

AMERICAN BEE JOURNAL

50TH YEAR

No 1

GOLDEN JUBILEE YEAR

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THE AMERICAN BEE JOURNAL

PUBLISHED MONTHLY BY
GEORGE W. YORK & COMPANY
146 W. Superior St., Chicago, Ill.

IMPORTANT NOTICE.

THE SUBSCRIPTION PRICE of this Journal is \$1.00 a year, in the United States of America (except in Chicago, where it is \$1.25), and Mexico; in Canada \$1.10; and in all other countries in the Postal Union, 25 cents a year extra for postage. Sample copy free.

THE WRAPPER-LABEL DATE indicates the end of the month to which your subscription is paid. For instance, "dec10" on your label shows that it is paid to the end of December, 1910.

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Objects of the Association.

- 1st.—To promote the interests of its members.
- 2d.—To protect and defend its members in their lawful rights.
- 3d.—To enforce laws against the adulteration of honey.

Annual Membership Dues, \$1.00.

General Manager and Treasurer—
N. E. FRANCE, Platteville, Wis.

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Have you a good bee-book? Many bee-keepers do not have. And that is where they make a big mistake. A bee-paper cannot take the place of a good bee-book. The paper is a splendid thing to read in connection with the book. On another page we make some generous clubbing offers of bee-books with the American Bee Journal.

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A new method, just published, worthy of investigation by all progressive bee-keepers. Advantages claimed for the plan of treatment. No clipping of queens' wings—no caging of queens—not even necessary to look for queens; no pinching of queen-cells—no shook swarming—no dividing—no extra expense connected with the plan—plan simple and easy to carry out—satisfactory honey crop—saves time and labor. Send to

Dr. H. JONES, Preston, Minn.,

for his booklet, describing his method of treatment. Price, 25 cts. Process protected by copyright.

Untested Italian Queen-Bees

Booking Orders for 1910

6 Queens for \$4; 3 for \$2.10; 1 for 75 cents

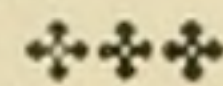
A Standard-Bred Italian Queen-Bee



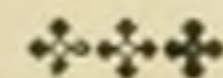
For a number of years we have been sending out to bee-keepers exceptionally fine Untested Italian Queens, purely mated, and all right in every respect. Here is what a few of those who received our Queens have to say about them:

What They Say of Our Queens

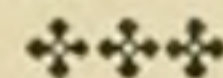
GEORGE W. YORK & Co.:—The two queens received of you some time ago are fine. They are good breeders, and the workers are showing up fine. I introduced them among black bees, and the bees are nearly yellow now, and are doing good work.
Nemaha, Co., Kan., July 15, 1905.
A. W. SWAN.



GEORGE W. YORK & Co.:—After importing queens for 15 years you have sent me the best. She keeps 9x Langstroth frames fully occupied to date, and, although I kept the hive well contracted, to force them to swarm, they have never built a queen-cell, and will put up 100 pounds of honey if the flow lasts this week.
Ontario, Canada, July 22, 1905.
CHAS. MITCHELL.



GEORGE W. YORK & Co.:—The queen I bought of you has proven a good one, and has given me some of my best colonies.
Washington Co., Va., July 22, 1905.
N. P. OGLESBY.



GEORGE W. YORK & Co.:—The queen I received of you a few days ago came through O.K., and I want to say that she is a beauty. I immediately introduced her into a colony which had been queenless for 20 days. She was accepted by them, and has gone to work nicely. I am highly pleased with her and your promptness in filling my order. My father, who is an old bee-keeper, pronounced her very fine. You will hear from me again when I am in need of something in the bee-line.
Marion Co., Ill., July 13.
E. E. MCCOLM.



We usually begin mailing Queens in May, and continue thereafter, on the plan of "first come first served." The price of one of our Untested Queens alone is 75 cents, or with the monthly American Bee Journal one year—both for \$1.40. Three Queens (without Journal) would be \$2.25, or 6 for \$4. Full instructions for introducing are sent with each Queen, being printed on the underside of the address-card on the mailing-cage. You cannot do better than to get one or more of our fine Standard-Bred Queens.

George W. York & Co., 146 W. Superior St. Chicago, Ill.

A VERY SPECIAL NOTICE!

75c Subscription Price Extended to Feb. 15, 1910, To All Present Regular Subscribers Only

We have decided to grant an extension of time from Jan. 1 to Feb. 15, 1910, on the 75c subscription rate on the American Bee Journal, to all present subscribers who remit direct to this office. This means that all who are in arrears, and any others who wish to advance their subscriptions to the end of 1910 or 1911, at 75c a year, can do so, if they will remit to us before Feb. 15—the middle of next month.

This is a final notice, and is given so that no one now getting the American Bee Journal, who wishes to clean up his or her back subscription, and also take advantage of the former 75c subscription price to the end of 1910 or 1911, will have ample time to do so. We want to be entirely fair, and even generous, to our present regular readers, hence this extension of time limit.

Now let us have a great inflow of renewals for the next 30 days. We are willing to be kept busy day and night, if necessary, taking care of your subscription orders. Address all to—

GEORGE W. YORK & Co. 146 W. Superior St., Chicago, Ill.

