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

BEETON, ONT. JAN 15, 1891 Vol. VI, No. 20.

WHOLE No. 280

IOURNAL THE CANADIAN BEE

Devoted exclusively to the interests of the Honey Producer.

Seventy-five Cents per annum in Advance.

ADVERTISING

All advertisements will be inserted at the following Tates

STANDING ADVERTISEMENTS.

Time.	1 in.	2 in.	3 in.	4 in.		page
1 month 2 months 6 months 12 months	\$2.00 3.00 4.00 6.00		5.50	\$4.50 6,50 9.00 15.00 25.00	11.00 15.00 23.00	\$10.00 17.00 25.00 40.00 75.00

Breeders' Illustrated Directory.

One-fifth column, 88 per year; \$5 for 6 mos. All yearly advertisements psyable quarterly in advance.

Condensed Directory.

Occupying one-half inch space, THREE DOLLARS per unnum,

Consient Advertisements.

to cents per line the first insertion, and 5 cents per space should be a scale of solid nonparell of which bere are ... elve lines to the inch, and about nine words to ach line.

Exchange and Mart.

Advertisements for this Department will be inserted Advertisements for this Department will be inserted at the niform rate of 25 CENTS each insertion-bot to geed five lines-mad 5 cents each additional line each insertion. If you desire your advi. in this column, be particular to mention the fact, else it will be inserted in our regular advertising columns. This column is specially intended for those who have Poultry erg, bees, or other goods for exchange for Something eize and for the purpose of advertising bees, housy, poultry, etc., for sale. Cat a must accom-pany advt. Five insertions without change, \$1.

STRICTI I CASH IN ADVANCE

Contract advertisements may be changed to suit the Asons. Transient advertisements inserted till forbid and charged accordingly. All advertsements received for THE MADIAN BRE JOURNAL are inserted, without extra Marge, in The CANADIAN POULTRY JOURNAL.

THE D. A. JONES Co., LD., Beston, Publishers

PUBLISHERS' NOTES

We will always be glad to forward sample cops those desiring such. THE JOURNAL will be continued to each address until

Communications on any subject of interset to a fraternity are always welcome, and are solicited. When sending in an "hing intended for the journal. When sending in an "hing intended for the journal. The sending in an "hing intended for the journal. We difficult the sender of the se

Reports from subscribers are always welcome. 'They assist greatly in making the JOURNAL interseting' If any particular system of management has contributed to your success, and you are willing that your neighbors about know it, tell them through the mediane of the JOURNAL

Barcos, - We make them is o does every one, and we will cheerfully correct them if you write us. Try towrite us good naturedly, but if you cannot, then write tojus any-way. Do not complain to any one else or let it pass. We want an early opportunity to make right any injustice we may do.

We do not accept any advertisements of a suspicious to screeping nature, but our readers must not expect us to screepongible should our advertisers not do as they agree. They will find it a good rule to be careful about extraordinary bargains, and in doubtiul cases not to pay for goods before delivery.

Clubbing Rates.

THE CANADIAN BEE JOURNAL and

Job Printing.

All we ask is the privilege of an opportunity to esti-mate. Free use of all our cuts given to those who favor us with orders. Specimen sheets furnished on application

ADVERTISEMENTS.



J. C. BENNER, Owen Sound Care Polson Iron Works

EGGS IN SEASON \$3 per 13 or \$5 per 26, Birds for sale. ANGUS, Ont.



BERSWAY

We pay 35c in trade for good pure Beeswax, deliver ed at Beeton, at this date, sediment, (if any), deduct ed. American customers must remember that there a duty of 20 per cent. on War coming into Canada

FOUNDATION

HONEY.

We ar prepared to accept all the No. 1 Extrac Honey that is offered in exchange for supplie at regular catalogue prices, on the following terms:

Put up in 60 lb. square tins....per lb. 101c. " " other styles of tin...." 091c. " " barrels" 081c. Freight in all cases to be prepaid to Beeton.

We will allow 30 cents each for 60 lb. square tins. No allowance for any other style of package. Dark honey will be quoted for on submission of samples.

The D. A. Jones Co. Ltd. BEBTON ONT.

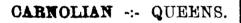
JACOB T. TIMPE

CRAND LEDGE, MICHIGAN,

The firms any variation of Petatoes that existripped everything at the Michigan Agricultural College. Look in maxi facus and see what he will give to those who grow the imagest yields in 1801. But say, if you want seense

QUEENS

nem manes, other TEREM OR FIVE BANBHDI write him, he will make you a special price if you wills endone a stamp and you need not pay for the queen until after you get thatm. Don't fail to LOOK OUT FOR MAP. AP.



I super to conduct o breeding of Choice Carniolan Queens hast sesson, and orders will be booked from Gats. He money sent until queens are ready to ship. FOMM ANDREWS, Paten's Mills. Wash. Co. N. E.



riverside Dairy & Poutry _{YARDS.}

Jas. MoLaren, Prop STEPHENS ST. OWEN SOUND.

Importer and Breeder Dark Brahmas Adams S. C. W. Leghorns.

S. C. W. Leghorns, High class fancy Pigeons Lop eared Rabbits, Guinea Pigs & White Rats

Eggs from braines or W. Leghorns \$2 per 13; \$3.50 per 26. To parties purchasing birds, \$1 per setting. JAS McLAREN, Owen Sound.

Choice Thoroughbred Prize Winning Poultry

At a reduced rate this month to make soors for PARTRIDGE COCHINS.

SILVER WYANDOTTER

WHITE MINOROAS,

and WHITE PLYMOUTH ROOMS,

or would exchange for offer.

JOHN GRAY, Todmosdan, Out.

Bantam Fanciers NEW FANOIERS. Eight Black Red Cockereis-grand ones, guaranteed Bred from a Crys-

GAME

Eight Black Red Cockereis-grand ones, guaranteed Bred from a Crystal Palace oup winner. Sure to pleas you; from \$2 to \$5 each. Some Fine Pair; also a good Pile Bantam Cockerel, (yellow legged), bred from a great English winner, fine station, color, etc. Price only \$3; also large Game fowls. All are in fine health and condition. First money gets the best.

condition. First money gets the best. E. F. DOTY; 47 Wellington Place, Toronto



Payable

In Advance

Muth's Honed Extractor.

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

Cor. Freeman & Central Avenues, Cincinnat

PATENTS!

Patents, Caveats, and Trade-marks procured, Rejected Applications Revived and prosecuted. All business be-fore the U. S. Patent Office promptly attended to for moderate tees, and no charge made unless Patent is "ecnred. Sendfor "INVBNTOR'S GUIDE." FRANKLIN H. HOUGH Washington, DC

BARNES' FOOT-POWER MACHINERY



Read what J. J. PARENT, Charloon, N. Y., says-"We cut with one of your Combined Machines last winter so chaft hives with 7 inch cap. 100 honey racks, 500 broad frames, 2,000 honey bores and a grea deal of other work This winter we have double the number of bee-hives, etc. to make, and we espect to do it all with this saw. It will do all you say it will," Catalogue and Frice List free, Address W.F. & 21

JOHN BARNES, 544 Ruby St., Rockford, Ill.



THE SEVENTH ANNUAL EXHIBITION

S-OF THE-

LASTERN ONTARIO

Poultry & Pet Stock Association

Will be held in the

OITY OF OTTAWA.

FEBRUARY the 3rd, 4th, 5th and 6th, 1891

JUDGE-J. T. Micknell, Bufalo, N.Y.

For Premium Lists, etc., address

ALFRED GEDDES.

Secretary, P. O. Dept., Ottawa,

ALLEY'S IMPROVED AUTOMATIC SWARM HIVER

Thoroughly tested and guaranteed to SELF HIVE every swarm that issues. Sample by mail for \$1.00. American Apiculturist coejyear and swarmer by mail \$1.50. Sample Apiculturist (giving full illustrated des-cription of Swarmer free

ALLEY, Wesham, Mass,

CONDENSED DIRECTORY.

Advertisements under this heading, occupying one haif 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 Clarada Chi Bird Store, Cleveland, Ohio.

W. COLE'S Black Minorcas. I have bred those birds for 5 years und they are as good as any in Canada, United States or England. 1889 pullets 94 94 943, 943, 96, 96, 96, 963, cockerel 953, J Y Bicknell, judge Eggs for hatching \$1.25 per 13. WM. COLE, Brampton

HOLY LAND QUEENS. Home and imported raised aspecialty. Bees by the pound and frame queens by the dozen. MENTION THIS JOURNAL GEO D. RANDENBUGH 445 Chestnut St. Reading Pa

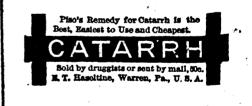
ITALIAN QUEENS from imported of home bred honey gatherers. Each 75c. gir \$4.00. Order now, pay when queens arrive. W. H. LAWS, Lavaca, Sebastian co. Ark. 1890

FEIERD. Look here ! italian Queens for sale: us tested 45 cts. each; tested 85 cts each; one frame brood 50 cts; three-frame nuclei, with Untested queen, \$2; with tested queen \$2.50. E.S. VICKERY, Hart well, Hartwell co. Ga.

