD, CANADA.

Carpets, Oil Cloth,
Matting, Curtains,
Black & Colored Silks,
Satin, 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.

Walking Sticks,
Umbrellas, Carpet
Bags, Valises, 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,
Balbriggan, Lamb's
Wool. Gloves in Kid,
Dog, Napa, Buck and Lisle.

Handkerchiefs,
Braces, Scarfs,
Bows, Socks, in
Endless Variety.

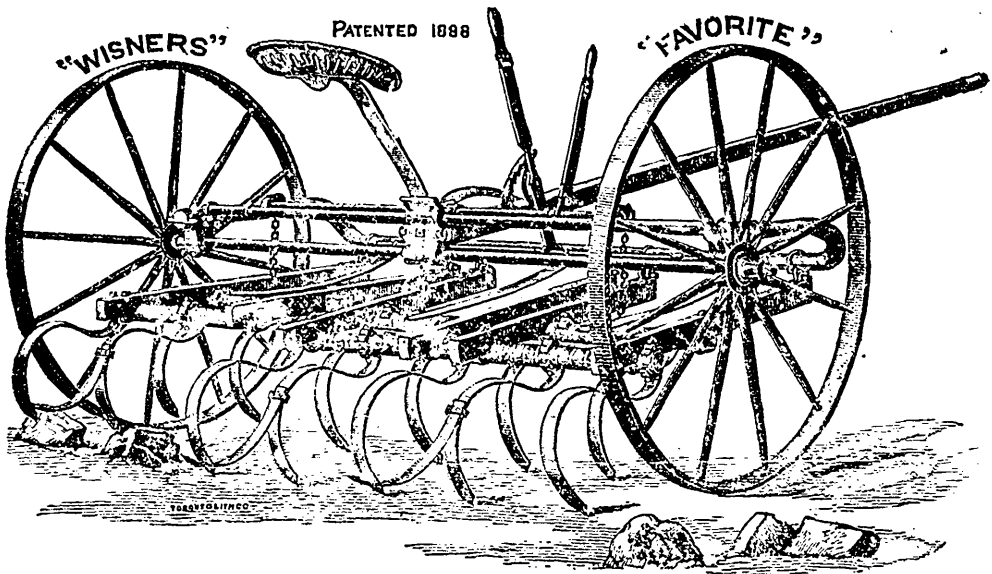
Lawn Tennis, Cricketing,
Boating, Bathing Suits,
Hats in Felt, Silk and
Tweed, Pith Helmets, Caps
in cloth, Silk and Lustre

Manufactured on
The Premises,
Costumes,
Mantles, Millinery

FAMILY MOURNING.

WILLIAM GRANT,
Brantford, Ont.

WISNER'S 'FAVORITE'



Patented and Manufactured only by

J. O. Wisner, Son & Co.,

Brantford, Canada.

ALSO MANUFACTURERS OF

**GRAIN DRILLS AND SEEDERS, SULKY HORSE
RAKES, HAY TEDDERS,
AND SPRING TOOTH HARROWS.**

SEND FOR NEW ILLUSTRATED
CATALOGUE.