American Bee Journal

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Are money-savers. We have a full line of Supplies, Bees, Queens, etc., and can supply you with anything in the

BEE-LINE

Queens any quantity. Tested, \$1.00; Untested, 75c each. 4Atf

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Please mention Am. Bee Journal when writing.

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Sold at reduced prices. Dovetailed Hives, Sections, and everything pertaining to bee-keeping of the **very best** kept in stock. Large Warehouse on of L. S. & M. S. R. R.

Wholesale and Retail. New price-list just out—**Free.** Let me figure on your wants.

11Atf **W. D. Soper, Jackson, Mich.**
Please mention Am. Bee Journal when writing.

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From 1047 Eggs**

IN three hatches. That's what G. W. Ormsby, of Pierpoint, Ohio, did with a Standard Cyphers Incubator. He don't claim to be an expert—just a practical, money-making chicken-raiser. But he insists on the best hatcher.

Cyphers Incubators

are used by more Government Experiment Stations, more leading Agricultural Colleges, more well-known Fanciers and Practical Poultrymen than all other makes combined.

Hot-air heat—no tank-troubles—a genuine non-moisture incubator. Self-ventilating. Self-regulating. You can get Cyphers Patented features of superiority in no other machine.

Cyphers Incubators and Brooders are guaranteed to you—you have 90 days—4 hatches to prove their superiority.

Write today for our big, handsome Catalog for 1910, describing Cyphers Incubators, Brooders and Poultry Supplies.

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Boston, Mass.; Kansas City, Mo.; Oakland, Cal.

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Closing Out Offer

We Have Some Copies Left of the Book

"Bees and Honey"

By Thomas G. Newman

bound in cloth, that we offer cheap to close out. It contains 160 pages, and is bound in cloth. It used to be a one-dollar book, but we will mail them, so long as they last, at 50 cents each; or with the American Bee Journal one year—**both for only \$1.20.** Surely this is a bargain. The book is well illustrated, and has some good information in it, especially for beginners. Address all orders to

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146 W. Superior St., Chicago, Ill.

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Where you can get this Combination—

Prompt Service —AND— Lewis Beeware



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THE GARDNER NURSERY COMPANY, Box 239 Osage, Iowa.



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We will make you delivered prices by return mail, on anything you may want for your apiary.

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There are no better HIVES than ours.

Prices the lowest.

Satisfaction guaranteed, or money refunded.

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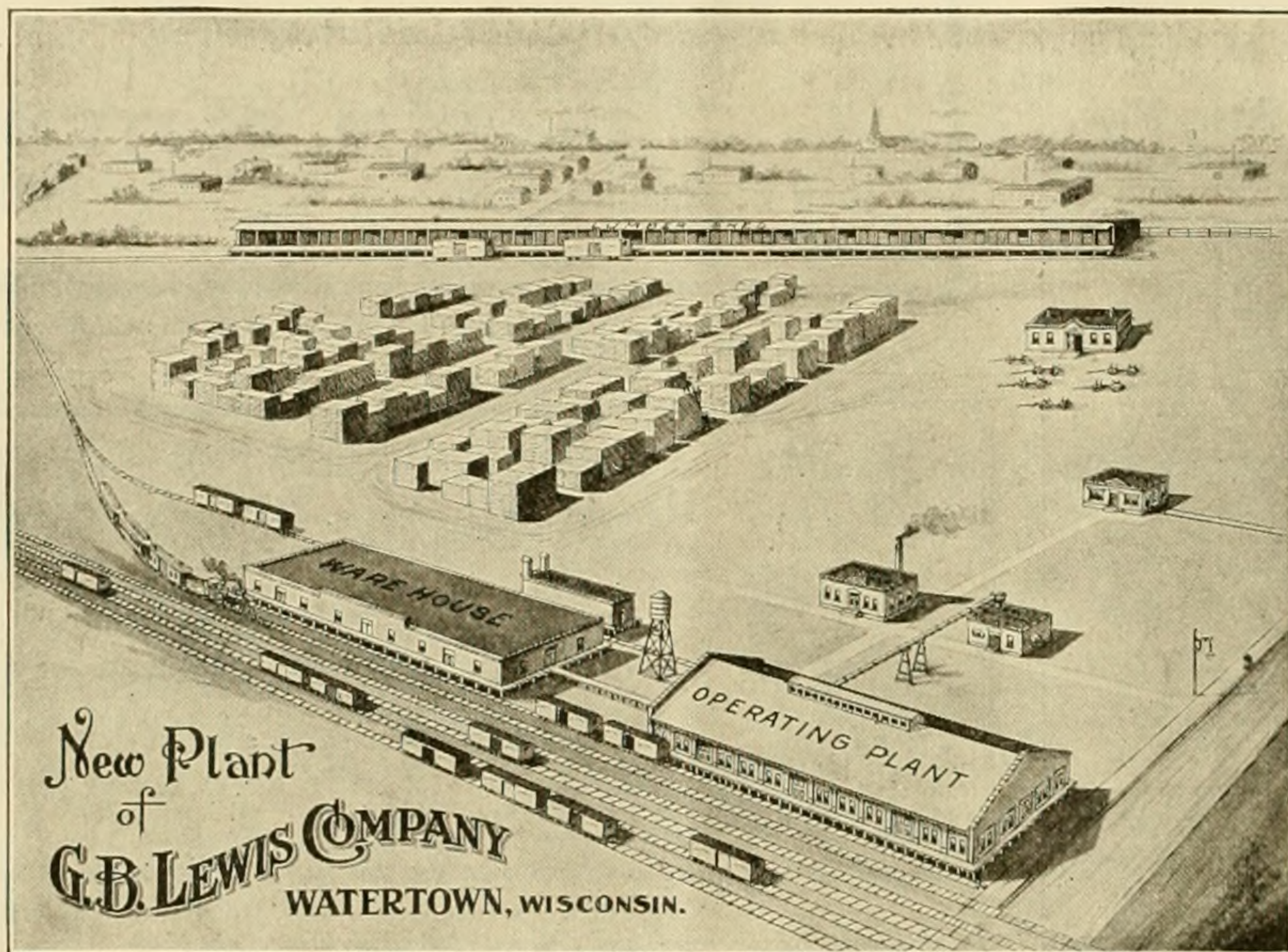
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OUR NEW PLANT IS NOW IN OPERATION