100 COLONIES of Italian bees for sale with yong queens and plenty of stores; hives hold18 frames chaff sides and 2 division boards making double ends. Write for prices stating quantity required. G. A. DEADMAN Druggist etc., Brusseis, Ontario.

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

POULTRY.MEN-Do not order your winter circular, or in fact any kind of printing until you have first asked us for samples and estimates. The DA JONES CO., Ld., Beeton.

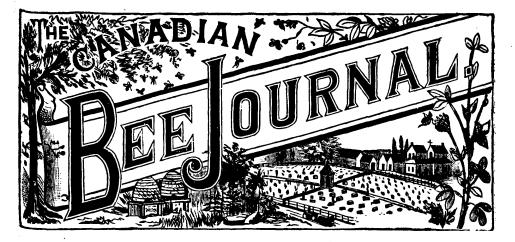


WHITE LEGHORNS

My mating this season gives me a fine lot of young Cockerls which I will sell cheap. also one two year old cock, a grand bird.

get the Write for prices and best in America.

R. H. MARSHALL DUNNVILLE



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

Vol. VI, No. 20. BEETON, ONT., JAN, 15, 1891 WHOLE NO. 280

THE	CANA	DIAN	BEE	JOURNAL
I	SSUED 15	T AND 15	TH OF E	ACH MONTH.
D. A. JONES, - EDITOR-IN-CHIEF F. H. MACPHERSON, ASSOCIATE EDITOR				

EDITORIAL.

HIS is an issue of conventions. We give reports of two or three local Associations, and partial reports of the Detroit and Ontario conventions. Just as we were getting along nicely with our report of the St. Catharine's meeting, we received a little "set back" which, while it will not interfere very materially with our giving the full report of the meeting, together with all the papers in the very near future, prevents us doing so in this and the next It will be remembered that a issues. resolution was passed instructing the President and Secretary to transmit all the papers read to the Minister of Agriculture, together with the regular annual report. The President called at the Department on his way home from the convention, and saw the Deputy-Minister with reference to that and other matters, and Mr. Blue stated that the Department would be quite willing to Publish all the papers and documents submitted to them, provided they received them at first-hand, and also be- of Geo. Neighbor & Sons.

fore they had appeared in the newspapers or journals. This condition they impose upon all Associations of like nature. Under these circumstances we feel that it would be unfair for us to give the papers to the public, even though we had them all in our possession, and we have, therefore, transmitted them to the President to go into the annual report, which will appear in the course of two or three weeks. We will likely be able to give them in our issue When the information of Feb. 15. detailed above, came to us, we had two of the papers already in type, and we have permission from the Deputy-Minister of Agriculture that our using these will make no difference to their appear. in the report. Of course, without the papers as leaders, the discussions thereon will not prove very satisfactory reading, and these we will also withhold until the appearance of the papers.

Death has added another to its long list, in the person of Mr. Alfred Neighbor, London, Eng., who passed away on the 19th December last. Mr, Neighbor was a personal friend, and as such we regret very much to hear of his He will be missed much more death. by the bee-keeping public of England. to whom he was well known, through his book on apiculture: "The Apiary; or Bees, Bee Hives, and Bee Culture, as well as being one of the supply firm

GENERAL.

POLLEN GRAINS

Gathered from Far and Near by Observer.

We have sleighing at last.

Stray straws in Gleanings makes good reading.

The Bee Keeper and Bee World, both new publications appeared on January 1st.

Iron rust will make wax dark. Then don't use anything unless its well tinned.

In Derbyshire, Eng., the bees are informed of a wedding and the hives are decorated.

That Tinker—Heddon controversy makes not bad reading, if they'll only refrain from personalities.

Don't wait until you have two or three swarms perched upon an apple tree before ordering your hives and foundation.

I believe that fewer bee houses will be built in the future than in the past. Wintering on ummer stands, properly packed seems to be gaining ground.

I notice that with one exception every beejournal published on the American continent, is connected with a supply trade. Are they any the worse for that ?

Is it true that there are hundreds of hives left on their summer stands right through the winter without any protection as \mathbb{R} . F. Holtermann would have us believe?

Emma Wilson (that's Dr. Miller's sister-inlaw) says that every lady will find a pair of rubbers boots and a good gossamer (one with sleeves preferred) a great help in the apiary. She's right.

Doolittle says that all colonies wintered on summer stands should have at least ten pounds of honey in their hives the middle of April, to give the bees the confidence they need to start out aright with for the season.

I only see the names of three or four Canadians in the list of members of the National Beekeeper's Union. There would be many more if the manager would tell us if the rights of protection would be accorded Canadian members in case of persecution.

Ira Barber sticks stakes down by every hive and marks on them numbers corresponding with one on the hive. In spring he takes the hive back to its old stand as indicated by the number. By doing this fewer bees lose their location and the hives are kept more evenly populated.

Dr. Miller commends Canadians for the active done at t measures they have taken to suppress foul the bees.

brood. Wonder what he'll think when he hears that steps are being taken to put a stop to the importation of "bees by the pound" from Uncle Sam's, unless they have passed through quarantine. A good many Canadians blame this traffic for all their troubles.

Ontario Bee-keepers' Association-

ANNUAL MEETING HELD AT ST. CATHAR-INES, JAN. 7-8. 1891.

HE first session was called to order by President Allen Pringle, in the Court House, St. Catharines, at 3 p.m. on the 7th, with about 60 beekeepers present. Owing to the duties of the auditors not being completed at the specified time, the regular programme was not proceeded with, and an informal meeting was held for a half hour. The president called for questions.

PARIS GREEN ON POTATOES.

F. A. Gemmell wished to know which was the most injurious, the sprinkling of Paris green on potato vines or on fruit bloom. He had noticed a statement ("Number Two," in C.B.J.) to the effect that more bees were destroyed by partaking of Paris green from potato vines, than from the other source, and he wished to know if any one had ever seen bees at work on potato vines?

W. J. Brown.—Had never seen them. J. B. Hall.—Had seen them frequent-

ly gathering dew off the potato plants. J. G. Gray.—If it once dries on the leaf the bees will chew the leaf.

I. B. Hall.—The dew moistens it.

President. — Spraying fruit trees should be done when the bees will not be injured—just after the bloom is off. To have its legitimate effect in preserving the fruit it must be put on just as the bloom is off. Had never seen bees sipping it off potato vines.

Mr. Shantz.—At a meeting of the Fruit-growers Association the other day Mr. Beadle said that spraying should be done just *before* the fruit bloom.

The president.— There is certainly some misunderstanding there.

J. K. Darling.—The spraying should be done just after the petals fall—when the insect deposits its eggs there. If done at this time no harm will result to the bees.

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ROUTINE BUSINESS.

The secretary and treasurer having come in while the above discussion was in progress, the formal business of the association was taken up.

The minutes of the former meeting were read and confirmed, when followed the

DIRECTOR'S PEPORT.

The Board of Directors beg to report:

During the year there have been three meetings of directors—the first at Belleville, immediately following the last annual meeting, for the purpose of appointing the officers and committees, and for the arranging for a premium to be given to members of the Association for the year 1890, which, as you are all aware, was a No. 2 smoker, supplied by The D. A. Jones Co.

The president, secretary and treasurer were appointed an executive committee, and they gave grants to the Toronto Industrial Exhibition (\$20), and to the Western Fair Association (\$10), to be expended in prizes for honey, etc.; and arranging the programme for the present meeting.

Mr. McKnight and Mr. Emigh were appointed as the representatives of this Association on the Board of the Toronto Industrial Association.

Mr. Gemmell represented this Association on the board of the Western Fair Association.

St. Catharines was chosen as the place of meeting.

The president and secretary were appointed a Printing committee, and a thousand circulars Were cent out through the province inviting membership in the Association, with good revolts.

A special meeting of the directors was called in Toronto for the purpose of appointing an inspector and sub-inspector under the "Act for Suppression of Foul Boood," when Wm. Mc-Evoy, Woodburn, and Samuel Bray, Alliston, were appointed to the positions of inspector and Sub-inspector respectively. It was thought ad-Visable that a committee be appointed to arrange for the distribution of a pamphlet regarding "Foul Brood, its cause and cure," and F.A. Gemmell, F. H. Macpherson, D. A. Jones and the president were detailed to this duty. This committee waited on the Minister of Agriculture, and arranged for the distribution of such a Pamphlet, embodying the act which had just been passed, and these formed the subject matter of an official bulletin (No. 33) which was distributed to some 6,000 to 7,000 bee-keepers throughout the province. An edition in German Was also printed.

By-laws for the guidance of the inspectors were also passed at this meeting.

