Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

	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	\square	Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
	Coloured maps /		Pages detached / Pages détachées
	Cartes géographiques en couleur	$\overline{\mathbf{A}}$	Showthrough / Transparence
	Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)	\Box	Quality of print varies / Qualité inégale de l'impression
	Coloured plates and/or illustrations / Planches et/ou illustrations en couleur	[]	Includes supplementary materials /
	Bound with other material / Relié avec d'autres documents		Comprend du matériel supplémentaire
	Only edition available / Seule édition disponible 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		Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / II se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été numérisées.
	marge intérieure.		

 \checkmark

Additional comments / Commentaires supplémentaires: Continuous pagination.

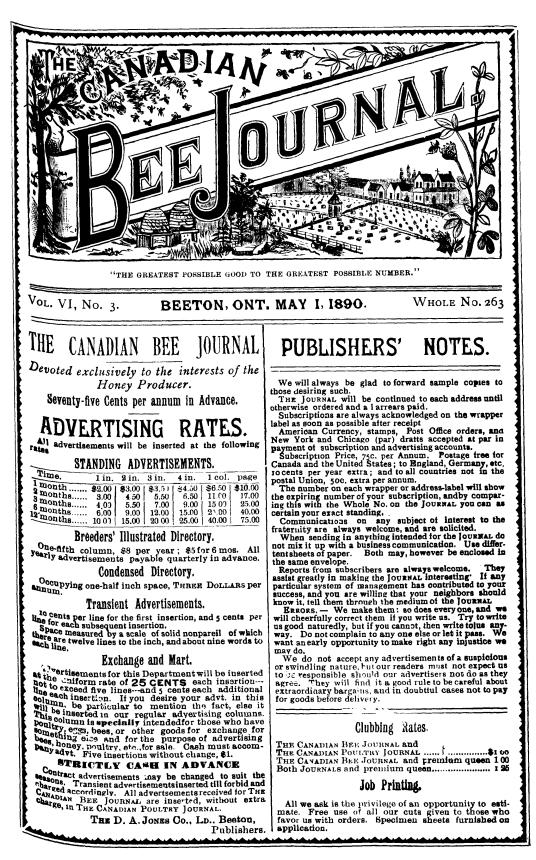




TABLE OF CONTENTS.

	-
A Special Request	58
A Spring Report	58
A Seeker after Light	63
Artificial Pollen for Spring	62
A Preventative for Robbiog	64
Brace Combs a Necessity	54
1966s Working april 19th	633
$\nabla \mathbf{u} \mathbf{u} \mathbf{u} \mathbf{n} \mathbf{n} \mathbf{n}$ $\mathbf{u} \mathbf{u} \mathbf{n} \mathbf{n} \mathbf{n} \mathbf{n}$	65
vommendations	67
Widing Swarms which Cluster together	63
44 Gracting Unrine Honey	54
feitile Workers	65
40nev Remedy for Canada or Colds	6.1
Poney Dew for Wintering	65
440Dev as Ree-water for Horses	65
Augustrial Prize Ligt	60
Valighton Ree-keeperg	-50
VILLATIO BRASK CONCERS Association	55
Fainting Hives	50
* Jeserving Frillf in Honey	6.3
~preacing Broods a cause of fow Brood	51
Some Friendly Criticisms	56
belling out of Winter Quarters	66
	54
wo met ous of fastening covers and buttom bear is	
	64
Using old southous	61
Width of Separators	66

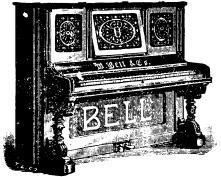
BARNES' FOOT-POWER MACHINERY



Read what J. J. PARENT, of Charlton, N. Y., says-"We cut with one of your Combined Machiner Estwintercc chaft hives with 7 inc: cap. 100 hchey racks, 500 broac frames, 2000 loney boxes and a grest deal of other work This winter we have double the number of bee hives, etc. tc make, and we expect to do it all with this saw. It will do all you say it will." Catalogue and Price List free. Ad ress W.F. &

JOHN BARNES, 541 Ruby St., Rockford, Ill 21





QUALITY, FIRST-CLASS, TONE, PURE and BRILLIANT, DURABILITY UNAPPROACHED, CATALOGUE FREE.



50 or 60 Colonies of Bees and a lot of Supplies for sale; also, if wanted, 28 acres of valuable land for sale or rent, eight acres un er cultivation. Location central ard one of the very best for honey. Best market in Canada. Sold zooo lbs honey retail during Nov., Dec. and Jan without soliciting orders. Satisfactory reasons for seling. It is a fine place, too, for poultry, and an excellent market.

Or, will engage a FIRST-CLASS bee-keeper to care for bees and land, must be temperate and honest Give references, experience, age, nationality, and all particulars. State salary wanted Address

C. F. BRIDGMAN MENTION THIS JOURNAL FERNTON, MAN

Entrice inits soonand PERMIC

The Bee-Keepers' REVIEW A 50-cent 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. Send for them, and learn how to get the back numbers cheaply. W. Z. HUTCHINSON, Flint, Nich.

Bee-Keepers Guide MANUAL OF THE APIARY.

This fitteenth thonsand much enlarged and more richly llustrated than previous editions. It has been fully revised, and contains the very latest in respect to beekeeping. Price by mail $\$_{1.50}$. Liberal discount to dealers and for clubs.

A. J. COOK, Author & Publisher, STATE ACRICULTURAL COLLEGE, LANSING, MICH.



Tested Carniolan Queens

We have just purchased all the Tested Carnolian Queens John Andrews, of the late firm of Andrews & Lockport, has now wintering in his too colonies. excepting those ordered prior to February 37th, 1890. These queens are to produce no bees showing yellow bands, and are to be shipped in May. Anyone in need of a fine breeding queen early in the season should correspond with une, or anyone inter and in the Carniolan bees should reation catalogue iseribing these bees. Address THE ADVANCE, Mechanic Falls, Me.



CONDENSED DIRECTORY.

Advertisements under this heading, occupying onehalf inch space, three dollars a year

O. J. PUTNAM, Leominster. Mass. has for sale several fine cockerels and pullets, B P Rocks. won 1st 2nd and 3rd on pullets, and 2nd on pen at Ayr Jan. 14 to 16 1890. Eggs \$2 per setting. MENTION THIS JOURNAL

BIRDS, Parrots, Dogs, Ferrets, Cats, Monkeys, Rab-bits, Bird Eyes, Goldfish, Song Restorer, Tray Cages, Distemper and Mange Cure. Wilson's Big Bird Store, Cleveland. Ohio.

POULTRY-MEN-Do not order your spring circulars or in factiany kind of printing until you have first asked us for samples and estimates. The D A JONES CO,, Ld., Beeton.

SEND your address on a postal card for samples of Dadant's foundation and specimen pages of "The Hive and Honey-bee," revised by Dadant & Son-edition of '89. Dadant's foundation is kept for sale in Canada by E. L. Gould & Co., Brantford Ontario CHAS. DADANT & SON. Hamilton Hancock Co. III.

W. COLE'S Black Minorcas. I have bred those W · birds for 5 years and they are as good as any in Canada, United States or England. 1889 pullets; 94 949 913; 144, 96, 96, 96; occkerel 954, J Y Bicknell, judge-Figgs for batching \$3 per 13 or \$5 for 26. WM. COLE.

HOLY LAND QUEENS. Home and imported raised a specialty. Bees by the pound and frame queens by the dozen. MENTION THIS JOURNAL. GEO D RANDENBUSH 445 Chestout St. Reading Pa.

(1) WILL BUY a test d Italian or Heddon strain queen under 2 years old. \$1.25 will buy a tested I alian or Heddon strain queen under 1 year old. The Italians are mostly from one of Doolittles \$10 queens, and the Heddon strain from selected stock. Can -hip at once. G A DEADMAN, Brussels, Ont

Muth's Honey Extractor.

"ortection Cold Blast Smokers, Square Glass Hone" "(s. etc. Send ten cents for "Practical Hints to Bee Keepers." For circulars apply CHAS, F. MUTH & SON.

Cor, Freeman & Central Avenues, Cincinnat

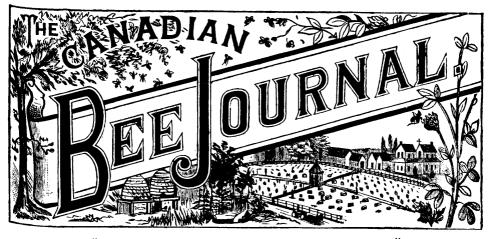


J. & R. H. MYERS, Box 94, Stratford, Ont. MENTION THIS JOURNAL.



BEST and cheapest Bees. 35 colonies of choice Italian and Hybrid Bees at from four to five dollars per colony in L Hives; in healthy condition. 5 per cent off on all orders accompanied by oash or part cash before the 20th of April.





"THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER."

Vol. VI, No. 3.

BEETON, ONT. MAY I, 1890.

WHOLE No. 263

THE CANADIAN BEE JOURNAL ISSUED 1ST AND 15TH OF EACH MONTH.

D. A. Jones, EDITOR-IN CHIEF. F. H. MACPHERSON,

ASSOCIATE EDITOR.

EDITORIAL.

7HIS paragraph is for you. Don't o pass it and think it is intended for some one else. Now we'll tell you what it is. The Minister of Agriculture has kindly agreed to issue a special bulletin regarding Foul Brood, and a complete list of names must be procured and sent to the Department at once. We have undertaken to make up the required list, and to have it as complete as possible, we ask each reader of the C. B. J. to send us at once a full list of the names and post office addresses of all bee keepers known to him within a radius of 20 miles, whether they keep I colony or one hundred. Do not let this request Pass by without attention, thinking that your neighbors will do the work for you. It half a dozen bee-keepers live in the same vicinity just hold a little meeting and prepare a joint list. Above all, do it immediately, as we must have the list ^{Complete} by the 10th of May. Do not be afraid of putting down a name be-Cause you think a bee keeper in the next town will do so too; we will see that the final list does not contain duplicates. This applies only to Ontario.

The membership of the Ontario Bee-Keepers' Association at this date is 250. We want to see the Association 300 strong by the first of June.

The value of honey imported into the United Kingdom during the month of March, 1890, was £2029. It would be interesting to know just how much of this went from Canada.