Second to None of its Kind in the World. Five Acres of Ground. Forty Thousand Square Feet of Floor Space. One-Half Mile of Private Railroad Track for the Prompt Handling of All Freight. Lumber Shed Five Hundred Feet Long. Latest Improved Machinery Operated Entirely by Electricity.



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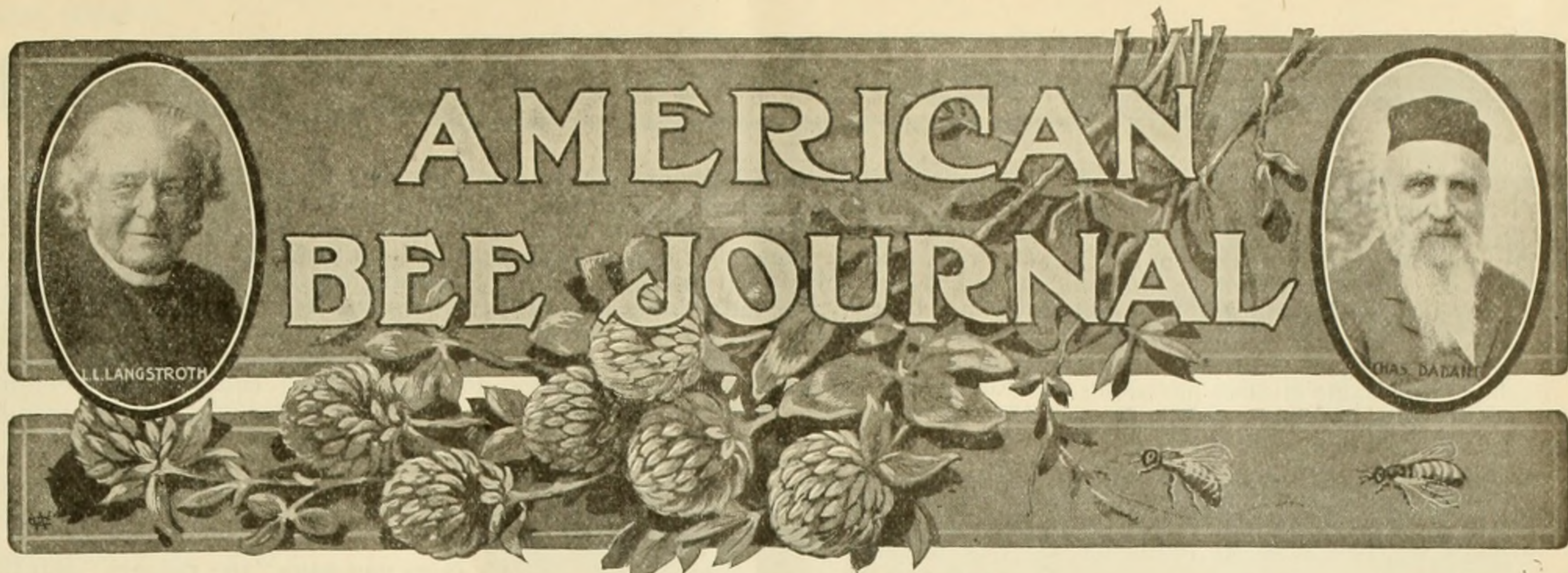


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WE CAN REACH YOU**

**30 DISTRIBUTING HOUSES
SEND FOR CATALOGUE
GIVING THE NEAREST ONE**

Our Operating Plant Having Been Destroyed by Fire on June 20, 1909, Building Operations on a New and Complete Plant Were Begun at Once. This New Plant is Located a Few Blocks from the Old One, the Change in Location Being Made to Avail Ourselves of Larger Ground Space and the Best Railroad Facilities. Needless to Say We Will Be Better Equipped Than Ever to Handle our Constantly Increasing Business and to Furnish the Finest Goods.