The third meeting of the directors has been held to-day, and the accounts for the year closed.

The membership for the past year has been the largest since its inception, numbering 323, and up to this date the renewals of membership for 1891 (85) are the largest ever before reported at an annual meeting.

During the year eleven local associations affiliated with the parent society, and these represent a total membership of

The Treasurer's report will show the association to be in a fairly good financial position, although the amount of the balance in hand is is not so large as in previous years, because of drains on the Association purse which the treasurer will detail in his report.

The Association is in excellent position, and it is hoped that our successors in office may continue to keep up the interest that the present directors have endeavored to maintain.

All of which is respectfully submitted.

SECRETARY'S REPORT.

The secretary's report showed receipts of \$323 in membership fees, and \$55 received from 11 affiliated societies.

TREASURER'S REPORT.

Following is an abstract statement of the receipts and expenditures of the year, showing a balance in hand of \$51.88.

ABSTRACT OF THE RECEIPTS AND EXPENDITURE OF THE ONTABIO BEE-KEEPERS' ASSOCIATION FOR THE YEAR ENDING 7TH JANUABY, 1891. R. MC-KNIGHT, TERASURER.

RECEIPTS.

То	Cash balance from	last year.	\$ 299	51
	Foor from Secretar	,	278	00

" Government Grant..... 500 00

\$1177 51

DISBURSEMENTS.

By Cash in connection with foul brood

•		Legislation \$ 155 25	
"	"	for Smokers to members 278 05	
"	۰.	Directors' expenses 184 40	
"	"	Grants to affiliated Societies 299 75	
"	••	Printing 21 75	
"	""	Secretary's Salary 50 00	
"	"	Sundry items 136 43	
		Balance in hand 51 81	

\$1177 51

To balance in Treasurer's hand, \$51 88

AUDITOR'S REPORT.

The auditors, D. Anguish and A. W. Humphries, reported having carefully examined the books and accounts of the secretary and treasurer, finding them correct in every particular.

On motion of $\hat{\mathbf{F}}$. H. Macpherson, seconded by C. Urlocker, the reports of the secretary, treasurer and auditors were received and adopted.

PRESIDENT'S ADDRESS.

President Allen Pringle then delivered his address :---

For the reasons mentioned on the editorial page the address of the President will not be inserted at the present moment. The address dealt fully with the work of the committee regarding foul brood legislation, and was full of interest.—Ed.

During the reading of the president's address the mayor of the city of St. Catharines entered, and immediately at its close the mayor was called on, when he delivered an address of welcome. He stated that during the past couple of years some five or six associations had honored St. Catharines with their presence, and none were more welcome to the garden city than the Ontario Bee keeper's Association. He then dwelt for a short time on the advantages of St. Catharines as a place of residence, especially dilating on its system of waterworks, which were on the gravitation system, and were considered by the good people of St. Kits as the finest in the country. In closing he referred to the father of bee-keeping in their city -Mr. Hellems, who he said had done much to create an interest in the pursuit in their midst.

President Pringle thanked the mayor for his kindly address of welcome, and also for the interest he had taken in furnishing such a comfortable place of meeting. Speaking of the water works, he said that the use of bad water caused Every an immense amount of sickness. family should have a filter. He had had one in use for upwards of fifteen years, and instead of using hard water, soft water was filtered, and it was thus rendered free from all impurities except mineral substances held in solution, and one thus had good wholesome, pure He advised every one to get a water. filter.

In closing he called on Mr. Hellems,

a white-haired old gentleman who had evidently passed the allotted span of three-score and ten years. Mr. Hellems explained that he had kept bees for over fifty years, and that as a boy at home when but ten years of age he had handled them without gloves, veil or smoke.

RESOLUTIONS.

On motion of R. McKnight, seconded by S. Comeil, the president and secretary were instructed to prepare a fullreport of the meeting, together with all the papers read, to be forwarded to the Minister of Agriculture, together with the usual report.

Moved by F. H. Macpherson, seconded by S. Corneil, and resolved :--

That this association desires to place on record its appreciation of the services rendered this association by the Minister of Agriculture, in the matter of the passage of the "Act for the suppression of Foul Brood," and for the generous distribution of an official bulletin relating to the cause and cure of the said disease, and that this resolution be embodied in the report to the Minister of Agriculture.

FOUL BROOD NOT CAUSED BY THE IMPOR-TATION OF QUEENS.

D. A. Jones.—In discussing the suggestion of the president re the importation of queens, was satisfied that it would be a very difficult thing to prevent the importation of queens from the U.S; No danger of and foreign countries. ot foul brood from the importation queens need be apprehended if the queens are sent with food of sugar stores, and if those getting them will be careful to destroy all the bees which accompany It was Mr. Adam Grimm who her. He gave this matter a thorough test. had 200 colonies, all more or less affected with the disease, and the queens in many of the colonies were worth at that time from \$10 to \$15. He did not wish to do away with his queens, and he experimented and found that he could put the queen in a clean colony with no. danger of giving it the disease.

It was here decided that any further discussion on the subject should be held over until after the reception of a paper which would be read, and the report from the foul brood inspector.

AFFILIATION WITH N. A. B. K. A. On motion of R. McKnight, seconded by J. K. Darling, and resolved, That we continue in affiliation with the North American Bee-keepers' Association.

QUESTION DRAWER.

"What is the best time to unpack bees wintered outside?"-J. B. Hall.

F. A. Gemmell.—About 1st June, or Just before the swarming fever.

P. Bussey.—Leaves packing on till they hang out; then takes the packing off down even with the top of the broodnest.

R. McKnight.—The question admitted of two answers. If in single clamps, not at all, if it is not inconvenient to work with them. If packed in clamps, six or eight or more together, whenever it was found necessary to separate the clustered hives to prevent contusion. He had 14 individual cases, and he keeps the bees packed in them until he wants to get at the hives readily for manipulation. He always leaves them Packed till the last minute. Considered the individual case best.

Wm. McEvoy.—Packs on summer stand in single clamps.

A. W. Humphries:—Related the case of a friend who never unpacked his bees at all, and who always had good success. He kept them in a bee-shed facing the east, in three tiers, separated by divisions in the front, and he manipulated them from the back of hive. In 1889 he had 24 colonies, increased to 36, and took 500 lbs. comb and 1,100 lbs. extracted honey. In 1890, which was not so good a season, he had 35 increased to 37, and took 250 lbs. comb and 1,100 lbs. extracted. As his colonies increased he extended his shed.

P. Bussey.—The hives should never be more than four inches from the ground in the honey season.

THE BEST PACKING.

Some one then asked what was the best packing.

S. Corneil. — In the language of a Scotch bee-keeper in the British Bee Fournal, "the best packing for bees is bees"—when the hive gets full, then unpack.

W. A. Chrysler.—In Kent county chaff-packed hives were considered the best—the nights were cool and the days raw and windy in spring and early summer. They kept the covering over the top till June 16th or 15th.

D. Anguish.—Used chaff-packed hives right through the summer, with four inches of packing.

S. Corneil.-Considered it best to protect by means of permanent packed walls, which will not make the hives too wieldy. Believed he had the warmest They were packed hives in Ontario. with cork-dust, were not more than 17 inches square outside, and when filled with combs did not weigh more than 22 The outside walls were of or 23 lbs. $\frac{1}{8}$ -in. lumber; then came 1 $\frac{1}{8}$ -in. cork dust, then 3-ply of carpet felt paper, and then the inner wall of **a**-inch picture backing. The entire wall was but 21 He was willing to test inches thick. them against any known hive for heatretaining qualities.

J. Myers.—Used flax chaff for packing, but it drew dampness.

R. McKnight.—Was opposed to chaff packing. Believed cork dust the best; and he believed also that he was the first in the world to recommend it. Chaff draws damp, and it becomes an absorbent when used over the frame. An absorbent was not what was wanted, but something that would transmit moisture. Cork was always dry. Dry leaves were better than chaff, but the cheapest was sawdust, taken from thoroughly dried lumber, such as is usually ripped up in planing mills.

D. Chalmers. — Wintered in three different ways—in house, large clamp and in individual clamp on summer stands—preferred the latter. He was trying dry wood ashes as a packing, and hoped it would turn out well.

S. Ccrneil.—If Mr. Chalmers would look in the Encyclopedia Brittanica, he would find that dry ashes was one of the very good non-conductors, and will retain heat.

J. Myers.--Had tried cork dust and found it good.

S. Corneil.—The objection to cork dust was the difficulty of obtaining it. He had obtained 500 lbs. in Rochester, which cost him 5c. per pound and the freight. If there was likely to be enough demand for it, a firm in Toronto had said they would put in a machine for grinding it.

Mr. Pringle.—With the exception of cork dust, which was the best, he has found that dry fine sawdust was the best available packing.

Mr. McEvoy asked for a vote on the question of out-door vs. in-door wintering, and after a good deal of discussion, when a show of hands was called for, it appeared that the majority present were in favor of packing on summer stands.