Fire has destroyed the bee-hive factory of G. B. Lewis & Co., Watertown, Wis, causing a loss of \$15,000, with insurance of \$4,500. This will be very trying at the present moment. We hope our friends will soon be able to resume business.

We regret to observe the death notice of Mr. H. Chapman, Versailes, N. Y., who passed away, April 8, 1890, at the age of 80 years. His name will be known to bee-keepers of future years as the one who introduced the Chapman Honey Plant to the public notice.

We trust that Ontario bee-keepers will not be slow to take advantage of the services of the Inspector of Apiaries under the Foul Brood Act. Any beekeeper, no matter whether a member of the Ontario association or not, may ask for, and receive, the services of the Inspector, by applying to the president, Allen Pringle, Esq., Selby, Ont.

GENERAL

Extracting Unripe Honey.

Correspondent writes, urging that attention should be given to condemning the practice of "extracting honey before it is capped." He says : "This, no doubt, would explain the immense yield some get.' This matter has received considerable attention in the past, and it has found many able advocates, chief among them being Professor Cook, who maintains that honey extracted in the unripe state. can be just as thoroughly ripened by artifical as by natural means. He objects, however, as strongly as anyone else to the practice of offering unripe honey for sale, as do all of the beekeepers. This is where the trouble really lies. It is true that the practice has something to do with the yield—it has a good deal to do with it—and it is a perfectly legitimate means. It stands to reason that if a colony is saved the time of capping over hundreds of square inches of comb, that it will gather just that much more honey, and if properly ripened after being extracted, the honey will be as good as if left in the hive until capped over by the bees. We certainly condemn the practice of extracting honey until the bees have commenced to cap the cells over, but we should not feel justified in objecting to this, providing the honey thus taken be thoroughly ripened before being offered for sale. But we do most strongly oppose the practice when not carried out as we propose. Let us hear from all who have suggestions or advice to offer in this direction.

For THE CANADIAN DEE JOURNAL.

Thick Top Bars-Brace Combs a Necessity-Spreading Brood a Cause of Foul Brood.

DON T think the thickness of top-bar makes any difference with brace-rombs. Bees will go more readily into the sections when thin top-bars are used; my top-bars are 3 in h thick. All that can be done in the matter is to clean out the brace combs before putting on sections, scrape the bars very clean and keep the bee space right. After all, what hurt do brace-combs do any way. The bees will put them in, and they work better with them in, and they know better than we what they want them for ; perhaps they are used for ladders to climb up on, any-way they seem to be a connecting link, which though a seeming nuisance to us, still have a purpose to serve which we may not know, and I have learned to let them alone. Everything can't run just as we want it at all times, and if we indulge the bees in some of their whims, I don't think we always lose by it. My bees seem to think more of their home if I am not so particular how they manage it. If I should be a hen-hussy, and boss my wife concerning little household affairs, how would it be? Keep an eye on the general outcome of matters and let the bees detail their business as they choose, and the result will be satisfactory. Sections will be glued, and you can't help it; if they fill them with honey can't you afford to scrape them ? Don't try to find a kind of corn that needs no husking. You can't expect bees to gather your honey and carry it to market. We have got our part to do, and the bee-keeper who is not afraid to work will succeed. When bees stop gathering glue they will stop gathering honey, and every invention tending to hinder their glueing is a block thrust under the wheels of progress. Inventions can be carried too far in some directions. There is wisdom in knowing when to stop inventing.

SPREADING BROOD CAUSES FOUL BROOD.

I am quite sure that many of the ills which afflict mankind are due to inventions which handicap nature's laws; then, as a natural result, remedies have to be or are sought to cure the evils which can only be cured by returning to our allegiance to the laws of nature. I am convinced that mismanagement is the causes of most diseases in man or beast. Foul-bread becomes a marked and chronic disease only when our management has caused it to be. Nothing annoys me so much as to see some gilly go to his bees on a chilly day and over-haul, manipulate and tumble them up for about two hours, and above all practise that most absurd of all things : spreading brood, and then when his bees get foul brood, commences to holler for remedies, giving them one thing after another, conscience only knows what, anything and everything he happens to find in his jugs from lamp oil, to Texas only knows what, and then flood the journals with all his trash, about what he has tried and what he thinks of it, and expects others to be interested in such reading. I wish Doc. Mason would lick every such gilly he finds to ding with his bees on cold days.

Ovid, Erie Ch., Pa. JOHN F. GATES. There is a good deal in what you say

with reference to the use to which the bees put brace combs. We have found in actual tests, in cases where we have removed brace combs from between the brood frames and honey-board and the honey-board and supers, that the bees crewded up more rapidly in the colonies which we left intact. The suggestion you make with reference to spreading brood causing foul-brood, is, we fancy, a statement not borne of experience. It no doubt has something to do with what we call "dead-brood," which some people mistake or foul brood, but we have tried in vain to make foul-brood by placing larvae in all stages in the hive when the bees could not get at it, allowing it to die. We tried this thing a whole summer, and though the odor from the decaying brood could be distinctly detected any place in the apiary, yet we could not produce the disease. We do not wish to make light of the evil of "spreading brood" in cold weather, but we wish to place on record our experience in the direction we have indicated.

Ontario Bee Keeper's Association.

URSUANT to the call of the Pres-ident a meeting of the Di the O. B. K. A. was held at the

Albion Hotel, Toronto, on Wednesday, 23rd inst. There were present: President, Allen Pringle; Vice-President, F. A. Gemmell; Treasurer, R. McKnight; Secretary, W. Couse; and Directors, S. Corneil, J. B. Aches, W. Brown, A. Picket, C. W. Post, P. Bussy, F. A. Rose, J. K. Darling and F. H. Macpherson.

The minutes of the former meeting were read and adopted.

The applications for the positions, of Foul Brood Inspectors were then read, and after due consideration Mr. Wm. McEvoy, Woodburn, was appointed Inspector, and Samuel Bray, Alliston, Sub-Inspector.

The following By law was then presented and passed through its various readings, and the Secretary instructed to submit it to the Minister of Agricul-^{ture} for confirmation :

"Be it enacted by the Directors of the Ontario Bee Keeper's Association, and it is hereby en-

acted : That the remuneration of the Inspector or sub-inspector (as the case may be) shall be four dollars per day, while actually at work under the the instructions of the President, and actual railway and stage fare and livery hire.

2. The Inspector or sub-inspector shall prepare and transmit to the secretary of the association a detailed statement of his work for the Association yearly, such statement to be verified by oath and to be in the hands of the Secretary at least three days previous to the annual meeting of the Association.

3. The Inspector and sub-inspector shall conform to all the rules and regulations of the Association made for their guidance.

4. The Inspector or sub-inspector shall conform to the directions of the President as to disinfecting his derson and clothing."

The question of the distribution of a pamphlet treating of Foul Brood as mentioned on page 1133 of the BEE JOURNAL was introduced by F. H. Macpherson, who stated that he had interviewed the Deputy Minister of Agriculture, suggesting the advisability of the government undertaking to issue a special Bulletin, in which should be embodied a description of Foul Brood. and kindred diseases, the cure for the same, and a sumary of the Act, showing the penalty for non-attention to the requirements of the law in respect to this disease, and that the Deputy-Minister had kindly consented to do all that had been asked of him providing the Association should furnish the matter for the proposed pamphlet, and he suggested that a committee be appointed to formally and officially wait on the Minister of Agriculture in connection with the matter.

On motion of Mr. Corneil, a committee, composed of F. A. Gemmell, F. H. Macpherson, D. A. Jones and the President, was appointed to wait on the Minister of Agriculture, said committee to prepare the subject matter for the pamphlet, and to do all else necessary in the premises.

After some routine business, the meeting then adjourned.

The committee appointed to wait on Hon. Mr. Drury, Minister of Agriculture, made an appointment with that gentleman for three o'clock, when Mr. Drury willingly confirmed the action of his Deputy. It will therefore be but a

short time until information regarding toul brood may be in the hands of every bee keeper, if the readers of the Canadian Bee Journal will do the plain duty of the moment promptly and cheerfully, as mentioned editorially, viz: prepare and send to this office a complete list of names of all bee-keepers known to them.

For THE CANADIAN DIE JOURNAL.

Observations.

I am not well. I've had the grippe, and it's left me with a beautiful legacy in the way of an influenza. In my spavined condition I know that what I write won't be sense, especially since I've seen the editor's remark that he guessed I was able to take care of myself. Т really ought to be in the hospital. I sit here with my pen in one hand, and a handkerchief in the other, and the hand that is engaged in transcribing my noble thoughts has much less to do than the handkerchief one, so if you should slide down the column that you pay me for-in goodwill-and don't stub your toe on one idea, please believe that for this time all my ideas have gone off to the wash.

**

I observe that some fellow who styles himself "Number Two" is writing for the C. B. J. now. Who is he, and what right has he to encroach on my territory of writing under a *nom-de-plume*? Isn't he trying to manufacture under my "patent," and haven't I as much right to "kick" as Henry Alley had on page 1063-4, Vol. 5, where he goes for me because I innocently remarked that the "principle" of his self-swarmer was "as old as the hills."

I've read the *Apiculturist* a good deal, and I've always been of the opinion that a man had better never fall foul of any subject which Mr. A. claimed the credit of originating—if he wanted to live at peace with him. What did I say any way? Simply that the "principle" was "old." Nothing about perforated metal, wire cloth, or anything of the sort—Why, then, all this fuss? I only hope it will work out successfully, but I have my doubts. **

I've attended a fair or two in my time, and I must confess I am not partial to the one-judge system, What a chance there is at connivance between the judge and the superintendant of the department, if either or both were so inclined. An awful tale was told me by a man who was a large exhibitor at various fairs, of

how at one fair he attended and exhibited atthere was such a connivance as I have mentioned. How a superintendent in one department got a superintendent from another department to show certain exhibits in the name of the latter (though owned by the former), and then how the judge was given a "pointer" and acted on it. And the curious part of it wasthat the last named superintendent wasn't in that line of business at all, and thus the thingleaked out. There would be no chance of anything like this, where there was a trio of judges---unless they were all "utterly bad."