G. B. Lewis Co. FACTORY LUMBER YARDS WAREHOUSES MAIN OFFICES Watertown, Wis.



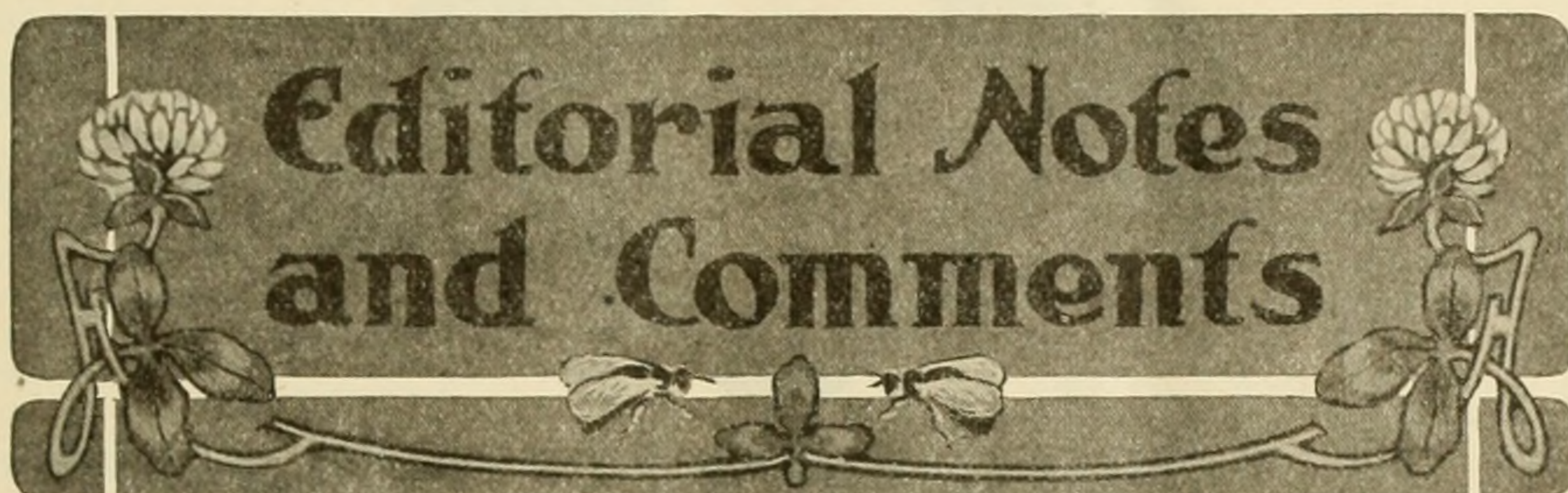
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GEORGE W. YORK, Editor.
DR. C. C. MILLER, Associate Editor.

CHICAGO, ILL., JANUARY, 1910

Vol. L---No. 1



Bees Helping to Save Fruit from Frost

In a conversazione (British Bee Journal), the fact was brought out that not only do bees aid in the fertilization of fruit-blossoms, but by that very act might be the means of saving a good part of a crop from the frost. A blossom remains fresh for some time, so long as fertilization has not taken place, but very soon after that occurs it dries up and falls off. Fruit-growers know that if a frost occurs when fruit-trees are in full bloom, the tender stigma is blackened by the frost, and the fruit is "blasted." Suppose a blossom opens Monday, and no insect visits it. It remains expectant Tuesday. "Then comes a frost, a killing frost" Tuesday night, and it's all day with the little fruit. Suppose, however, that a bee had visited it on Monday. Being fertilized the stigma would promptly dry up, and by Tuesday night the little fruit would be sufficiently ripened to resist the frost.

Score another point for the little busy bee.

Bane of Green or Unripe Honey

We have received the following from Mr. R. A. Burnett, of R. A. Burnett & Co., the oldest honey-dealing firm in this city:

CHICAGO, ILL., Dec. 28, 1909.

EDITOR AMERICAN BEE JOURNAL:—I have read Mr. E. D. Townsend's article in the November and December American Bee Journal, entitled, "The Two Cans of Honey." The story is well told, and it is in no sense overdrawn. With my more than 30 years of dealing in honey, I can testify that the greatest enemy extracted honey has had during that period of time, has been green or unripe honey. The greatest loss is in the volume of business, for where a family gets a can of this aborted sweet, they will in all

probability drop the use of honey for months, yea, even years, for they say they cannot get honey any more; this having left a bad taste in their mouth has hurt the sale of honey.

It is not true that bakers can use unripe honey to advantage; they will not, and do not use it. The large users of honey now submit all purchases of honey to a chemical test, and if it does not meet with their requirements it is rejected; hence, it is only the ignorant and the poor man, that can least afford to be cheated, that is cheated.

It may be encouraging to bee-keepers to know that there is less unripe honey coming on the market now than formerly.

Yours respectfully,
R. A. BURNETT.

We are always glad to get something from Mr. Burnett. His many years of experience surely has taught him much about the best quality of honey for market. And on a good many other topics relating to honey and its marketing he could give a world of information. We wish he would feel free to "chip in" any time he sees a chance to help bee-keepers, out of his large experience with honey.

It surely is good to hear that the market receives less unripe honey now than it used to. But what honest bee-keeper would knowingly ship unripe honey to the city or general market?