EVENING SESSION—FIRST DAY.

At 7.20 the president called the meeting to order, and asked for Mr. R. McKnight's paper on

HONEY PRODUCING PLANTS.

When requested to prepare a paper on honeyproducing plants I felt the duty to be a difficult one. The more I looked into the subject the more apparent did the difficulty become, not because of the meagerness of the subject but because of its magnitude. A little investigation will reveal the fact that honey-producing plants are greatly more numerous and widely diffused than most of us have any idea of We all know the class of flowers from which the greater part ofour su pus honey is collected, and have some acquaintance with the richness of their nectar producing capabilities; but few of us have any conception of the vast variety of plants that contribute to the simple wants of the bee. They include all and more than all that require the visitation of insects for their fructification and continued existence. Moreover it is a recognized fact among scientists who have devoted much time to the investigation of botanic mysteries, that flowers once devoid of perfect nectaries, and wanting in the functions necessary to the abundant production of honey may be so changed through time and selection as to become so. This being the case it is possible that flowers that now regale the bee with their sweet laudations, may in time lose their power to supply their liquid attractions, and possibly pass out of existence. It must be borne in mind that honey producing plants are not limited to those only whose flowers are visited by the bee. The flowers of many honey producing plants—their nectaries and the modification of their nectaries being so arranged that the bee cannot extract the honey therefrom when it is easily accessible to other insect tribes. Then again there are families of plants that yield nectar not found in the blossoms-that popularly speaking have no blossoms-The common bracken may be cited as an example. A sweet liquid is oftentimes exuded from the leaves of a great variety of trees and shrubs; and appropriated by the bee. It is, however, generally taken by it at second hand, being first collected by myrids of tiny insects and subse. quently expelled from their bodies in a modified

form, when it is popularly known as honey dew. It is therefore manifest that for me to attempt to enumerate the honey-producing plants, even of my own neighborhood, would be a hopeless task. Indeed, I am persuaded that no beekeeper or botanist has yet accomplished the work of naming the entire honey producing plants of this or any other country. A tolerably com. plete list of those best known may be found on page 386 of Langstroth, on "The Honey Bee Revised, by Dadant. To this I refer those who are curious to learn the names of the best honey producing plants of North America.

R. MCKNIGHT.

Owen Sound.

HONEY YIELDING PLANTS, COPIED FROM LANG-STROTH, REVISED BY DADANT.

Compositae Dandelion Thistle Chamomile Snowflower Ox-eye-Daisy Goldenrod Coreopsis Lettuce Chickory Boneset Iron Weed Indian Hantain Fire Weed Aster Burr Marigold Spanish Needle. Coneflower Isatis Tinctoria Star Thistle Thoroughwort Butterweed Sneeze wort Blue bottle Rag weed Varieties of Echinops Onagsaceve Leguminous Indas Tree Locust Tree Honey Locust Mistaria Clover-white Red Clover, Alsike Milibob Alfalfa Peas Beans Vetches Lentils False Indigo Partridge Pea Wild Sena Milk Vetch Gellon Wood Mesquit Tree Cleome - Integrifolio and Pungens Labiate Sage Mint Ground Ivy

Pleurisy root Corniterous Rape Mustard Cabbage Radish Candy Tuft Stock Wall Flower Moon wort Sweet Alyssum Cress Ericaceve Blueberry Sow wood Laurel Clethra Alwrfolia Cowberry Huckleberry Whottleterry Procumbens **Talerianaceo** Valerian Lamb lettus (Primrose family) Ġaura Enothæxa Willow herb Liliacoe Lillies Aspargus Star of Bethlem Lilly of the Valley Solomons Seal Violet. Night Shade Garlic Onion Crocus Malrecoc Mallows Hollyhock Cotton Abutilon Caprifoliceve Honeysuckle Snowberry Arrow wood Cucumbaceoc

Horehound Motherwort Horse Mint Basil Hislop Bergamet Margovam Thyme Melissa Dead Nettle Brunella Pennyroyal Rosaceous Wild Rose Cherry Plumb Apricot Apple Pear Quince **Hawt**horne Blackberry Raspberry Strawberry Juneberry Cenqufoil Bowmans root Queen of the Prairie Meadow Sweet Pyracantha Polygamous Buckwheat Lady thumb Rhubarb Sorrel Krout weeds in variety **Bavaze** Family Bavaze Viper Bugloss Comgry Phacelia Virginia Lungwort Hound Tongue Gromwell False Gromwell Sorophularia Simpson honey plant Vormicas Yellow Jassamine (poisonous) Asclepiadacew Milk weed Silk weed Asclepias Syrica Tuberosa

Cucumber Melon Squash Gourd Umbelliforow Parsley Angelica Lavage Fennel Parsnip Corriander Cow Parsnip Coryophyllaceoe Pink Licknis Chickweed Saponaria Reb Grass Goose foot Blue-eyed grass Corn flag Buckthorns Barbarry Sumac Grape Vice Polansia Button weed Minionette Farel Skunk Cottage Water Leaf Hemp Touch me not Amaranth Crowfoot Millon Poplar Oak Walnut Hickory Beech Burch Alder Elm Hazel nut Maples Horse Chestnut Persimmon Gum Tree Dogwood Button bush Cypress Liquidamber Linden

HONEY DEW.

Aylauthus, etc.

F. A. Gemmell.—Asked with reference to the secretions found on willows, what it was the insects lived on, and if it went through any change before being exuded and taken up by the bee?

Mr. Wm. McEvoy.—Thought that honey-dew was atmospheric. He had found the secretions on the leaves of trees, but could not find but one or two of the aphides.

S. Corneil.—If Mr. McEvoy had gone balance of the report of the higher up the tree he would have found of the convention.—Ed.]

millions. In the fall of 1886 he was away from home several months, and left his bees in charge of others. That fall the aphides had come in bigger flocks than ever, and his has gathered much of it. The colonies were doubled down to 180, and some of the honey-dew was fed to those deficient in stores. The smell was horrible, and the mixture was as dark as black-strap. In the spring his 180 colonies had dwindled down to 50 or 60. He had exposed some of the combs, but there were no bees around Lindsay that would rob them.

J. K. Darling.—Corroborated what Mr. Corneil had said. The aphides live by puncturing the leaf or stem. The liquid is exuded out of some little horns at the rear. He used to blame the ants for killing his cherry trees, but he had since found out that they were going up the trees to milk the aphides.

D.A.Jones.—When Prof. Cook visited Beeton some years ago they had gone into the bush near one of the out-apiaries and cut off branches, on the leaves of which were thousands of these aphides, and when exposed under a microscope they could be actually seen puncturing che leaves.

Mr. Wm. McEvoy.—Asked how it was that it was most prevalent during dry weather?

J. B. Hall.—The reason was that if there was lots of wet weather it would wash off the leaves; when dry, the exudations dry on the leaves, and in the mornings when wet by the dew the bees gather it.

R. McKnight. — Believed that the presence of honey dew was due to atmospheric conditions, but the saccharine matter comes from the plant and not from above.

FOUL BROOD.

[The subject next taken up was "Foul Brood," and it was introduced by a verbal statement of his work by the Foul Brood Inspector, followed by a most excellent and valuable paper on the subject by Mr. S. Corneil. As we have not room for the paper and discussion in this issue, we will hold all over until next issue, as well as the balance of the report of the proceedings of the convention.—Ed.]

THE CANADIAN BEE JOURNAL.

Michigan State Bee-Keepers' Convention.

25TH ANNUAL CONVENTION.

THE above convention was held at the Normandie House, Detroit, Mich., opening January 1st, 1891, at 9 a.m. The president, Prof. A. J. Cook, in the chair. A communication was read from the secretary, H. D. Cutting, in reference to the honey exhibit at Chicago Fair, advising that each state make a honey exhibit separately, under a representative appointed for the purpose.

In the absence of the secretary, the assistant secretary was appointed secretary.

The reception of annual dues followed, resulting in a membership before the close consisting of about thirty-eight.

The following committees were then appointed :

Exhibits—Dr. A. B. Mason, Messrs. Truck and R. D. Parker.

Resolutions—Byron Walker, A. W. Fisher and B. Knight.

Columbian Exhibit — M. H. Hunt, A. I. Root and R. F. Holtermann.

Legislation—Hon. R. L. Taylor, W. Z. Hutchinson, Geo. E. Hiltor.

The subject, "Best method of rearing queeps," came next on the programme. Mr. Hutchinson being absent, it was opened by Mr. Heddon, the following paper being handed in later:

"THE BEST ALL-PURPOSE QUEENS, AND THE BEST METHOD OF BRABING THEM."