* * Did it ever strike you that bee-keeping is further advanced in this province of Ontarior than in any other country on the face of the globe? I do not mean by this that we are ahead of all others in our methods of production, but that the business is looked upon as a standard of industy by the government. I know of no other country where a bee-keeper's association is recognized by, and subsidised by the Legislature of the country, nor of any association which is is more efficiently conducted than our own. What are the aims and objects of other similar societies? Perhaps much the same as our own, but there are none which have the power to act or the influence to further any scheme, having for its object the interest of the bee-keeping community, such as we have. Truly the bee-keepers of this province have cause to be thankful.

If Mr. Alley will let me live you'll hear from me again.

OBSERVER.

For THE CANADIAN BEE JOURNAL. Some Friendly Criticisms.

HE young man, Locke, in his efforts to establish the American Apiculturist, conceived and put in to practice the "Query"

plan in apicultural journalism. As the plan has been developed by the American Bee Journal, and the CANADIAN BEE JOURNAL, it has become a central feature as an educational factor in bee journalism. Numerous answer⁶ to a very simple question must necessarially suggest a valuable thought. I know this to be true from the letters I have received touching matters drawn out by these queries, I having contributed to these departments from the beginning. These queries go out to numerous bee-keepers and apicultural writers for answer⁵ and each must rely on his own knowledge and experience to answer them. He must answer without any suggestion from any other souro than his own cranium. Herein is the "tug of war." The editor is an exception however, for if he answers he may profit by what is before him, and I think his "comment" would be more in place than his answer if he cannot Possess his soul. To me these answers are an amusing study because of their illustrative character as to comprehensions. The proper thing to do is, when a question is to be ^{answered}, first look all around it and decide What was in the mind of the querist when he Penned the query, then answer the question as Adhering to the points on which information is asked. To what extent this essential rule is followed in the query department will be made manifest by the following criticism.

We take query 258 in CANADIAN BEE JOURNAL of April 1st, 1890. The querist asks :---

"What thickness of comb in section will the bees cap quickest at top and sides, and top and bottom of sections."

Now when looking for the meaning of the Query I take it that the querist was aware that When sealing section combs, bees do not commence at the top as they do when storing honey in brood combs but invariably commence to Seal in the middle of the combs, and finish around next to the wood last. His question relates to "section combs," and finally he Wants to know what thickness of comb gaged by Width of section, will contribute most to rapid sealing of the honey clear out to the wood all around. The question indicates that querist was well aware that bees Are, if not usually, sometimes slow to cap the ^{Outside} cells next to the wood, and he is seeking ^a remedy. Hence the question.

Mr. Doolittle's answer comes first on the list, and his answer is: "One-and-five-eighth inches." Does Mr. D. really intend to say that just "One-and-five-eighth inches" answers the question.

Wm. McEvoy says: "I don't know." This is better than a guess would be.

Prof. A. J. Cook refers to his answer of query 256. There he refers to quality and quantity, matter not embraced in the query under consideration.

Allan Pringle, says: "The narrow ones." His answer indicates that he understood the question, but his answer is indefinite.

Dr. Miller saw through the question but he went at it gingerly: "I should think the binnest comb would be filled and capped the "oonest." This is awfully indefinite. He "begs the question."

J. K. Darling: "Could not say, but would think brood comb thickness, seven-eighth inches." Why brood comb thickness? Bees ways build store comb thicker than they do

brood comb if they have the room to gratify their instinct.

A. B. Mason: "They will cap thin combs sooner than thick ones." Is this true if all the conditions are relatively the same in each case? I think not. The Dr. does not understand the latter part of the question. Has he never observed that the cells next to the wood at top bottom and at the sides of the nearly finished sections sometimes remain full of unsealed honey till the apiarist gets impatient waiting for the bees to finish their job. I have often seen the like and may have complained of the same thing.

J. F. Dunn: "I prefer that the honey in sections should be about nine-eighths of an inch in thickness." He fails to understand the question. The question did not relate to preference.

H. D. Cutting had "La grippe," and is excusable for not "understanding the question."

G. A. Deadman: "They would no doubt cap cells one-quarter of an inch, quicker than those of one half inch, etc." This is putting it too fine. It is contrary to my experience. The question is certainly not reached.

Jas. Heddon: "One-and-one-half to one-andthree-quarters in the sections contains the thickness of comb which the bees will seal the quickest and most completely one time with an other." With the qualifing terms added the grounds are pretty well covered here.

Eugene Secor: "I have thought that comb built in sections one-and-one-half to one-andwhree-quarter inches thick would be capped sooner than where the cells are longer, &c." No doubt this is true in the main but it "begs the question" after all.

J. Alpaugh: "A thin comb will be filled and capped before a thick one." True, if the surface is the same, but not so if the thin comb has extra surface to make its capacity equal to the thick comb. I believe Mr. Alpaugh is correct when he says that "a thick comb will be filled to the wood and capped before a thin one. Mr. Alpaugh saw through the question and went straight for the "point blank" hit or miss.

It would not do to criticise my own answer. I am satisfied that thick nectar rapidly gathered will be stored and sealed most rapidly. And when the nectar is thin there will be delay in sealing the combs because time is necessary to evaporate it to proper consistency. But these facts do not answer the question only in part. But they go to show that no certain thickness of comb in sections, will cure the trouble embraced in the query.

J. E. Pond: Mr. Pond is a trained lawyer

and knows how to look a question all over, but that "close spacing" hobby of his has turned his brain totally round. Come again, brother Pond. Your close spacing is all right, but stick to the question.

THE PRIZE SCHEME IN THE A. B. J.

"Number Two," under the head of " jottings," in the C. B. J. of April 1st, makes some very sensible remarks about the outcome of that laudible enterprise of the A. B. I. As I look at the matter the editor acted in all good faith in his management of the affair. His plan guarded against possible partiality on the part of the "judges," as the signatures of the writers were removed before the articles were put in the hands of the judges. But after that precauif I had been one of the judges tion. I think I would have recognized the "hand write " and expression of most of the articles.

The question was "Extracted Honey," and why all three of the awards were given to manipulation, "nothing new under the sun," the "judges ' only know. I am not usually troubled with inquisitiveness, but I think I would engage to pay the prizes just to see in print the names of the judges and all that was said and done in this matter. As to who got the prizes is a very little matter, but it is so awfully easy to track along after manipulation. Since volumes have been written on that subject, the glory fades into shadow. But there are fields in connection with extracted honey as to its nature, quality, food, medicine, etc., etc., that have not yet been explored. Were those judges practical bee men? will always be an unanswered question.

G. W. DEMAREE.

Christiansburg, Ky., April 10, 1890.

FOR THE CANADIAN BEE JOURNAL. A Special Request.

OW that the Foul Brood Bill has become law it is deemed advisable to publish and distribute a pamphlet among Ontario bee-keepers briefly and comprehensively treating of foul-brood-its causes and best methods of treatment, and cure; including also a copy of the Foul Brood Act.

As the Minister of Agriculture has kindly consented on behalf of the Ontario Government to print and mail the pamphlet as an official Bulletin on condition that we supply the names of Ontario bee keepers and the manuscript matter for pamphlet ready for printer, in order to get a complete list of such names we must apply to and ask the co-operation of all of the j Ontario readers of the C. B. J. Let every reader you put over the frames in the bee-

send in at once to the JOURNAL office the names of all the bee keepers he knows of in his district.

> ALLEN PRINGLE. President O. B. K. A.

FOR THE CANADIAN BEE JOURNAL.

Selby, Ont.

A Spring Report.

NOT ONE DEAD OUT OF 315,- PAINTING HIVES.

ERE is my winter report along with some other things. I prepared 57 colonies last fall for out-door wintering, by putting

a large box over each hive and filling in about four inches of forest leaves. I put 258 in my cellar (which filled it almost as solid as an ice man packs away his ice,) and all have come out alive and in good condition. I do not expect any of them to spring dwindle, as I have not had any of this since I came to St. Thomas. I have always wintered in a warm cellar, which accounts for it. The bees come out much healthier when wintered in a warm cellar than when wintered in a cool one; but my cellar was unusually warm this winter, having so many hives in it, coupled with the mild winter. I kept the thermometor about half way between the ceiling and floor, and it stood nearly all winter between 54° and 56°. Mild spells it would run up to 60° ; and never went below 50° .

UNPAINTED HIVES BEST.

I have not painted my hives for four years and I wish I could now scratch the paint off the ones that have it on. I find the unpainted hives are not so cool in spring and fall as the painted ones, and not so hot in the summer. I find the walls of a painted hive in the spring and fall when the nights are cold, will be quite wet inside while the unpainted ones are not 50 bad

FACE HIVES DIFFERENT WAYS.

I used to face my hives all the one way (to the south) when I took them out of the cellar, and in nice rows, every way you could look at them. That was when I was more nice than wise. If those fellows that want to paint their hives different colors and intermix them to save the loss of young queens, would just leave their hives unpainted, and face them in every conceivable direction, not more than three together facing one way, they would have but little trouble.

JACOB ALPAUGH.

St. Thomas, Ont., April 13, 1890.

It would be really interesting to have an article from you telling us just how you put up your bees for winter; if you use loose bottom boards; what

cellar, and all other particulars. We do not think we have had any description such as this from you in the past, and as you are so uniformly successful, your method will be of much value. As to Painting hives, our time is so taken up that we are seldom able to get our hives painted before they are needed for swarms, so that nearly all our colonies are in unpainted hives the present year. We have not as yet discerned the decided difference you speak of so Positively, and there may be a good deal in it. We shall observe. Mr. R. McKnight says it is not necessary or desirable to have ventilation through the sides of the hive. His ideas are given in the following article:

For THE CANADIAN BEE JOURNAL. Painting Hives

_____ bd-man.bd __

ES, I paint my hives. I would as soon leave my front fence unpainted as my hives. Whether "paint interferes harm-

fully with ventilation" depends upon the means provided for ventilation. If ventilation be needed above, below and around the hive, then paint is an interference to some extent. I don't think it necessary or desirable that air be admitted through the whole surface of the hive, otherwise the bees would not prevent this by propolizing the interior surface of the hive. It may be admitted that they know what is good for themselves. A writer in some of the bee papers lately stated that unpainted hives afford better ventilation than painted hives, that they look just as well and last as long. The first statement may be true, the last is contrary to experience and common sense.

R. McKnight.

Owen Sound, Ont.

We must contend, as does Mr. Mc-Knight, that an apiary of painted hives looks a great deal better than a lot of unpainted ones.