New Zealand Bee-Bulletin, No. 18

From that far away land where Christmas comes in the middle of summer, where there are the best Sunday-schools, where all the women can vote, and where *they* have helped to vote down the saloons, comes this government bulletin of the New Zealand Department of Agriculture. It is written by that able apiculturist, Isaac Hopkins, who has done so much for bee-culture in that land, and who retires

from public service with the issue of this bulletin.

There are 70 octavo pages of reading matter, and 19 plates, many of these being original full-page half-tone engravings.

In spite of the fact that New Zealanders are clear on the other side of world, bee-keeping is in many respects the same there as here.

Instead of seconding Mr. Hutchinson's plea for "more bees," Mr. Hopkins advises against putting all one's eggs into one basket. As to the profits, Mr. Hopkins estimates that from a well-conducted apiary, in an average good district, the net profits per colony should reach from \$4.25 to \$5.00 per annum through a number of successive seasons. He says wisely:

"Outlay for good literature should never be stinted, for the obtaining of one good 'wrinkle' from the experience of a writer may be the means of adding largely to the profits of the apiary."

Three fine pictures illustrate the manner of turning a frame over while holding in the hands without having the comb break out of the frame—a very important item 40 years or more ago, but hardly necessary in these days of wires and foundation splints.

He emphasizes the matter of testing extracted honey by means of a hydrometer. Obtaining from grocers in the ordinary way 20 cans of different varieties and grades of honey, he tested carefully their specific gravity. He says:

Before testing, the condition of each sample was noted, in order to compare the specific gravity with its appearance. Eleven samples ranged from 1.400 to 1.430, with an average of nearly 1.413, while the remaining 9 ranged from 1.350 to 1.390. Those above 1.410 were very firm and dry before testing, and the whole 20 samples were granulated. Those from 1.400 to 1.410 appeared to be well ripened, but were not so firm as the others; there was a marked difference in those below 1.400, which were soft and moist. My opinion is that the first-mentioned were thoroughly ripe and would keep any length of time; the second lot, ranging from 1.400 to 1.410, were well-ripened and fit for the market; while all the samples registering below 1.400 were very doubtful regarding their keeping qualities—one at 1.385 had already begun to ferment. These figures will be valuable for comparison with those of future tests. A portion of each sample is being kept sealed to test by time. It was very noticeable that the better the honey the higher was its specific gravity.

Ripening honey outside the hive is

JAN 27 1914

advised, with this argument in its favor, which will appeal to many:

"I may add that by ripening honey outside the hive swarming can be better kept under control."

The climate, with its great heat and dryness, may favor ripening outside the hive.

Perhaps this same climate has something to do with the fact that Mr. Hopkins is strongly opposed to the use of excluders under surplus apartments. The advantage of keeping the queen below is entirely overbalanced by the hindrance to free ventilation, in that hot climate.

Queen Mating More Than Once

There have been at different times reports of queens mating the second time, but generally the observations have been of such character that there was at least a possibility of mistake. Now comes a report in the British Bee Journal, so circumstantially given, and in which there was such close watching, that there seems no possibility of mistake. A virgin was in a baby-nucleus hive containing a section, with glass sides, so that all that was going on could be seen. June 29 the young queen came out 5 times, flying around the entrance for a few seconds, then darting off and staying away only a few minutes; but the last time she was gone she was away for 5 minutes, returning at 5 minutes to 4 o'clock, with unmistakable signs of impregnation.

June 30th, she flew out 5 times, the longest flight lasting 5 minutes. July 1st she came out twice for short flights; then she came out again at 4:20, and returned again after having been out about 20 minutes, and upon her return the marks of her having mated again were most distinct.

It is quite possible that the instances of more than once mating are more common than generally supposed.

Breeding Immune Stock

Before the visitors and delegates to the National Farm Land Congress which met in Chicago lately, W. M. Hays, Assistant Secretary of the United States Department of Agriculture, evoked bursts of applause by declaring that a start had been made in the scientific breeding of cattle whereby in a few years even an inexperienced farmer would be able to rear cattle immune to tuberculosis, a consummation that will be worth millions of dollars to the nation at large. Mr. Hays said:

"As proof that we are on the road to success in the undertaking, I may point to the recent accomplishments of the department and the institutions with which it is affiliated regarding the production of plants resistant to diseases which previously made the growing of the parent stocks impracticable.

Disease-resistant cow-peas, cottons, cantaloupes, flax and varieties of cereal grains have been produced. These steps, however, are merely preliminary to blaze the way to the production of the tuberculosis-proof steer."

If cows, cow-peas, etc., can be made immune to the diseases that compass their destruction, what about bees? A foul-brood-proof bee is a thing much to be desired, and in the light of what has been accomplished its attainment seems not at all impossible, if indeed