This is the topic that has been assigned me by the secretary. I have wondered quite a little why he used the words "all-purpose." I supposed queens were all for one purpose--that of laying eggs. I don's suppose we would rear them any differently if we were to have their offspring engage in storing extracted honey than we would if their progeny are to be engagediin the production of comb honey. If we were to engage in rearing bees or queens for sale, I suppose that we would not attempt to rear queens differently in order to endow them with different qualities. In the premium lists of fairs I have seen premiums offered on an "all-purpose" bee hive, that is, all things considered, a hive that is the best adapted for raising either comb or extracted honey, or for either cellar or outdoor wintering. I can see how these wordswhen applied to a queen bee they lose their meaning.

I might say in passing that I am opposed to an all-purpose anything, whether it is a queen bee, bee hive or a new milk cow. These combined all-purpose articles must succumb to the special purpose machine.

While I have criticised the use of the words "all-purpose" as applied to queens. I am willing to admit that much of our success centers in the queens. Of the factors under our control that go to make up our success, I think location, hives, combs and management are fully as important as the queen. We need queens that are sufficiently prolific to all the combs of an ordinary brood nest in the early part of the seasor. Many plead for extraordinary prolificness as a very desirable quality in a queen. If queens were expensive-cost even \$1.00 eachthere might be some excuse for desiring prolificness in a queen, but as they are ordinarily reared by the bees when left to do the work themselves, they practically cost nothing, and there is no excuse for not having enough of them-so that there will be no need of "horsewhipping" them, as Mr. Heddon puts it.

As to the rearing of queens, I know of no better way for the honey producer than that of simply allowing the bees to follow their own instincts. Young queens-those under two years of age-usually are the most desirable. They begin laying earlier, fill their combs more completely, and bring their colonies out in a more populous condition at the beginning of the white honey harvest. There is less disposition to swarming with young queens, and the same may be said in regard to the building of drone comb, if swarming occurs and foundation is not furnished. As to the rearing of queens artificially, so to speak, we should strive to secure the same conditions under which they are reared naturally. There must be warmth, food in abundance, plenty of nurse bees, and nothing but eggs or just-hatched larvæ for the bees to develop into queens. As to the details of commercial queen-rearing, each breeder is a law mato himself, and I think I have now mid enough to start the discussion upon "The best all-purpose queens, and how to rear them."

W. Z. HUTCHINSON.

differently in order to endow them with different qualities. In the premium lists of fairs I have seen premiums offered on an "all-purpose" bee hive, that is, all things considered, a hive that is the best adapted for raising either comb or extracted honey, or for either cellar or outdoor winterin. I can see how these words-"all-purpose" — might be applied to a hive, but

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So and keep the best looking queens, irrespective of breed and this generally resulted in hybrids. In the majority of places he thought the impression was Italians had increased the honey yield, but it was easier to keep hybrids, and it is hard to get good hired help.

Mr. Moore.—When we first started beekeeping we spent much time fussing and puttering with our bees. Where we get many, however, we have not the time for this, and to keep them pure it was necessary not to putter. Italians had given him the best results he thought. He thought, however, one wanted pleasure as well as dollars and there was no pleasure in handling hybrids.

Mr. Berg, Traverse city, Mich.—He had some cross-bred bees and they Were very cross. They aimed at the head every time. He thought bees could be made cross by handling, but he preferred the Italian or German bees. He had a colony which gave him three seasons 4 supers, 32 sections each of comb honey. The queen was hybrid; he was foolish enough to kill her and put in Italian. Black blood in every shape appeared to crowd out the light and if they found hybrids best they would soon have blacks.

Mr. Heddon.—Thought that the reaton the black blood hung on so was be-Cause we noticed it when we did not Want it. Quality was the question. It Was easier to breed for bands than Quality. Some people said thistles Would stay better than wheat; he thought not, it was cnly because we wanted the Wheat. Mr. Heddon would sooner have a qeeen out of a honey apiary than One raising queens for sale.

R. F. Holtermann.—Do you not think the queen rearer can devote more time to selection Mr. Heddon? Yes, but I would sooner have queens from a colony giving good results. He thought the disposition of the Italian was not as good as the German. When he got the right bees he let young queens run into the hives as they hatched for swarming and generally the old queen was superseded.

Dr. A. B. Mason, Auburndale, O.— Jokingly said he wished he could always believe all everyone said but he could dot believe a man when he said it was as easy to grow wheat as thistles. He liked Italian as well as hybrid and vice versa. As to color, he did not like the too yellow bees.

Mr. Holtermann. I like them just about as pure as I can get them without much fussing.

Mr. Heddon.—Have had pure Italians in large numbers. He did not think much of rising votes in conventions; he wanted to see why a man so thought, and then let the reader judge if the reasons were good.

Mr. Walker, Capac, Mich.—My flow is mostly fall and black bees do the best for me. For 16 years I have made honey production pay every year.

J. T. Timpe, Grand Ledge, Mich.— I prefer the Italian bees.

Mr. Heddon.—In reply to a question there is only one race of bees but they quickly breed to strains.

Upon vote of pure black bees, tavored by one; pure Italians, 9; hybrids, 8.

ARE APICULTURAL INVENTIONS IN DEMAND OR EXCESS.

Your committee has assigned a rather difficult subject for me, and I must acknowledge I am rather at a loss as to how to handle it. Web. ster's New International says that an invention "is the art of finding out something which has not before existed." That last clause would throw out of the category nine-tenths of the socalled inventions. In this connection it should be observed, that the field for original invention is narrowing down. The older the science or industry, the more limited the opportunity for real invention or startling innovation. Inventive genius has then to content itself simply with the improvements upon, or different applications of old or existing principles. In electrical science James Heddon tells us, on good authority, that all the inventions of the present time are simply mechanical improvements, and that no great innovations may be looked for, and I would add that apiculture is no exception. Our own Lang. stroth and Quinby gave us the first practical moveable frame hive. Major Hrushka the first extractor, and Mehring the first real comb foundation. These three are the great inventions in our beloved industry, and I think I can say truly, that, with few exceptions, all others are simply applications or improvements. Am I stepping on somebody's toes? No. It takes a genius to improve or to make a new application of an old idea.

Now, then, in answer to the question, "Are Apientural Inventions in Demand or Excess?" I answer "Yes" and "No" to both; although there may be an apparent contradiction in Yes, apicultural this, there is none in reality. inventions, or, if you please, improvements, are in demand. There never was, and never will be, a time in our history when some invention will not be needed to accomplish certain desired ends. We often hear it said, that, if some enterprising Yankee would get up an invention to accomplish so and so, he would make his fortune. Much has been said about the world inventors. There not rewarding is no doubt some foundation for this, but there is more ado made about it than the facts warrant. The world at large is looking for and ready to reward some Edison, some Westinghouse, some Watt, some Erricson or Gutenberg to invent or discover any device or process whereby certain economic ends may be accomplised.s As I have already intimated, our industry is one of the old ones. Since we have had a Langstroth, a Quinby, a Hrushka and a Mehring, we cannot expect to make any startling innovations, but there is a big field yet for improvements, Well, if apicultural inventions, or, if you please, apicultural improvements, are in demand, what are one or two of them, for example? Asto implements, I would suggest that we need a good reversible extractor that shall not be too large or cumbersome. Whether such a one can be obtained is a question. Again we need some method whereby all bee-keepers can prevent swarming, and yet not interfere with the honey crop. There are several ways of preventing it, but none that seemed generally accepted or adopted. These are but two and I might suggest others, but I will sum all the rest of the needed inventions in this: we want inventions or new methods whereby we can produce better and more hone , and do it more cheaply. We bave seen that during poor seasons, it is a difficult matter to raise the price of honey in pro-What we must have. portion to its scarcity. thea, is cheaper production. Possibly what we need is fewer fixtures and fewer inventions, and more economy in labor and time. If that is the case the field for improvement is more in method than in the invention of devices. I have shown that inventions are in demand. I now propose to touch on the other side of the question, namely that they are in excess. Some inventions are like some men-it were better that they had never been born. Many of the socalled inventions have been a positive curse to our industry. Beginners and over enthusiastic bee-keepers have adopted them at a large expense only to find that they were a delusion and a snare, and too late they discover that they upon

have tried a few to see whether that number In justified the adoption of a larger number. my travels recently among the bee-keers I rep across three or four who, having been over enthusiastic in regard to the merits of a certain hive, had made and put into operation any They had where from fifty to five hundred. carefully tried them and found them wanting; and at the time of my visit I found the hives stacked up by themselves as it were a monument of apicultural foolishness, and their auth-Of course they ar. ors well nigh discouraged. gued that bees did not pay very well, and had come to the general conclusion that the hives recommeded by Quinby and Langstroth were best after all. These are by no means isolated I hear of it through correspondence too cases. Is behooves editors, then, to be frequently. careful what they reccommend or place before Perhaps it would not be too the public. sweeping to assert that about nine-tenths of the apicultural inventions are absolutely useless. They are a damage to the poor people who are duped by them, and a positive loss in them to the inventor. Impractical inventions, as a rule, are dreamed out by impractical men, and it were better that they never appear in the pages of ? bee journal.