For THE CANADIAN BEE JOURNAL. Lambton Bee-Keepers.

HE members of the above association assembled in Butler's Hall, Wyoming, on Thursday, April 10. There was a large attendance, considering the very bad state of the roads.

Atter reading the minutes of the previous meeting, calling the roll of members, and re-Ceiving the report of the Secretary Treasurer,

ing to the handling and management of bees. The first question being :

HOW BEST TO PREVENT SWARMING.

Mr. J. B. Aches said that excessive swarming could be controlled, but it was a hard matter to totally prevent it. He thought the best way was to give plenty of room and practise the storifying system. Some bee-keepers practiced caging the queen.

The president said there were a number of different principles to prevent swarming :

1.-Give them plenty of room.

2.-Keep them well shaded.

3.-Caging the queen.

4.-By practising the Heddon process (which method he followed).

Everybody present took a lively interest in the discussion, and the novice was strongly advised not to attempt the caging process.

SHADE VS. SUN FOR HIVES.

The first discussion led to one on the above subject, as to whether bees would do as well sitting in the shade as in the sun. The decision was to the effect that they did not.

AFTERNOON SESSION.

HOW MAY BEES BE WINTERED WITH THE LEAST AMOUNT, OF HONEY.

Mr. Grainger liked his bees to have plenty of honey during the winter, and have them good and strong in the spring. He, last fall, put away two colonies, one a hybrid and one an Italian; both were put away alike, and he could not see any difference in the amount of stores consumed.

Mr. Aches said that quite often a nucleus, or small colony, would consume more honey than a large one. He had wintered on five pounds of honey, but again another winter the same colony would consume 20 or 25 lbs of stores. For cellsr wintering he liked an even temperature.

The president liked a circulation of air through the celiar. A general discussion followed on ventilation.

AGE OF QUEENS.

Mr. Brown thought that two years was the limit-that old queens were likely to cause fertile workers.

None of the other members could agree with him, all holding to the idea that after a queen became mated, she during her life had the power of laying both worker and drone eggs; the cause of fertile workers was on account of the absence of a queen.

HOME MADE HIVES.

Whether was it best for a beginner to manuthe convention entered on a discussion pertain. | them of someone experienced in making them? facture his own hives, or should he procure

Mr. Brown thought best to engage some one with more experience. He sent to A. I. Root for his.

Mr. Aches thought it advisable to purchase a model hive of some standard size, and go by it. He had used the Heddon hive, and was fairly well pleased with it.

QUEENS-NATURAL VS. ARTIFICIAL.

The next question was, what kind of queens do you think most of? Those raised by force or by natural swarming.

The opinion was that queens reared under the swarming impulse were best, but just as good queens could be reared artificially by the experienced bee-keeper.

FOREIGN QUEENS.

The advisability of sending distances for queens, to introduce new blood in the spiary, was discussed.

Mr. Aches said. yes, if we could depend on the one from whom we were purchasing. He was now trying some Carniolans.

Mr. Brown did not like them; he purchased one queer, and it was worth a man's life to go within four rods of that colony. He had pinched her head off.

Mr. Aches thought them quiet, but instanced a case of receiving a severe stinging. Hiz idea was that no strain of bees should be judged by one colony.

The majority like a cross between the common Black and the Italian, for honey gathering qualities.

Dr. Harvey suggested that pure Blacks were like the farmer's hired man, "too quiet."

GENERAL BUSINESS.

The Secretary was instructed to correspond with the Secretary of the Ontario Bee-Keepers' with reference to affiliation, and to complete all nect scary arrangements.

It was decided to expend \$20 of the O.B.K.A. grant equally between the following Agricultural Societies: Brook- and Alvinston, Forest, Petrolia, and Wyoming. Committees were appointed to interview the different societies to ask them to grant equal amounts for prizes in this department, and to impress upon them the necessity of appointing competent persons to act as judges. The committees are: For Brooke and Alvinston, Lewis Traver, W. E. Morrison; Forest, E. A. Jones, T. C. Jackson; Petrolea, C. Boyd, David Brown; Wyoming, George Forbes, Wm. Grainger.

The next meeting will be held at Petrolea, Sept. 1st; when addresses will be dolivered and essays read by Archibald Duncan, Dr. Harvey, and others.

J. R. KITCHEN, Sec.-Treas.

Industrial Prize List.

The prize list relating to Honey and apiary supplies was revised on the 23rd inst, as follows :

COMMITTEE.—Messrs. George Vair, (chairman), R. McKnight, Martin Emigh and E. J. Otter

All honey exhibited must be the production of the exhibitor.

The quantities specified in the various sections is the amount of heney on which the award of the prizes is to be made, but this rule does not apply to Sec. 17 in which the quantity is not limited.

Exhibitors selling honey during Exhibition (for which right a small fee will be charged) will not be allowed to make any removal from their regular exhibit, but may have a special supply at hand from which the honey sold may be taken.

Exhibitors effering comb honey for sale will not be allowed to cut the sections, but must sell whole sections put up securely in manilla or paste-board boxes or bags, and purchasers notified not to eat it in the building, and in the solicitation of customers no unseemly noise will be permitted.

Exhibitors must not interfere with or attempt to influence the jndges in the execution of their duties.

A breach of these rules will forfeit any prizes that may be awarded.

(See also General Rules at beginning of prize list.)

Open to all Bee-keepers (agents excluded).—Entrance Fee, 25 cents each entry.

SEC. I	st 21	d a	rd 4t	b
1. Display of 200 lbs. of extract-		0	•	
ed granulated Honey in				
glass 2. Display of 500 lbs., liquid	\$10 \$	5	\$3\$	
2. Display of 500 lbs., liquid				
extracted honey, of which				
not less than 250 lbs. must				
be in glass, quality to be				
	20	15	10	5
3. Display of 500 lbs. comb				
honey in sections, quality				۷
to be considered	25	20	12	U
4. Display of 20 lbs. of comb				
honey in sections, quality				
to be considered, that is to				
say, clean sections and best		~		~
filled	10	6	4	2
5. Display of 100 lbs. of ex-				
tracted liquid Linden honey				
in glass, quality to be con-	0	5		_
6. Display of 100 lbs. of ex-	ō	9	4 -	
tracted liquid clover honey,				
in glass, quality considered	8	-	•	~
7. Beeswax, not less than 10 lbs	0	5	3 -	
(maufacturers of comb				
foundations excluded)	6	4	2 -	-
ioundations excluded)	0	4	4	

8. Foundation for brood cham-	Queries and Replies
9. Foundation for sections 3 2 I -	
10. Apiarian suppliesS.M.B.M.	UNDER THIS HEAD will appear Questions which have been asked, and replied to, by prominent and practical
11. Style and assortment of tins for retailing extracted	been asked, and replied to, by prominent and practical bee keepers—also by the Editor. Only questions of im- portance should be asked in this Department, and such
honeyS.M.B.M.	questions are requested from everyone. As these questions have to be put into type, sent out for answers, and the re-
¹² . Style and assortment of	olies all awaited for, it will take some time in each case
glass for retailing extracted honey S.M.B.M.	to have the answers appear.
13. Section super for top story	
and system of manipulat-	Using Old Sections.
ing, product to be exhibited in super as left by the bees 3 2 1 —	
¹ 4. Most practical new inven-	Query 261.—I have a lot of sections
tion for the Apiarist, never	two years old. I have kept them in
shown before at the exhi- bition	the garret and on taking them down
15. Largest and best variety of	and trying to put them together a good
uses to which honey may be	many broke. How could I prevent it ?
put,illustrated by individual samples of the different	EUGENE SECOR, FOREST CITY, IOWADampen
things into which it enters	them before putting together.
as a component, for example	
say, one or two samples each in canned fruits,cakes,	J. ALPAUGH, ST. THOMAS.—Soak the joint with water where you want them to bend.
pastry, meats, vinegar &c. 8 5 3-	with water where you want them to bend.
16. Most useful Queen nursey	R. McKnight, Owen Sound, OntSoak
¹⁷ For the most tasty and neat-	them for a while in hot water and put them to- gether while damp.
ly arranged exhibit of	getner while damp.
honey in the Apiarian de- partment, all the honey to	G. A. DEADMAN, BRUSSELS, ONTHandle
he the production of the ex-	careful until you thoroughly dampen them with water.
hibitor. \$20 of this prize	
is given by the Ontario Beekhepers Association 35 15 10 —	WM. McEvoy, Woodburn, OntSteam
	the joints well before you try to put them to- gether.
CONVENTIONS.	Boundary
	PROF. A. J. COOK, LANSING, MICH By damp-
May 3, 1890-Susquehanna, at Hop Bottom,	ing them. Lay them in a damp cellar or wet the cuts over night.
Pa; H. M. Seeley, Sec., Hartford, Pa.	
May 7, 8, 1890.—Texas state at Greenville. J. N. Hunter, Secy, Celeste, Texas.	Allen PRINGLE, SELEY, ONT Put them in a
ay 19, 1800-Northern Illinois at Rockford.	damp place for a while and then wet the joints before putting together and there will be no
⁴¹¹ , D. A. Fuller, Cherry Valley, Ill.	danger of breaking.
Jany 7,-8, 1891—Ontario Brekeepers Associa-	
tion, at St. Catherines; W. Couse, Sec., Streetsville, Ont.	G. M. DOOLITTLE, BORODINO, N. Y By steaming or wetting the joints, if one piece
	section. If of other make they ought not to
CLUBBING LIST.	have broken.
We will club the CANADIAN BEE JOURNAL	DR. MILLER, MARENGO, ILLTake a tea-kettle
With any of the publications below at the prices Quoted in the LAST column :	and pour hot water so it shall run down through
	the joints. In five minutes you can soak up 500 before they are taken out of the box. Or, let
The Canadian Bee Journal	them lie in a wet blanket for 24 hours.
	A P Missey Averypupity Ouro Priheing
TYPE THE TAKEN THE TAKEN THE TAKEN THE	A. B. MASON, AUBURNDALE, OHIO.—By being more careful. If they are one-piece sections
Apiculturist (m)	thoroughly moistening them when they are to be
Beekeepers' Advance (m) 1.25 1.15	bent will probably make them all right.
** If you require catalagues circulars note	H. D. CUTTING, CLINTON, MICHI take is
""""""""""""""""""""""""""""""""""""""	for granted they are one piece sections, If you
printing give us an opportunity of estimating.	would dampen the outside of the section at the
for * Clubs of five, at one time, to any address	bend they would not break, use a sponge and warm water.
"" 32.25 ten st one time \$6.00' 20 st OTA	
time \$11.00; 50 at one time \$25.00. This is an excellent opportunity for associations.	J. F. DUNN, RIDGEWAY, ONT.—If they are soiled use them for kindling wood. If of good

color, too dry to fold, run a stream of hot water over the groove and they will bend all right.