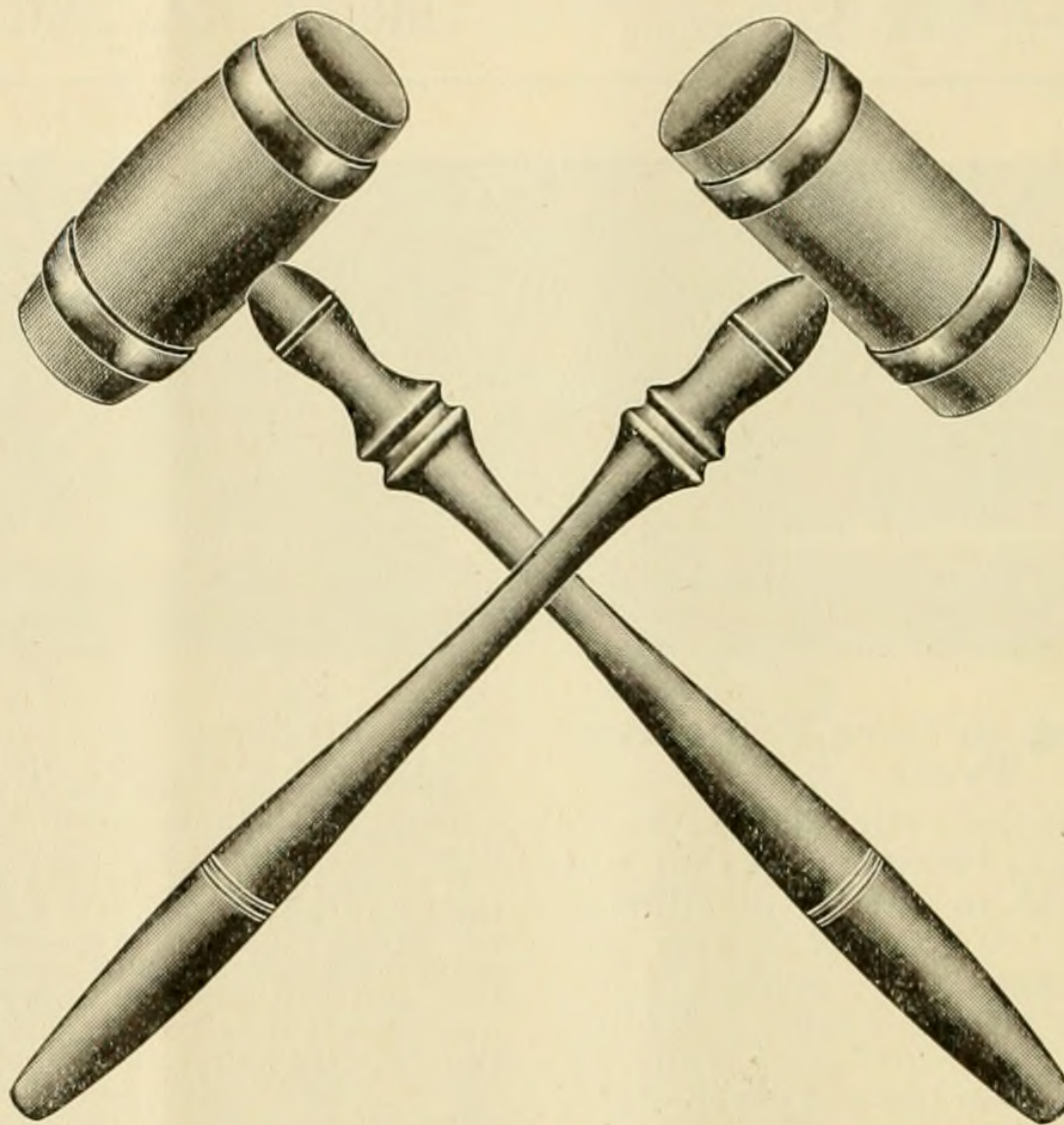
improbable. Indeed, it is not unreasonable to believe that something in that line has already been automatically attained. Some bees succumb to foul brood more readily than others. May that not be that the latter have started at least just a little way on the road to immunity? In a locality where foul brood is freshly introduced, its ravages are more severe than in a locality where it has been for a long time existent. Have not these latter become immune to a certain extent? Why not expect a bee immune to foul brood?

Painted vs. Unpainted Hives

D. M. Macdonald, in the British Bee Journal, expresses a very kindly feeling toward the associate editor of the

or out of a hive. In a heavy rain a painted hive is better, because it keeps out the moisture. After the rain is over, the unpainted hive is better, for it lets the moisture come out. But there is no great trouble from rains. The trouble from moisture in the hives is in the winter, whether the hives be outdoors or in the cellar. The moisture is *originated in the hive*. Paint can do no possible good toward preventing that moisture; it can not make the breath of the bees less. But it can do harm by preventing the outward passage.

Now you have "the reason." But the belief is not so stubbornly held that it cannot be changed, and if a sufficient "reason" for "the opposite" be given, there will be a prompt recantation.



THE LANGSTROTH GAVELS PRESENTED BY MRS. J. J. GLESSNER, OF CHICAGO.

American Bee Journal—which feeling is heartily reciprocated—and then wants to know something. He refers to the reason for leaving hives unpainted, viz.: the "better chance for the moisture to dry out of unpainted hives than out of painted ones." and says:

"Please explain the reason why you think so. Is it that the wish is father to the thought? Now, I am ready to contend the opposite. Damp, moisture, or mold, is far more likely to find its way in, and stay there, in an unpainted than in a painted hive, other things being equal."

Now listen to that Scotchman. Wants "reason" for a thing, believes the opposite, and then doesn't give a word of "reason" for *his* belief. Well, let us see how far we can agree.