A good many things that we younger ones think we have discovered, were years ago men. tioned and described by father Langstroth and father Quinby. The most I think we can expect to do is to improve upon some old method or device. While I would not discourage inventors I would certainly warn the novice against wasting too much time in trying to get up something that will be vastly superior to anything else ever thought of or dreamed of by the fathers of There is just one thing more I apiculture. would like to speak of, although it is a little foreign to the treatment of the subject as above and that is, a sort of jealousy among some of our apicultural inventors as to who first originat ed or devised this or that thing. The priority of claim rests not with either of the disputants, as a general thing, but some poor obscure bee keeper who does not care who has the oredis of the idea, so long as he and his bee-keeping He is not going to lif friends are benefited. awake nights worrying over it anyhow. I speak of this because I have seen a little undercurrent in some private correspondence that passed through my hands, and as long as the idea is simply an improvement upon an old method, and not legitimately an invention, what matters it who has the credit? If we are jeal-ous at all, let us be jealous for each other-jealous that rome one else have the honor. rather ERNEST R. ROOT. than we.

Mr. Heddon.—Thought the question a very important one. He had never met young Root but from his paper he thought he was a practical man. The two inventions mentioned were just what was required. He thought correspondents had a great deal of influence, almost as much as the publisher. As to the apicultural patents the property a man owns through his invention is as dignified as to own real estate. The man who first published an invention should have the credit of it.

A. I. Root.—They had every mail letters describing inventions.

Prof. Cook.—Said he felt Mr. Root was wrong about the patent business and a man had a right to have a patent. Mr. Root should urge people to be careful not to go into worthless patents but respect them.

Mr. Root.—Claimed he had seen so much evil through patents he felt like warning people against them, but did not intend to teach any one not to respect patents.

Some present thought Mr. Root's teaching was almost in the direction of disrespect.

AFTERNOON, JANUARY 1.

PROF. COOK'S ADDRESS.

Prof. Cook's address we shall publish in next issue, the copy not arriving in time for the present number.

In reply to question Prof. Cook said Heather did not appear to succeed in America.

Mr. Heddon.—Thought it would be well to simply educate the people it was a waste to put Paris Green on fruit trees when in blossom—it should be done just after.

Dr. Mason.—Said he had a neighbor who put Paris Green on his trees when in bloom. The man would not stop when being told it was the wrong time. He however did it when told his bees were being poisoned by it.

A. J. Root.—Thought that the law for the prevention of poisoning stock would hold good.

Prof. Cook.—Said he thought a law to forbid the spraying of trees during time of bloom would be good.

Mr. Holtermann.—Suggested that a good pamphlet be printed containing an article from a prominent horticulturist and the bee journals supply this for distribution at a low price.

After a lengthy discussion twenty were in favor of legislation and seven against it.

Hon. R. L. Taylor, Lapier, Mich., gave a paper on

FOUL BROOD AGIAN.

Though I discussed the subject of foul brood at our last annual meeting I have at the request of our society prepared a sort of supplemental paper on the same subject. And first I will add a further word to aid in the identification of the malady. Enough has been written about sunken and perforated capping and the color and viscid character of the brood recently dead of the disease. In the case of weak colonies generally, and of all colonies during the breeding season, some of these indications will be found if the disease is present and will furnish certain means of a correct diagnosis, but it is to be noted that after the breeding season is well over a strong colony, though badly diseased, exhibits none of these indications. The cappings if ever present are all nicely cleared away and the dead brood is entirely dried up, more scales almost of the color of the comb itself laying fast to the lower side of the cell and drawn back more or less from the opening. I have samples of affected comb with me, one of which illustrates this point, though the sample is hardly a fair one, as the scales resulting from the dead brood are more apparent than they usually are. being less drawn back and thicker and rather darker than they are often found. To detect the disease in strong colonies, some little time after brood rearing has ceased open the hive and apply your nostrils directly to the combs as they hang in the hive. If the disease is present to any extent and your olifactory organs are sensitive you will detect an odor more or less strong which may be described by the term "old." But not many at least at first could say by this test with any degree of certainty whether the colony were diseased or not. It is only to be taken as an indication. Now take out three or four frames one by one from the centre of the brood nest and hold each with the bottom bar from you in different directions until the light strikes well into the lower side of the cells, where, if affected, the scales I have described are very evident. The sample makes this plainer than any amount of description could do.

In contending against the evil there is nothing so important as an active knowledge of the sources whence the danger of spreading the contamination arises. With this knowledge I am convinced there is little necessity for fear that the disease will spread to healthy colonies if

only the sources are within reach of the apiarist. If many wild bees, among which it has a foothold, are in the vicinity, it must become eradicated there in the course of nature before the apiary is safe, for every wild colony affected will in time die, and its honey if any be left, will be appropriated by other bees and the plague unavoidably disseminated. This danger cannot well be guarded against, but those at home may easily be reduced to a very small figure. They fall under three heads. Those from affected honey, from affected combs and from affected hives. Under the head of hives, is included of course all paraphernalia. I think the principal danger from this sourse arises from affected honey, which may have been left on the parts of the hives by daubing or otherwise. No bee should be allowed to visit them, and soon as it may be safely done they should be boiled in water, scorched with flame or burned up; either method is effectual. Affected combs are dangerous, not only from the honey tut also from the dead brood which they contain. Every dead larvae is a bundle of seeds, and when moistened by honey, new brood or otherwise, they are released and carry death wherever they go. Such combs are safely rendered innocuous by fire or boiling only. The extremest caution in changing combs from one colony to another should always be observed. There is no more certain way of propagating the malady. Infected honey itself, however, is the chief medium by which foul brood is dissemated and so in it is the principal source of danger. The bees are sure to contract the disease thereby whether they obtain it by deliberate feeding on the part of the apiarist, by gathering up what is carelessly allowed to be left exposed about the apiary or by robbing. When once pointed out every beekeeper should be able to guard against the danger arising from the feeding and dripping of honey, but to secure protection against robbing, extraordinary caution is often required. If bees were deprived of their disposition to rob foul brood would soon be eradicated. This cannot be done indeed. To one who has had to deal with the plague this disposition seems to be increased thereby. The more powerful nations of Europe keep their eyes upon the Turk as the "sick man" watching for occasion when they may profit by his dissolution. The bees emulate the example of the nations. Soon as they catch the odor of the disease issuing from the bive they promptly label it the sick man and eagerly watch and wait and at length, unlike Russia, Austria and the rest, instead of holding each other in check they all turn in at the nick of time to complete the work of destruction, and like many a hunan

individuals and nation find the seeds of death wrapped up in their ill-gotten wealth. From infected colonies that are reasonably strong and in good health, with sound hives, having moderate entrances. I would not anticipate immediate danger, but would keep a sharp look-out for the impending decline. . It behoves him whose bees are infected, whether or not he obeys the general injunction "keep all colonies strong," to be constant in his efforts to keep all diseased colonies strong. No one will understand me to advise building up such colonies, I mean only that no weak colonies should be tolerated for a single day, and indeed it is to be hoped that this advice will be seldom applicable for it is to the interest of every apiarist to banish the disease by the most effectual method as speedily as possible. I need hardly add that the taking of bees from a diseased colony and adding them to a healthy one would certainly convey the disease in the honey, carried as though it were fetched by robbers.

I will close here for I am sure that if due and timely heed be paid to the directions given here and in my paper of a year ago, no one need be greatly alarmed nor very seriously damaged by foul brood, and I only hope that none of you may ever need even to call these into exercise. R. L. TATLOR.

Lapeer, Mich.

Dr. Mason—Mr. Taylor has certainly given us a new way of finding out foul brood. I should like to see a description of the disease given. All papers I have seen have failed to do this; even the bulletin of the Ontario Government.

Mr. Holtermann stated, although he never had foul brood yet he had seen the disease a number of times. The way given by Mr. Taylor of finding it was new to him. It was particularly good, as it enabled you to detect the disease when it could not be done by the method known to him.

R. L. Taylor, in reply to a question, as a rule honey from foul broody colontes will give the disease.

Mr. Grayden had much foul brood experience. It started in 1884; it did not show itself in 1889, but again in 1890. He had triel every remedy, even powdered coffee and salysilic acid; the disease was checked, but not cured. The only way of clearing the combs was by melting the wax. He shook the bees from the combs into empty boxes when no honey coming in; they soon starve and swarm out, when they could be put in hives.

B PROFITABLE BRE-KREPING & THING OF THE PAST?

T. F. BINGHAM, ABBONIA, MICH.

The above question as presented seems to indicate that the business of apiculture is not at Present a paying one, but that in the past it has been remunerative.

When we call to mind the past prices of honey and the corresponding prices of other commodities, we do not find that the relative profits have materially changed, neither that the varied changes of methods to suit the changing tastes and circumstances have materially changed the profits of the present.