JAMES HEDDON, DowaGIAC, MICH.—You do not say what kind of sections they are. If they were one piece sections, with me, I should throw them away. In fact, if some one had given them to me and made me accept them two years ago, I would have burned them up the next day after the doner left. I am dead set against one piece sections. The best thing you can do if you are bound to use them is to soak them in water.

J. E. POND, NORTH ATTLEBORO, MASS.—I suppose you refer to one piece sections. These are very apt to break when thoroughly dry, to wet them thoroughly at the joints may help the matter, it don't always. I am obliged to nail each as I can in such a case and the rest I use for kindling.

J. K. DARLING, ALMONTE, ONT.—Dampen the backs of the sections opposite the groove by drawing a cloth dipped in hot water along a few of them laid face down, fold before the wood swells as that will have a tendency to crowd the joint a little. Provide yourself with a package of No. 20, 3 inch wire nails to nail such as chance to break. Friend Jones can supply them.

G. W. DEMAREE, CHRISTIANBURG, KY.—When I put together "one piece sections" I draw a wet sponge across the piece at the back of the cut and in a few minutes they will bend readily without breaking. About 100 of them can be treated with the sponge and stacked up when the first ones will be ready to bend and drive together. A cheaper way is to put the whole lot in a damp cellar 48 hours before they are to be folded. The latter is the best way when the stuff is very dry.

Artificial Pollen for Spring.

Query 252. What kind of artificial pollen is best to feed bees in spring where there is not sufficient natural pollen?

J. ALPAUGH, ST. THOMAS, ONT.—Fine pea meal.

K. D. CUTTING, CLINTON, MICH.---Rye flour, also ground oats.

R. McKNIGHT, OWEN SOUND, ONT.-Buckwheat flour is as good as anything.

ALLEN PRINGLE, SELBY ONT.—Cotton seed meal, rye meal, wheat meal, etc.

G. M. DOOLITTLE, BORODINO, N. Y.—I use corn meal ground fine and unbolted What is not used by the bees can be fed to the stock.

A. B. MASON, AUBURNDALE, O.—I don't know, rye flour, wheat flour and what is known here as middlings are all good.

J. K. DARLING, ALMONTE, ONT.—Have rather more of the genuine article sometimes than I care about, therefore can't say having never tried any kind.

JAMES HEDDON, DOWAGIAC, MICH.—Graham flour or in fact any kind of flour 15 good, but nine times out of ten where it has been fed it is probably useless or worse than useless.

PROF. A. J. COOK, LANSING, MICH.—Rye or oat meal indeed any kind of meal. We never had to feed in Michigan, as they can get collen as soon as they ought fly, which is usually early in April.

G. A. DEADMAN, BRUSSELS, ONT.—I would feed cotton seed meal but I believe in allowing the same frames in the brood nest the year round, the best then will gather enough in the fall to last them until there is sufficient natural pollen the following season.

EUGENE SECOR, FOREST CITY, lowA.—1 don't know. I don't if it will pay to keep bees where the supply of pollen is insufficient for their needs. My bees always gather too much. They store it in such quantities that old combs are often practically worthless.

J. E. POND, NORTH ATTLEBORO, MASS.— Rye meal is as good as anything, I, however, have never seen a season here, as yet, where there was any need of using any artificial feed of any kind. The "good candy" made with flour is I think the easier way to give artificial pollen to the bees, but there is this objection to it, that unless care is used robbing may be started,

J. F. DUNN, RIDGEWAY, ONT.—I used to think my locality did not furnish enough early pollen and then used rye flour. Now I do not want anything of that description in my combs. Skunk cabbage is the first source of pollen here then comes tag alder and black willow.

WM. McEvoy, WOODBURN, ONT. – Feed none is best, carefully let them alone in spring. You cannot rush things along that time in spring with any profit, so that you better not fuss too much with your bees in early spring or you will rush things the other way.

DR. MILLER, MARENGO, ILL.—I have used mostly ground corn and oats, just because I had that kind on hand for feeding larger stock. Almost any flour or ground grain will do, but I don't think bolted flour as good as something coarse. The hulls give the bees a good foothold.

G. W. DEMAREE, CHRISTIANBURG, KY.—It has been a matter of doubt in my mind for some years as to whether there is any profit to be derived from artificial pollen at any time. Still if the season is backward I usually provide a mixture of ground grain for my bees to fuss with, if for no other purpose than to keep them out of mischief. The best substitute for natural pollen is a mixture of coarse wheat four, commonly called "shorts," and oil cake meal. The last named article is the cakes of flax seed dried and ground into meal after the oil has been pressed out of it, I know of no substance that will excite breeding like the oil cake meal.

SELECTIONS.

Wintering up Stairs over Dwelling.

CTOHN R. WASON :-- I commenced the season of 1889 with 10 colonies all strong, increased to 27 colonies, and took 600 lbs of extracted honey and left them plenty to winter on. I looked over them on March 14th and they seemed to be doing well. I have them in a room up-stairs northwest corner of the dwelling house. I wintered them in the same place last winter and they did well. I clipped queen's wings for the first time, last season and find it a great saving of work; when the swarm comes off I remove the old hive or colony and put an empty hive in its place and if I want a strong colony to raise comb honey I shake all the bees from the old colony in front of the new ones and give the combs and brood to other colonies not yet swarmed.

Hawkesbury, Ont., March 17, 1890.

JUSTUS KREUTER.—As regards myself I had a fair one, or the best I know of. I started out with ro hives in the spring, sold six, and put 17 into winter quarters, all fairly heavy with winter stores. I sold about 700 lbs of extracted honey and 200 of comb. I use the Blackburn hive with the langstroth trame. I winter in a frame building with good success, giving the bees lots of ventilation which I think is the most essential point for good wintering. I lost two this winter the rest look well.

Roostock, Ont.

DIVIDING SWARMS WHICH CLUSTER TOGETHER.

Alex. Trimble.—Kindly say what is the best method to adopt in separating swarms where five or six or even more are clustered together. Hampehira mile (ht April with 1800

Hampshire mills, Ont., April 14th, 1890.

The best method to adopt after the swarms are out, is to shake them all down on a sheet, or something of the kind; then search for the queens, and Cage them at the entrances of the thives prepared for them; divide up the bees as equally as possible, and the job is complete, liberating the queen and allowing her to run in at the entrance when the bees have got running in nicely. Clip the wing of every queen if you want immunity from such trouble.

BRES WORKING APRIL 12TH.

[Ino. A. Noble.— My bees are busy to-day (April 12) carrying in pollen. I have not lost a colony in seven years. I winter all out-doors, in sawdust and chaff packed hives. It is fine and warm to-day, the warmest day we have had this spring.

Norval, Ont., April 12th, 1890.

WINTERING WITH SMALL ENTRANCES.

J. B. LEE.—I started in the spring of 1889 with six strong and five medium colonies, and increased to 22. I took 700 lbs of extracted and 65 lbs of comb honey; and sold the former at 124 cents, and the latter at 20 cents per pound. I have also stored in the house 14 brood combs of sealed honey for use in the spring. I put my bees in the cellar Nov. 5th. The temperature has stood 43° to 45° all winter. February 27th I found two colonies in the cellar showing signs of dysentry, and 1 carried them out and packed them in their summer stands, and the next day the bees had a good fly. I have experimented with two colonies this winte: in the oellar, by giving them each an entrance one-half by two inches. They are dry and in good condition at present.

PRESERVING FRUIT IN HONEY.

In answer to the correspondence in the BEE JOURNAL respecting the preserving of fruit in honey. I preserved cherries in extracted honey last summer, and we used them this winter, and we found them better and cheaper than fruit preserved in sugar.

London, Ont., March 11, 1890.

We presume you mean that you used honey as the sweetening power in preserving the cherriec. This is a regular practice with many bee keepers, for years past. What our correspondent wished to know, was whether fruit could be preserved in its raw state in honey, and, whether, after a few months, it would still retain its natural flavor. If this is what you did with the cherries, give us particulars of the modus operandi.

A SEEKER AFTER LIGHT.

I. P. FULLER.—Will you please explain what the symptoms of Foul Brood are? I know nothing of it but should like to be posted in case anything goes wrong. There are not many who know anything about it.

Kensington, Ont., April 21, 1890.

If evidence were wanting in support of our contention that the distribution of the foul brood pamphlet, would have the effect of posting many beekeepers who know nothing at all about it, here we have it. Gur correspondent will see in the present issue what is being done in this direction, and we hope he will furnish us with a big list of names.

SAMUEL J. CROW.—I have just got nicely started in the business. I began the season of 1889 with 21 colonies, and increased to 30; took 600 pounds of extracted honey, which I sold for 15 cents per pound. Sold eight colonies and have 22 in good shape thus far.

Rosedene, Ont., March 11, 1890.

CAPPINGS.

CUT FROM A VARIETY OF COMBS.

Two methods of Fastening covers and bottom boards on hives for moving to out-apiaries.

NTO each edge of the bottom-board, just be-low the middle of the hive, drive an 8 penny wire nail until there is about an eighth of an inch between the head and the wood Drive two more into the cover to correspond. With these in every cover and bottom-board, every hive in the yard is ready to be fastened together securely at the rate of about half a minute to each hive. Make a loop of stout wire -I use steel bale wire, No. 14-so that it will just slip over the nail-heads from bottom-board to cover. The wire should be spliced with a "telegraph splice," that is, the ends should not be twisted together, or returned on themselves, but each end should pass the other and then be twisted around it. Now take two sticks, two or three inches long, with the ends notched. Place these sticks between the wires on one side, and spread them apart until the wires are perfectly tight. If the wire is a little rusty, the sticks or "keys," will hold better, though I have never known one to slip if properly arranged."