"Damp, etc., is more likely to find its way into an unpainted hive." Agreed. The paint is a hindrance to free passage. "And stay there." There we part company. Why should damp be more likely to stay in an unpainted hive? Your "reason," Mr. Macdonald? If an unpainted wall allows a freer passage in, why will it not allow a freer passage out?

But now for "the reason." Paint hinders the passage of moisture, into

The National Presidency

We have received a number of congratulatory messages since the announcement of our election to the presidency of the National Bee-Keepers' Association, last month. We certainly appreciate such kind words, and only hope that we may be of some real service, not only to the Association, but to beedom at large.

Hon. Geo. E. Hilton, whom we succeed in the presidency, wrote us as follows:

FREMONT, MICH., Dec. 7, 1909.

DEAR MR. YORK:—I congratulate you upon your election. I have felt it a very great honor to be the president of the largest society of its kind in the Western world for the past 2 years; and I am more than glad that you are my successor. No one deserves it more than you, and no one would fill the position more creditably. If I can serve you in any way, I shall feel it a privilege to do so, and I want you to call on me at any time, and I am at your service.

I am sending you by this registered mail the gavel that we all appreciate so much because of its associations, and of the promptings of those who secured it and presented it to our Association.

With the very best wishes for your success, I am,

Very truly your friend,
GEO. E. HILTON.

The president's gavel referred to is the one presented to the National when

it met in Chicago, in 1905. It was made by a son of Mrs. J. J. Glessner, a Chicago lady bee-keeper, the wood having been taken from a tree planted by Father Langstroth perhaps a half century ago in Oxford, Ohio. Mrs. Glessner presented it to the Association, as she did also a similar gavel to the Chicago - Northwestern Bee-Keepers' Association at the same time.

It is needless to say that as president of both of these honored associations, we shall keep the gavels most carefully, so as to turn them over, some day, untarnished and undishonored.

Mr. W. Z. Hutchinson, editor of the Bee-Keepers' Review, sends these assuring words:

FLINT, MICH., Dec. 7, 1909.

BRO. YORK:—I am glad to congratulate you on your election to the presidency of the National. I shall be more than glad to stand with you and help in every way to make a success of the Association.

Fraternally yours,

W. Z. HUTCHINSON.

We shall hope to have the hearty cooperation of every bee-keeper, whether a member of these organizations or not, in trying to lift American apiculture, as expressed in these two leading conventions, to a little higher level, if that may be, during 1910—the new year upon which we all have just entered with such high hopes and inspiring resolves.

Keeping Bees Without a Bee-Paper

The following paragraph is taken from the December Bee-Keepers' Review:

Most of the subscriptions to the bee-journals expire with the year; and there are always more or less of these subscriptions ordered discontinued. Sometimes reasons for this step are given. The one most frequently given is: "I can't afford to take it another year." When a bee-keeper can't afford to take a bee-journal there is something radically wrong. If he hopes and expects to succeed he can't afford *not* to read all of the bee-journals published. It is knowledge of his business that helps a man to succeed; it is from ignorance that he often fails. A man can't know too much about his business. The successful bee-keepers, poultrymen, farmers, gardeners, etc., all read the leading journals devoted to their businesses. The man who drops his bee-journal because he thinks he can't afford it, is almost as foolish as the sailor who ventures out to sea without a compass. I am not writing this so much because I hate to lose subscribers, as because I know it is *true*, and that some men have not given it sufficient thought.

Editor Hutchinson is right. We have large opportunity to learn the "reasons" why some bee-keepers discontinue their subscriptions to bee-papers. Some say they "haven't time to read a bee-paper!" Then they haven't time to keep bees at all. No man who desires to be successful can afford to get along without at least one good bee-paper and one good bee-book. Life is too short to learn everything by experience.

Then, again, what is \$1.00 for a year's copies of a bee-paper—less than 10 cents per copy if a monthly! There must be something radically wrong with the man, or bee-keeper, who can't get at least 10 cents worth of helpful information out of a single copy of any real bee-paper that was ever published.

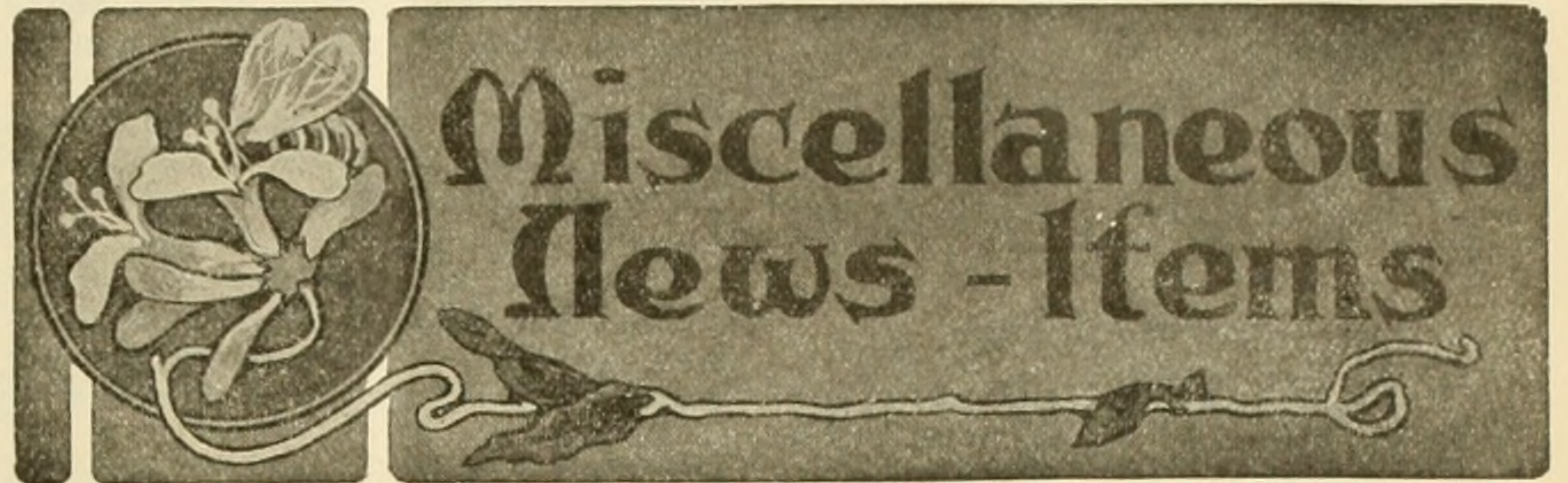
The last census showed something like 700,000 persons keeping bees in the United States. And there are perhaps