It is not probable that honey will be relatively lower than at present, neither that its production will relatively change as time rolls on, but there are some features in the present which seems moving steadily to the front. The mystery and superstition incident to a limited understanding of the busines appears to be clearing away, and bee-keeping, like the raising of pigs and sheep, stands out in bold relief as a branch of domestic economy, which in the near future will present a vast aggregate composed of thousands of littles, each one of which has returned a better profit on the labor and capital employed than any of the other numerous ways by which the limited farmer and mechanic thrives. It is true that in the matter of profit bee-keeping, like other pursuits, has its ups and downs, its "off year," but that does not imply or demonstrate that the industry is likely to become less profitable in the future than it has been in the past. The proportion of successful bee-keeping to those engaged in the business who do not make money, is greater than in most pursuits, whether mechanical or agricultural, and at present no reason presents itself to show that the same Of course no one ratio may not continue. supposes that a few colonies of bees will support a large family and leave a balance in the bankneither will a small farm-but the small farm and and the small apiary combined probably will.

Out apiaries, so-called, afford practical evidence that bees in small apiaries either do better or are more conveniently handled. If such is the case, and it would be reasonable so to believe, there can be little doubt of the future. If I have made this paper plain, I have shown that beekeeping has been a profitable pursuit, and that no substantial evidence exists to prove that it will ever be less so, and apiculture, as one of the many methods of profitable and deversified industries, either on a large or limited scale, does and will continue to hold an interesting and remunerative place among ether successful Pursuits.

T. F. BINGHAM.

James Heddon—Thought that it was not a correct principle to go into the most paying business. If there was any business paying better than another, all things considered, it would soon be filled up to put it on an equal footing. The question was who was adapted for the business? there were fortunes to be made in it, and to be lost. He thought the great aim was to try and encourage labor.

Mr. Root said that the great point was to do a thing well; he said people said farming did not pay, but he mentioned a friend, who after working an acre forty years, got \$1100.00 worth of red currants from it; so it is in beekeeping,he could not make honey in the flowers, true, but there was much in our power. Mr. Root said the demand for honey was on the increase, they were selling the fifth car load in six months.

A lengthy discussion followed upon the marketing of honey.

Mr. B.Walker said, nine-tenths of the honey in Detroit was adulterated, and jars of honey sold without the name of the producer in defiance of the law.

Mr. Heddon, defending himself for selling honey cheap thought if another bee-keeper handled his honey he should have a profit, and it was well to let the bee-keepers keep their customers in remembrance of honey; he sold honey to bee-keepers mostly.

HONEY STATISTICS AND THEIR ADVANTAGES TO BEEKEEPERS.

Mr. President, ladies and gentlemen. of the convention, I suppose by honey statistics that your secretary had in mind a collection of facts embracing the increased or diminished value of swarms going into winter quarters, loss in winter and spring, condition of bees at beginning of season, production of full crop of honey gathered both white and dark, comb and extracted. the quality of honey in the different markets remaining unsold, with price etc., as all this in formation is essential in obtaining a reliable and accurate report of the honey crop. Their advantages to the beekeeper are many and varied, and besides the advantages it is something of a satisfaction to know as soon as the crop is harvested about what you are going to get for it. The North-Eastern beekeepers association (now New York State) made the first attempt to collect statistics of bees and honey in 1873. But I believe that the best and most practical plan yet devised originated with the

foundation of the United States Honey Producers Exchange, on January 1888. By having a good corps of reports in each state we are able to tell almost as soon as gathered whether it is a short orop or a heavy one, and by comparing the present with the reports of the past year all the members can obtain quite a clear idea of what the market is going to be, and thereby sell his honey intelligently, and if the crop is a short one at better prices than he otherwise would have been able to obtain. It also posts the commission houses and buyers as to the extent of the honey crop throughout the United States.

One of the largest honey producers in America remarked during the past season that the "Exchange " was the best thing that ever came from a convention of beekeepers. It has already saved many a dollar for a large number if not all of its members, and I believe that if the work is properly carried out in the future it will do more to keep the honey market than anything yet devised. I am fully assured that the New York and Boston Markets started out two cents per pound higher than it would have been had it not been for the "Exchange" and that price would have been sustained if the dealers in the different markets, especially those in the west, where there was a good crop, had sufficient confidence in it's reports. It was not the intent of the originators of this plan of gathering to make a corner in the honey market, or raise prices as high as they were some years ago, but that we may obtain better prices in years when there is a scarcity. For instance, there was no honey carried over from 1889, and with a decidedly short crop this year the bulk of choice white comb honey in pound sections could just as well have been sold at twenty as at eighteen cents, had the teachings of the "Exchange" been followed.

The season of 1887 illustrates the other extreme. It was generally reported through the journals that there was a very short crop of honey, and some went so far as to say that they expected honey to sell at 25c per lb., wolesale, before the opening of another season.

It was true that there was very short crops in certain parts of the west, but there was an equally good one in the east, and I know of several beekeepers who held their honey on the substance of these reports until January or February, and then sold it for several cents per pound less than they could have obtained in the fall. It was plain enough that no one was to blame for the condition of affairs. The facts had not been ascertained. That the gathering of statistics is a great boon to the progressive beekeeper and that the exchange is a movel in

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the right direction, I think but very few, if any, at this convention will deny.

But as I am writing this I cannot but think of the much broader field of usefulness and the room for improvement that is open on every hand as soon as it has sufficient funds to carry out the work. I shall not feel entirely satisfied until the Exchange reports shall be in the hands of every intelligent beekeeper in the country and has a seperate report in pounds of honey produced and the number of colonies, from at least one of the most progressive beekeepers in each county in the several states.

GEO. H. KINCKERBOCKER.

A. I. Root—In reply to a question re exchange, said the reply was sent out to those who sent in their dollar. He thought the replies were not as good as those in *Gleanings*.

Mr. Heddon—Is the private report \$1,00 better than the Bee Journal?

Prof. Cook—Thought one report was about the same as the other, only *Gleanings* broader.

Mr. Walker--Thought there should be a great many more reporters to get statistics.

Prof. Cook—In reply to a question, said the break-joint honey board and thick top bars gave us less brace combs; he preferred the honey board to the thick top bars.

Doctor Mason—I used honey boards and top bars in hives this year, and never had more satisfaction in taking honey.

Geo. E. Hilton-I have used the zinc honey board.

Mr. Heddon-Related how he had tried with between 200 and 300 colonies the break joint honey board and not break-joint, and he found with breakjoint board he had no brace oombs, and without break-joint he had brace combs.

A. I Root—Said he thought the seven-eighth inch top bar was the best.

(To be concluded next issue.)

CLUBBING LIST.

We will club the CANADIAN ERE JOURNAL with any of the publications below at the prices guoted in the LAST column :

The Canadian Bee Journal		OUNSEEN
and American Bee Journal (w)	₩ ·75	81.00
Gleanings in Bee Culture (s-m)	1.75	1.60
Beekeepers' Review (m)	1.25	I.I5
Beekeepers' Guide (m)	1.25	1.15
Apiculturist (m)	I.50	I.35
Beekeepers' Advance and	3.25	1.15

A Comment on the O. B. K. A. Meeting.

N HEABING that the Ontario Bee-Keepers Association was to hold its annual meeting in St. Catharines, I determined to be present, and looked forward to the event with no little pleasure.

As my pleasurable anticipations failed to materialize, it struck me that it might not be unprofitable to record some of the impressions made by that meeting on an outsider. I was pre-Sent the greater part of the afternoon of the first day, also the latter half of the next morning, and the greater part of the final meeting on Thursday afternoon. For the whole of that time, with the exception of the President's address, and a Paper on "Out Apiaries," I heard scarcely any "bee talk," the rest of the time being taken up by the reading of minutes, appointment of officers, the moving of resolutions of greater or less importance, and the discussion of matters of somewhat doubtful relevancy, such as the paper on Journalism. While admitting the necessity of these business transactions, is it not a somewhat regretable fact that so many hours are consumed in what may be called oiling the machinery and getting steam up, that there is not time enough to thresh out the grain?

I assume that the chief aim of these conventions is to gather together as many representatives of the bee industry as possible, for the Purpose of intelligently discussing practical beekeeping, and advancing the cause of apiculture generally.

The practice of Farmers' Institutes and other County associations is, I believe, to hold special "meetings for the transaction of business, and "hile I am aware of the difficulty of adopting this method with Provincial societies, it does "seem desirable that these matters should be got "over as quickly as possible, and that the bees should be allowed to "have the floor" for the "bulk of the time.

If I recollect rightly it was your proposition, Mr. Editor, to devote three days instead of two to future meetings, and where this is done would it not be advisable to announce the first day [as a purely business day, so that those interested in bees and honey, attending on the two following days, could depend on hearing bee-keeping in its various branches discussed by the ablest exponents of the Art. St. Catharines, Jan. 9, 1891.