"To save time, we first out twice as many lengths of jute twine, 1 inch in diameter, as we have hives to haul. These lengths will just reach around a hive transversely, and tie in a bow knot, in the direction of the dotted line. With a certain number of lengths thrown over the shoulder, we proceed to a hive, lift the front up, slip one end under, draw it around the hive tight on the dotted line, and tie it. The rear is Now, then, to stretch looped in like manner. the twine taut we draw the tops of the loops toward each other, in such a way that the cord that was at first perpendicular is now stretched to the hypothenuse. After having drawn them as far as you can with your fingers, take a hammer and drive at the angle on both sides of the cover until the diagonal part of the cord begins to sing like a fiddle string. You might suppose that, after the cord is slipped from a perpendic. ular to a diagonal, it will have a tendency to resume the perpendicular again; but if you will try the experiment on the hive you will find that the friction is great enough to keep the cord at whatever diagonal you may drive it."

Both the above we clip from the lastissue of Gleanings. The first is by a correspondent, the second by Ernest Neither of them provide for a Root. super or rim over the brood-chamber for purposes of ventilation, and we almost always find it necessary to use such an arrangement to prevent smothering. Of the two methods, we think the first mentioned would be the best, in case the rim has to be used, though we should be inclined to feel afraid there would be some mishap even with it. There will be four portions of the hive

to bind together-if a loose bottom board is used and it would be almost impossible to bind them so tight that a sudden jolt would not cause them to shift. If the super or rim is attached to the brood-chamber by clamps, they would work all right. Where the bottomboards are attached, and clamps are in use to fasten the cover to the hive-body, if screws are placed in the rim in the same position as in the cover, the clamps will hold the rim on quite securely. The wire cloth is always tacked right onto the top of the rim. Our own method is given on page 42 last issue.

HONEY BEMEDY FOR COUGH OR COLD.

This is the time of year when colds are likely to be the order of the day. The following recipe is said to be an excellent remedy:

"Boil two ounces of linseed in a quart of water until the seeds are quite soft. Strain, and add half pint of honey, two ounces of lump sugar, and the juice of three lemons, Boil these well together. Take a teaspoonful every half hour, or two teaspoonsful on going to bed. It is most effective hot."

WINTER PACKING.

Dr. J. W. Vance, in giving his winter report says:

"The colony that was in the finest condition when taken from our cellar was the one that I had left with the super on, with combs above and below. There was nothing on the except the cap. So you see they have plenty of air. The cap does not fit tightly, and there was a large space of air below, between the empty combs. Those of my colonies that fared worst and were weak and depleted, were confined to a single story, and had no upward ventilation. In a temperature of from 45° to 50° it is absolutely necessary that the bees should have ventilation. If they are well covered, they must be well opened below."

A PREVENTATIVE FOR BOBBING.

A correspondent in the American Bee Journal writes as follows :---

"He placed a piece of window-glass, about 8x5 inches, in front of the flight-hole, the top resting against the hive, and the lower end about 14 inches from the entrance, so as to enable the bees of the hive to go in and out at the sides. The next morning the robbers made an attack on the hive in great numbers, but going straight at the entrance were stopped by the glass. They swarmed in front of the glass, but could not find the entrance at the sides, and very soon returned in disgust. To effectually put a stop to further robbing, the glass should be allowed to remain for several days, until the robbers forget the spot."

The bees in this country must be a

somewhat different breed from these mentioned by the correspondent here. We have tried this very thing and our robbers have always been "cute" enough to crawl over and go in at the end. Stick to the "wet hay" process, as described on page 16, volume, VI of the JOURNAL.

CLIPPING QUEEN'S WINGS.

A writer in the Guide has the following paragraph amongst others, on the advantage of clipping the wings of the queen:

"There is one advantage in clipping queen's Wings which is never mentioned and yet my experience leads me to believe it is true. Before I began the practice I kept several favorite queens till they laid so many unimpregnated ggs and scared so many drones that I pinched their heads off. But I have never had a single clipped wing queen go far beyond her best day without the bees superceding her on their own •ption; and queens reared to supercede their nothers are as a rule, the best queens we get. I have ceased to trouble myself about superanuated queens, but simply clip the wings of laying queens, but shiply one the best of the rest, as with all my reading and study I find there are many things the best will do better for themselves than I can do it for them and one thing is the replacing of queens that have Partially out-lived their usefulness.

CELLULOID FOUNDATION.

A corespondent from New Zealand Wants to know whether sheets of Vulcanite or celluloid could not be used as a base for combs, with the object of Preventing orme comb, and taking the place of the Aspinwall wooden combs.

FERTILE WORKERS.

A novel way of getting rid of fertile Workers is described by Z. T. Hawk, in the Apiculturist. He did not adopt the orthodox plan of carrying the bees and combs a hundred yards, and then shaking them off the combs. Time was tco Precious for fooling that way. He picked up the colony, and placed it on the top of its next neighbor. The latter was a good, powerful colony, working at a good rate in the sections. He removed the section-case and honeyboard, and placed the queenless colony directly on the brood-chamber of the colony that had a queen. He then placed the section-case above this double brood-chamber, and work went on as though nothing had happened. In two or three days he gave the double colony another case of sections. When the l

work was well begun in this second case, he separated the brood-chambers in the evening, and gave one case of sections to each. At the time of dividing, he made sure that the queen had occupied all available cells in the broodchamber that had before been queen-The queenless hive then raised a less. He does not think that the bees queen. lost five minutes of time from harvest; in fact, he thinks there was a gain of energy resulting from the greater number of bees in the double colony. The result was more honey from the two . than he would have got had they remained together.

HONEY DEW FOR WINTERING.

In the A. B. J. of April 26, Ira Barber gives his experience with honey-dew as winter stores for bees:

"According to promise, I will give the condition of the bees, after living on "bug-juice" for five months, for quite a number of them had nothing to live on but that. All that had queens have wintered in fine condition. Four colonies out of the 140 were queenless, and failed to winter. Many of the hives are quite badly solied on the outside, but no damage is done. The timber that the bugs and bees frequented in this locality was swamp-elm. The temperature that the bees were wintered in, was from 46 to 56 degrees."

HONEY AS EYE-WATER FOR HCRSES.

The Breeders' Gazette gives the following recipe for sore eyes in horses. Why not for human beings as well ?

"I would suggest that a few drops of pure honey be dropped into the horses eyes daily or twice daily. It can do no harm, and I have known some remarkable cures by using honey alone. Let one person hold the horse's head, and turn it a little to one side, while another opens one lid and drops in a few drops of honey. It may effect a cure. I think it worthy of a trial with any eye in horse or ox that is sore from any cause. If the honey is too thick to run freely, it can be warmed a little, which will thin it so that it will flow freely, but care should be taken not to heat it to more than blood heat. New honey will not require heating."

PAINTING HIVES.

James Heddon says in the Review :

I wish my hives painted white, or nearly so, to avoid the intense beat of the summer months; and the packing boxes a dark red. Let the reader place a dark red or black board and a white one in the sun, even a low winter sun, and some time after they have received the sunshine, let the hand be placed upon them and the difference in temperature noted."

OUR OWN APIARY.

SETTING OUT OF WINTER QUARTERS.

N the 17th (just two days after the last issue of the JOURNAL) we arose betimes in the morning, and with

the assistance of three of the boys, carried our 202 colonies out of winter quarters, and the story we have to te'l is not so cheerful as we led you to expect in the report of our last examination, the latter end of March, when we looked over them, and did not find any dead ones, although in some instances we thought they were dead, until by rapping on the hive we heard the hum of the inmates. We were congratulating ourselves on the probability of coming through without any loss, though we had no right to expect any such happy consummation, owing to our neglect in not personally superintending the preparations for wintering last tall. .\iter doubling up the weak and starving ones and counting those entirely dead, we are 29 colonies less than last fall. All the remaining colonies are in excellent condition so far as a hasty examination will permit of our judging, for the weather has been unfavorable for much manipulation. Some of our loss we can easily account for now that we can see inside the hives. A number of the colonies were in two-storey hives, and they had plenty of stores for wintering and to spare, if the colonies had not commenced breeding; apparently they did commence, however, very soon after they were put into winter quarters, as they had bred immense quantities of bees, and had starved. A lower temperature would have saved them. The lesson we learn from this is that strong colonies should be wintered in a lower temperature than smaller ones, and that the best success will be attained if all the colonies are as nearly equal as possible when put into winter quarters. We have always preached this, but this is an instance of others not carrying out our instructions. Three of the colonies died of dysentery, from breeding; and just here it may be well tomention that there is a difference between dysentery as produced by excessive winter breeding, and as developed by the consumption of bad stores. In the latter case the whole colony becomes affected, while in the first

instance the old bees give the evidences of dysentery, as shown by their distended bodies, while the younger ones are a natural size. The former died of dysentery, the latter of starvation. A number of the colonies were apparently queenless when put into winter quarters, if we may judge by the way the bees were scattered over the combs as though they had never clustered, and had died from exposure and isolation.

SMOKERS, AND HOW TO LOAD THEM.

The directors of the Ontario Beekeepers' Association have lately had sent to each member of that body, a No 2 smoker as a quid pro quo for the membership fee, and the contract for supplying these was given to the publishers of the BEE JOURNAL. We have had one or two requests for information as to "how the smoker works?" For fuel, a number of things may be used. See our reply to a query on page 18, present volume. The smokers as sent out are constructed somewhat differently to those made by us prior to the season of 1889, and what puzzles some may be to know at which end the smoker is to be "loaded," as those sent out are what we might term "breech-loading" as well as "muzzle-loading." When they were made to load from the "muzzle-end" or top, we were continually hearing complaints of how hard they were to load, when they required replenishing, with the nozzle so hot it could not be taken off by hand, and had to be knocked off with a stick, or other instrument, and allowed to cool, after fresh fuel had been put in, before it could be replaced. This objection we overcame by making the bottom end of the fire-barrel removable, and the fuel can now be readily put in without burning one's self.

WIDTH OF SEPARATORS.

We ordinarily make separators so they will not come nearer than a beespace to either top or bottom of sectionsbut if the slots in the sections are made full-bee-space, and the separators are cut the full width of the depth of the sections, and are flush at top and bottom, the combs will be more true, and will have a neater and more finished appearance. The bees are inclined to bulge the tops of the sections, while they scarcely ever bulge the bottoms.

THE CANADIAN BEE JOURNAL.

If lour-way sections are used, there is really very little use in using separators, as they are filled more accurately, and are capped at all the edges better, as well as being fastened more securely. It is less trouble to make sections with bee-way only at top and bottom, but yet we always prefer to send out the fourway sections, because we feel that the results will be so much better.

CANADIAN IOURNAL THE BEE ISSUED 1ST AND 15TH OF EACH MONTH. EDITOR-IN-CHIEF. D. A. Jones, F. H. MACPHERSON, ASSOCIATE EDITOR. BEETON, ONTARIO, MAY I, 1890.

Sometimes one or two insertions of an adverrisement will bear fruit to a remarkable degree. We but this is the exception and not the rule. have had people insert one advertisement in the "Exchange and Mart" column, and after waiting a week or two without any responses they write that they got no replies, and consequently conclude that the advertising medium is at fault. Speaking on this very subject one of America's foremost advertisers says : "Generally speaking, spasmodic advertising is as silly as spasmodic eating. To expect a single advertisement to pay is as foolish as to hope to grow fat from the spails of one dinner." Just lately one advertiser wrote us that he had received twenty-five replies from one little advt., while another one who advertises in the POULTRY JOURNAL writes that he sold six settings of Duck eggs, all in one day, through his advt. in the JOURNAL. Sometimes it works all right, if you offer just what people want to buy, but as we first stated, it is "the exception and not the rule." Somehow many people who advertise only once in three months or more forget that most folks can't remember anything longer than seven days.

Though we own the dies on which our perforated metal is punched, yet it is not always possible to get the punching done as promptly as we could wish. This has been more so the present season than ever before, and a number of large orders, going long distances have had to be held days, waiting for perforated metal, either in full sheets or for strips for honeyboards.

Recipients of smokers sent out by us under justructions from the Ontario Beekeeper's As-

sociation should know that in case the smokers reach their destination in a badly damaged condition, we are bound to replace them, but the party receiving it, must be at the expense of the return postage. We had taken pains to pack them all to prevent damage to as great an extent as possible, and up to the present time have received complaints from none living on a line of railroads, where the packages can be delivered without being transported by carrier. In the cases of offices only reached by carrier, that individual evidently uses the mail-bag as a cushion with dire results to the contents when they happen to be smokers. Three complaints are the total up to this date.

One or two requests for information as to how to feed came in to us the latter end of Marchbut too late for the issue of April 1, when the information was desired These were overlooked in the issue of April 15, and it is now too late to make the replies of any use. We. trust those who desired to know about feeding did not find it necessary to do so.

CIRCULARS RECEIVED.

J. B. Mason & Sons, Mechanic Falls, Me.,-16 pages-Beekeepers supplies.

E. L. Eratt, Mariboro, Mass.-Beekeeper's edition "Companion and Prize Weskly,"-Bees and supplies generally.

Joseph E. Shaver, Friedens, Va.,-Bees, hives and supplies generally.

James Heddon, Dowagaic, Mich .- 40 pages-The Heddon Hive and supplies generally.

A. I. Root, Medina, O.,-42 pages-All kinds of supplies, and household.

Commendations:

THOS. CHRISTIMN.-I had eleven replies from all parts of the country in reply to my advertisement in the BEE JOURNAL, and I sold all my hees.

Lorranie, April 19, 1890.

INO. BEEKING .- Received supplies in good shape, everything being satisfactory. Tyfield, Ont., March 19, 1890.

GEO. WOOD .- Your valuable JOURNAL is all the time improving, as can be seen by any one possessing, as I do, a stack, of which the top one reads Vol. 6, No. 1, and the bottom one, Vol. 1, No. 1, and not a missing number.

Monticello, Ont., April 3, 1890.

GOOD BOOKS

Farm, Garden 🛿 Household.

THE FOLLOWING VALUABLE BOOKS WILL BE SUPPLIED FROM THE OFFICE OF THE CANAD-IAN BEE JOURNAL. ANY ONE OR MORE OF THESE BOOKS WILL BE SENT POST-PAID DIRECT TO ANY OF OUR READERS ON RECEIPT OF THE REGULAR PRICE, WHICH IS NAMED AGAINST EACH BOOK.

POULTRY AND BEES.

Burnham's New Poultry Book	1	50
Cooper's Game Fowls	5	
Felch's Poultry Culture	1	
Johnson's Practical Poultry Keeper	-	50
Johnson's Practical Poultry Keeper Poultry: Breeding, Rearing, Feeding,		
etc Boards		50
etcBoards Profits in Poultry and their Profitable		
Management	1	00
Management	1	w
		ΠE
Miller		75
A.B.C. in Bee Culture by A. I. Root.	-	
cloth,	1	25
Quinby's New Bee-Keeping, by L. C.		
Root, Price in cloth Bee-keepers' Handy Book, by Henry	1	50
Bee-keepers' Handy Book, by Henry		
	1	50
Production of Comb Honey, by W. Z.		
Allen's (R.L&L.F.) NewAm.Farm Book	\$2	50
Beal's Grasses of North America	2	50
Brackett's Farm Talk, Paper, 50c. Cloth		75
Brill's Farm Gardening and Seed-		
Growing	1	00
Growing Barry's Fruit Garden. New and revised	2	
Farm Appliances	1	ÕÕ
Farm Conveniences	ĩ	50
Farming for Profit	3	75
Hutchinson. Paper,	0	25
The Hive and Honey Bee by Rev L.		40
The Hive and Honey Bee, by Rev. L. L. Langstroth. Price, in cloth	2	00
A Bird's-Eye View of Bee-Keeping, by	4	00
Rev. W.F. Clarke,		25
		50
Success in Bee Culture, paper cover	1	
Cook's Bee-Keepers' Guide in cloth	1	25
Foul Brood, its Management and Cure		••
by D. A. Jones. price by mail		11
by D. A. Jones. price by mail A. B. C. in Carp Culture, by A. I. Boot in Paper		-
		50
Queens, And How to Introduce Them		10
Bee-Houses And How to Build Them		15
Wintering, And Preparations Therefor		15
Bee-Keepers' Dictionary, containing		
the proper defination of the spec-		
ial terms used in Bee-Keeping		25
Standard of Excellence in Poultry	1	
Stoddard's An Egg Farm. Revised		50
Wright's Practical Pigeon Keeper	1	80
Wright's Practical Poultry Keeper	2	00

** Please send us the names of your neighbors who keep bees, that we may forward copies of the BEE JOURNAL to them. A postal card and five minutes time will do it.

*** Subscribers who fail to receive their copies of the JOURNAL promptly, will kindly advise us. Missing numbers are always replaced, where possible.

** Secretaries of local associations are requested to forward us, at the earliest possible moment, the dates of their meetings; and when the convention is over, a full report of the proceedings.

PRICES CURRENT

BEESWAY

We pay 35c in trade for good pure Beeswax, delives ed at Beeton, at this date, sediment, (if any), deduct ed. American customers must remember that ther is a duty of 25 per cent. on Wax coming into Canade-FOUNDATION

EXCHANGE AND MART

25 CENTS pays for a five line advertisement in this column. Five weeks for one dollar. Try it.

POUL/TRY

FOR SALE—10 Show Coops, three with wire fronts ¹⁰ lock up, \$5 each. 10 pairs Carriers, 10 pairs Owls, 2⁰ pairs Antwerps, Fantails, Trumpeters, Jacobins, Nun⁸, Swallows, Archangels Dragoons and many others. LOP. French and Dutch Rabbits, Guinee Pigs and White Ra¹⁵. Stamp for reply. W FOX, 597 King st west Toronto

W. F. Black Spanish a specialty. Eggs for hatching from two grand yards 32 for 13, or \$3.50 per 25 One fine cockerel for sale. G. H. SHEERES, Clark^d burg, Ont.

EGGS for hatching from prize winners, White Wys^{D'} dottes, White Cochins, Pit Game and Pekin Duck⁵. My Wyandotte pen is headed by the first prize cock³ St Catharines 189c. My Ducks are direct from Rankin⁶ yard fowls. Eggs \$2, Duck eggs \$1.50. R B MILLARD 941 Queen's Ave, London Ont.

CGGS, Eggs, Eggs from my prize winning S C White Leghorns. Almost a clean sweep at Detroit 1890. Also few sittings from my ohoice Golden Wyandotte McKeen's strain. Prices moderate, satisfaction gust anteed. A W GRAHAM, St Thomas, Ont

W. F. Black Spanish hatching eggs at \$1.25 per sit winners at the Owen Sound Poultry show 1890 JAS STEWART, Meaford

M B SMITH, Grimsby, Ont., will sell eggs this season from his prize winning birds, S C Brown Leghorm and White Plymouth Rocks at \$1 per 13. Now is your chance to secure good stock at low prices.

EGGS \$2 per 13-From high scoring pen lof Royal Black Javas, headed by Rob Roy, 963, hens 95, 954 963 pullets 943 95, 953. At St. Catharines, with 6 bird 3 lsts, 3 2nds and 3 specials J D ROBERTSON, BOX 164, Guelph Ont RGG8 for sale, Silver Wyandottes \$2 per sitting. Silver Spangled Hamburgs \$1 50 per sitting. M B GUE, Inglewood Chicks for sale in fall

POR Sale—Black Minorcas. \$20, one cock, three hens imported and fitteen pullets. See Ontario Poultry show prize list. O G KALBFLEISH, Tilsonburg, Ont

GG8 from the best Single Comb Brown Leghorns and Black Langshans in Canada for \$2 50 per 13, Per 26. Express paid to any part of Cauada. GEO HANSLER, Tilsonburg, Ont

EGGS from Buff, Black, White and Partridge Cochins, Light and dark Brahmas. No better stock in this country, at \$2 per 13. GEO H HANSLER, Tilsonburg

POR SALE-10 Fine Buff Cochin Cocks and Cockerels at trom \$2 to \$3 each, 2 pairs light Brahma chicks \$3 per pair, Two Dark Brahma cockerels at \$2 each. GEO H HANSLER, Tilsonburg.

OB SALE or exchange for anything I can use, two mastiff dogs and two bitches one year old. Dark Brahmas, P R'ks, Langshan B B R Pile eggs for sale \$1. Par sitting Wanted to excha ge one cock of each tind with some person that has good stock J V BAT-TRAM, Brigden

Partridge Cochins at \$150 per setting. All birds score over 90 and all are well mated. WM & CHAS SPARKS, Chatham. Ont.