There is a great deal of truth in what is written above. I must confess that I was disappointed in the amount of real "bee talk" that was indulged in, none of

the finer points of bee-keeping having been touched on at all, and I was satisfied that there were others who felt even more disappointed than I did. It was because of this that I advocated a three days' session next year, and I am glad to notice that the Directors at their after-meeting, accepted the suggestion of the annual meeting, and chose London as their next place of meeting, and set the dates for the 5th, 6th and 7th Jan. 1892. Now, if in arranging the programme, the Executive Committee will arrange to devote the first and last session for business, and give us all the intervening ones for good discussions on matters materially affecting the \$ and c. part of our business, they will meet with my ideas exactly. Of course there is a lot of business that must of necessity be transacted, and I' am as much interested that it should be properly done, as any one can be, but not at the expense of what most of us may consider more important matters. know there are a few who think that such things can better be discussed through the journals, but I am not altogether of this opinion. I think that we can get more "pointers" at 2 convention of two days than we can by reading journals two weeks, because we come in contact with excellent practical bee-keepers, who, try as we may, cannot be got to write for the papers. The great bulk of bee keepers do not attend conventions to hear the annual reports, and to see that proper officers are elected, but to enjoy a real good practical discussion on the pusuit in general, and we must see to it that our future meetings do not lack this important feature.

SELECTIONS.

BRUCE BEE-KEEPERS' ASSOCIATION.

HE third annual meeting of the Bruce Bee-Keepers' Association met in the Town Hall, Walkerton, on Dec. 20th, when the following officers were elected for the coming year.

President, A. Sherrington; Vice-President. W. H. Moffatt; Directors, John Harkley, Wm, Brockie, R. Rivers, And. Rowand. and John Moffatt; Sec.-Treas., A. Tolton; Auditors, J. B. Ritchie, J. Seegmiller. Delegates to O.B.K. A., Abram Rowand, J. B. Ritchie. Next meetting to be at Edengrove on the last Friday in January, '91.

A. TOLTON, Sec.

CORRECTIONS.

DB. G. L TINKER.—In my article on page 374 the paragraph beginning at the middle of the second column reads. "In 1883 he began the contraction," etc. It was written :—In 1883 I began the contraction of the brood nest, etc. As this error of the typo materially changes the sense, I feel obliged to ask for a correction. In the same paragraph the types make me say that I used "tin and wood hives." It was written :—tin and wood queen excluders.

New Philadelphia, O., Jan. 7, 1891.

BEES OCCUPYING THE WALLS OF A HOUSE.

J. P. Cockburn.-Seven years ago last July a stray colony of bees settled on the cornice of a rough-cast house, the property of George R. Moss, of Dickinson's Landing, Ont. The bees found some small opening between the wood and plaster, and soon took possession of the hollow wall, four inches in thickness, where they have been located ever since. The bees have been no further trouble to Mr. Moss than that settle on everything in the front yard, soiling all they light on. In July and August, while the sun is striking on the building, the bees come out and hang in great bundles. No one has seen a swarm leave in all this time. During preserving time, when bee pasture is scarce, the bees become troublesome taking possession of the kitchen, so much so that operations there have sometimes to be suspended. Mr. Moss knows nothing of the management of bees, and would like some of the brothers to et him know how to get rid of the pests without making matters worse, or better still to hear of some plan by which he can secure some of the stores without tearing down the walls of the house.

Gravenhurst, Ont., Jan. 9, 1891.

I know of no plan by which the bees can be dispossessed of their stores or their abiding place, without to some extent tearing down a portion of the walls of the house, either inside or out. Of course if no better plan presents itself, as a last resort, all their entrances could be closed up, thus starving them' them to death.

THE CANADIAN BEE JOURNAL

ISSUED 1ST AND 15TH OF EACH MONTH.

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

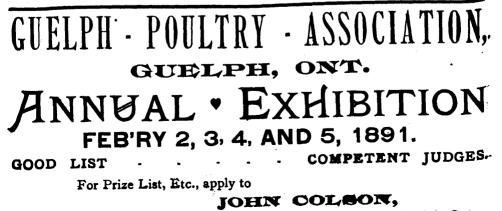
BEETON, ONTARIO, JANUARY 15, 1891.

A copy of our catalogue for 1891 is included in the present issue. It will bear reading carefully.

Convention reports crowd out most of our other departments, also a number of excellent articles from James Heddon, John F. Gates, "A-Hallamshire Bee-keeper," and others.

The American Bee Journal in its new form' looks neat and tasty, but really we think it doesnot look so imposing as it formerly did, but perhaps we will get used to it. It is certainly abig lot for a dollar.

St. Catharines is a very nice city, but we are afraid we cannot say very much for the enterprise of the papers published there. Of all reports of the convention meetings by the local papers in cities where former meetings were held,those appearing in these papers were the most meagre.



Secretary, Box 462, Guelph, Ont.-

400

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

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A FEW Silver Laced Wyandotte Cockerels for sale from American prize winning birds. Eg hatching in season. W. J. O'NEAIL, Paris, On

FGR SALL-Thirty Mammoth Bronze Turkeys bred from stock imported this season. Mammoth Light and Dark Cochins, Silver Grey and White Dorkings bred from imported stock. Come and judge for your-selves. JOSEPH KINSEY, Doon, Ont.

FOR SALE—My entire stock of Black Minorcas 13, Pullets, and 2 Cockerels. Guarantee every Pullet to score from 94 to 964; one Cockerel will score 95. he took ist at Toponto Exhibition. Pullets are all laying. \$25 will buy the lot. W. COLE, Brampton.

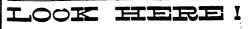
FOR 5ALE-4 Light Brahma Cocks and Hens, (year-ings),25 Cockerels and Pullets; a lot of Pekin Ducks in pairs and trics, Brown and White Leghorns, old and young, cheap if iaken at once. Also a pair of lopeared rabbits. JOHN COLE, 151 Hughson st. Hamilton,

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FOR SALE—White Bocks S. L. Wyandottes, Buff, Pekin Bant eggs, after March 15th, 91. I bred the highest scoring trio of W. P. R. in America this year, cockerel %, pullets 97, 96; one G. L. Wy cock for sale score 93. Butterfield, price \$4; see awards at Dunville show. Eggs \$2.60 per 13, \$4 per 36; circulars free. S. M. CLEMO, Box 113, Dunnville, On t.

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Having secured the services of **MR.I.K.FELCH**, all baceders would do well to get their birds in shape and heve them scored by the above judge, so this is his last season as a public judge.

For prize lists and general informanion apply to the Secretary-Treasurer, Jas. McLaren.

This being their 8th Annual Show, and the Association always paying up their prizes in full, they have the prospects of a good show.

Birds sent in care of the Directors will be carefully handled while under the carn of the Association.

P. A. BLACK, Pres.,

AS.	McL	AR	EN,	SEC.
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TO THE EDITOR—Please inform your readers that I have a positive ramedy for the above named disease. By its timely use thousands of hopeless cases have been pomanently cured. I shall be glad to send two bottles of my remedy WEE to any of your readers who have consumption if they will send me their Post office Address, Respectfully, T. A. SLOCUM, M. C., 186 West Adelahde St., Torunto, Cmt.

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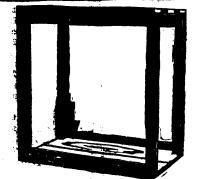
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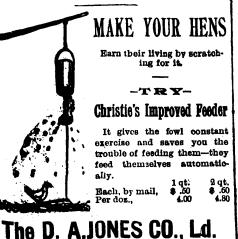
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WM. MOORE,

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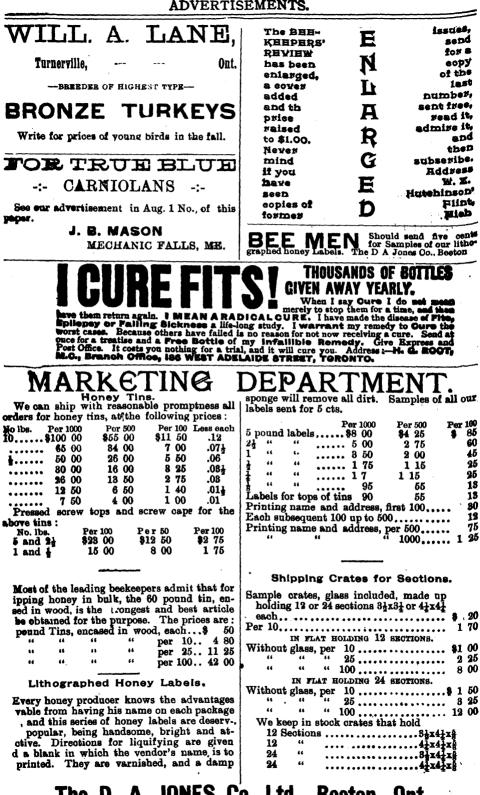


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