GGS-Silver Laced Wyandottes, Grand River strain; Plymouth Rock, True Blue strain; Black Minorcas, imported stock, Black Breasted Red Game Bantams, and Black Spanish. \$1 per doz. Chicks in the fall. MATHEW WILKINSON, Cheltenham, Ont,

DARK BRAHMAS—Having imported a grand high scoring pen of Dark Brahmas, (cock alone costing we will sell a limited number of eggs at \$5 per 13. Parliament, St., Toronto.

BLACK Hamburgs, T Smelts stock, Langshans, my own of per an. See prize lists for both. Eggs \$3 per 13 B per an, express paid, No birds in pens less than 92. Hamburg Cockerel and Pullet for sale score at 'St. Ostharines 93 and 90. Langshan cockerel, score Milton, 93. Cards with birds. C | EISELE, Guelph.

DARK BRAHMAS-prize winners at Stayner. SS Hamburgs, (McNeil strain) eggs for hatching per 13, \$2 per 39. Address W J BELL, Banda Ont.

Partridge FOR SALE—To advertise my stock of prize winning poultry I will sell from Brown Leghorns, at 51.00 per 13, or \$1.50 per 26; only a limited number of settings to be sold, order at once. This is your last Change; birds for sale in the tall Address W L WITCHELL, Painswick, Ont

FOR SALE or Exchange for small hand printing press white eggs from my prize Wyandottes golden, silver and CLAUDE E. BALDWIN, Barnston, Que. Eggs \$1 to \$3 Per sitting.

DARK BRAHMA COCK for sale cheap, the one I raised all my prize winners from, have no room few more orders, gbut limited, for eggs at \$2 per 13. Have several pairs of fine Guinea pigs for sale. Wantda Lop-ared Doe. must measure 20 or 21. JAMES ALLERN, Stephen street, Owen Sound.

THE HAMILTON Poultry Yards. Eggs from Light Brahmas, Houdans, Earred Plymouth Racks shara, Partidge and Buff Cochins, Langshara, White and Brown Legcorns, Black Spanish, Hamburgs (black) also Black Red Game, Duckwing and Brahmas, Rose Comb White Leghorns, White Plyand Cayuga ducks, \$2 per setting. Black Javas, Dark Mouth Bants \$1:50 per setting. I won upwards of diplomas for breeding pens. Won the diploma for best collection of sowls at Kingston. A few fine birds for share, A C H LUXTON, Hamilton.

POULTRY.

COOPS-We have on hand ready to thip quick large number of coops, sizes and rices as mentioned in advertisement in another column. The D. A. [ONES CO., 1d, Beeton.

RUVERSIDE Poultry Yards. Eggs from Light Brahmas, Black Minorcas, Single and Rose Comb White Leghorns, Silver Spangled Hamburgs, Silver Laced Wyandottes, Eggs \$1.50 per 13. Mammoth Bronze Turley Eggs \$4 per 11. For sale or exchange one Light Brahma cockerel, two black Minorca cockels, two silver Laced Wyandotte cockerels, three si. gle comb White Leghorn cockerels. Want, one B B Red Game, one Red Pile do., one black Cochin, one Partridge Cochin, o e B P Rock, cocksor cockerels, or offers WM DURRELL Pembroke, Ont

BEES

50 COLONIES Bees on hand, lo of these for sale. Send for particulars. Only good Colonies will be sent out. Address, H. M. FREY, Heidelberg, Ontario.

50 HIVES Hybrid and Italian Bees for sale in single board hives Price \$6 and \$6.50 per hive. A bargain. Address ADIN BURKHOLDER, 1298 Chene street, Detroit, Mich.

1000 LBS. of Bees for sale at \$1 per pound, discount for large orders. Will sell 100 hives of bees at \$5 per hive or 10 for \$45. 1000 lbs of foundation 49 and 45 cts. J. A. FOSTER, Tilbury Centre.

1000 Lbs. Chas. Dadant & Son Comb Fdn. ready to ship at once. Every inch as good as sample. Price, brood 40c a lb, section comb 45c alb. war worked, brood 10c, section 15c alb.; send for sample. All orders to R. E. SMITH, box 72, Tilbury Centre Ont

60 or 70 swarms of pure Italian bees to sell cheap. Anyone taking a quantity can have them at \$4a swarm in Jones' S. W. hive. The reason for selling too much other work. THOS CHRISTIAN Lorraine, P.O.

WANTED to begin work 1st May, an experienced beekeeper; also one who has had some experience To the right parties good wages will be raid. Address staring salary wanted, experience, age etc, at once. F W JONES, Bedford Que.

40 Colonies of Bers for sale, Italians and Hybrids; 22 upper stories and combs, and perforated honey boards; 28 houey boards and supers and super reversers for comb honey; extractor, store cans, 8 C. bee feeders, 2 queen nurseries and a number of other aticles, all for \$250 SAMUEL STAFFORD, Sheddon.

DEES! BEES!! Yes all the bees you want. 300 swarms for sale. Bees by the prund, queens. Nuclei, comb foundation the best make, also all kinds of supplies, Excelsion hive in flat with racks, 40c. each. Also 10 inch Pelham mill, just as good as new for \$12 warranted. Send for price list of 1890. R. E. SMITH, Tilbury Centre, Ont.

COMB FDN. I make the best and don't you forget it, I will work up your wax, loc per lb for brood. 20c for section. I do not cut pices. Poor work is dear at any price. 7 years and every customer satisfied Price ot Fdn. on application. W ELLIS, S. Davids. Ont. (Niagara Falls express office.)

THE BRIGHTEST !

Five banded Golden Italian beas and Queens and the **Reddest Drones**. Very gentle; very prolific: good honey gatherers-working on red cloverand the **Most Beautiful** bees in existe tee! Took ist premium at Mich. State Fair in 1889. Reference, as to purity of stock, ED. of C B. J. Sample of bees five cents. Untested queens, before June 15th, \$1.25; after june 15th, \$1.00. Tested (3 bands) \$2.00; selected, tested, (4 bands) \$3.00; breeding queens', (4 to 5 bands) \$5.00 Virgin queens, 50cts; 5 for \$26.0. Salte arrival and satistaction guaranteed. Canadian currency and stamps at par.







20 OR 30 Colonies of Bees, single colonies \$8,00 bees each, by taking five or more \$7.00 each. These stacks in each story. Cash with order. Montion this lournal. Journal.

STATION THIS JOURNAL.

W. H. SANFORD, Totter ham, Ont.

^Carniolan - Queens AND BEES.

INTEND to have a large amount of Queens and bees bred from imported mothers, ready to send to for the whot want them, by the first of June next. Send for free circular.

JOHN ANDREWS, NENTION THIS JOURNAL. Patten's Mills, Wash. Co., N.Y

HE SWARM HIVER

Mail, and the AMERICAN APICULTURIST ONE year for \$1.50. Sample copies free. Address American COULTURIST, Wenham, Mass. MENTION THIS JOURNAL.

Comb Foundation.

Prices on application. Beeswax made up. Beeswax wanted. 50 colonies pure Italian Ress for sale. Tested and Dollar Italian Queens Quein a ship either G. T. R. or for sale. Tested and Donar Ivalian Arring the season. Can ship either G. T. R. or H. COUSE,

. CHELTENHAM.

BROWN LEGHORNS AND BLACK MINORCAS.

AND BLACK MINORCAS. WILL sell a few sittings of Eggs from my grand breeding pens this spring. My Brown Leghorns the second once in Canada. At the Owen Sound Show we are the second prize given, winning eight the second prizes, making a ctean sweep. I have the honors at Owen Sound for 5 years in succession rown Leghorns. My Minorcas are grand birds. In the second prize lists this winter I find I had the the second prize lists this winter I find I had the the second prize lists this winter I find I had the the second prize lists this winter I find I had the the second prize lists this winter I find I had the the second prize lists this winter I find I had the the second prize lists this winter I find I had the second prize lists this winter I find I had the the second prize lists this winter I find I had the the second prize lists the second will give the second prize lists from imported stock. Address Minorcas, Abbot Bros' Address

Cure Polson Iron Works MENTION THIS JOURNAL



PATENTS! Perents, Caveats, and Trade-marks procured, Rejected polyactions Revived and prosecuted. All business be-to the second second

DUNNVILLE.

5 ITALIAN BEES

 $A^{\rm T}$ our annual spring sale we will ship full colonies of Italian Bees with tested queens, in our regular hive or shipping crate for \$5.00 each. Sa'e arrival guaranteed. Discount given on larger numbers.

JULIUS HOFFMAN, MENTION THIS JOURNAL

CANAJOHARIE, Mont. Co., N.Y.

Beauty

Is desired and admired by all. Among the things which may best be done to



enhance personal beauty is the daily use of Ayer's Hair Vigor. No matter what the color of the hair, this preparation gives it a lustre and pliancy that adds greatly to its charm. Should the hair be thin, harsh, dry, or turning gray, **Ayer's Hair Vigor** will restore the color, bring out a new growth, and

render the old soft and shiny. For keeping the scalp clean, cool, and healthy, there is no better preparation in the market.

"I am free to confess that a trial of Aver's Hair Vigor has convinced me that it is a genuine article. Its use has not only caused the hair of my wife and daughter to be

Abundant and Glossy,

but it has given my rather stunted mustache a respectable length and appearance." — R. Britton, Oakland, Ohio.

"My hair was coming out (without any assistance from my wife, either). I tried Ayer's Hair Vigor, using only one bottle, and I now have as fine a head of hair as any one could wish for." -R. T. Schmittou, Dickson, Tenn.

"I have used Ayer's Hair Vigor in my family for a number of years, and re-gard it as the best hair proparation I know of. It keeps the scalp clean, the hair soft and lively, and preserves the original color. My wife has used it for a long time with most satisfactory re-sults." — Benjamin M. Johnson, M. D., Thomas Hill Mo. Thomas Hill, Mo.

" My hair was becoming harsh and dry, but after using half a bottle of Ayer's Hair Vigor it grew black and glossy. I cannot express the joy and gratitude I feel." — Mabel C. Hardy, Delavan, Ill.

Ayer's Hair Vigor, PREPARED BY

Dr. J. C. Ayer & Co., Lowell, Mass. Sold by Druggists and Perfumers.