not many over 5 percent of that number who read a bee-paper. Why, one would think that at least one in 10 bee-keepers would be regular subscribers. And yet it is only one in 20!

—There are now just 3 bee-papers published in the United States. At the full subscription price they can be had for \$3.00 a year. (We will furnish the 3 for \$2.50.) In what other way can

the would-be bee-keeper better invest \$2.50 each year. We don't know.

The bee-papers are certainly *cheap* in price. And, without fearing the accusation of being egotistic, we think we can say they are *good* in quality of contents. At any rate, we know at least one bee-paper whose publishers are trying to give good value for the subscription money that is asked for it.



Death of Counts Barbo and Borromeo

Two noted Italian apiarists died recently. The first one is Count Gaetano Barbo, one of the founders of the National Association of Bee-Keepers, and of the journal *l'Apicoltore*, in 1867. He was for a number of years vice-president of the National Italian Association. His greatest claim to fame, however, was the excellent set of microscopical studies which he prepared of the anatomy of the bee, and which were made into lithographic pictures by the noted artist, F. Clerici, in the seventies. The most eminent of these studies is reproduced in the latest edition of the Langstroth-Dadant "Hive and Honey-Bee."

Count Barbo was a little under 70 years old. He died September 13, 1909. He was not only a noted apiarist, but also an up-to-date agriculturist. Wealthy though he was, he did not hesitate to take a hand in agriculture, himself directing the work of a large, progressive farm, in which the country people were educated to the most advanced modern methods.

The other death is that of Count Emilio Borromeo, who was also one of the founders of the Italian Association of Bee-Keepers. He died a few days after Count Barbo. It was through the efforts of these men that modern apiculture found its way among the farming classes in Italy.

The picture on the first page shows the apiary of Count Borromeo, in 1870, at his country home.

We are indebted to Mr. C. P. Dadant not only for the facts as given above, but for the picture on the first page and the two used in his article on page 14.

Cure for Bee-Stings

Bee-keepers, as a rule, have little faith, in the thousand and one remedies for stings that have been lauded. Here comes a cure, however, that is given by a veteran, who ought to know something about stings, and it may be worth trying, at least in cases where persons not bee-keepers are stung, for a regular bee-keeper would hardly feel that he could

afford to stop in his work 4 or 5 minutes for each sting received. This is what Elias Fox says, in *Gleanings*:

Get the best proof alcohol, and carry a little vial of it in the vest or shirt pocket; and when a sting is received, simply remove the cork from the bottle and place the mouth of it over the wound after removing the sting, and reverse the bottle and hold it over the wound for about one minute, and keep moving it slightly over the wound; then remove and rub the alcohol into the skin; then apply the bottle again, and do this three or four times, and the pain is gone, and it will be but a few minutes before the swelling will also be gone. I have never had any swelling left after 15 minutes, and the pain is gone almost instantly. Don't be afraid to make a thorough application.

Sectional vs. Langstroth Hives

Jas. A. Green, in the Bee-Keepers' Review, says that his experience differs from that of E. D. Townsend. Mr. Townsend thought bees built up better in Langstroth than in the shallower sectional hives. Mr. Green has had the two kinds side by side, in large numbers, for some years not less than a hundred of each kind, and says:

Almost invariably my experience has been that the bees breed up better in sectional hives than in the Langstroth. My earliest and largest swarms are always from the sectional hives.

Honey in Switzerland

Among the Swiss laws regarding honey, as given in *Prak. Wegweiser*, are the following:

Art. 87. Under the designation "honey," may be brought into trade only the pure, unadulterated bee-honey.

Art. 88. Honey which is produced through artificial feeding of sugar, or of substances containing sugar, must be labeled "sugar-honey."

Art. 89. Foreign honey may be offered only under declaration of the country of its origin.

Orange-Blossom Honey

It has been generally understood that not much honey from orange-blossoms has ever been produced. If a report in *Gleanings* is to be credited, there are at least localities where the reverse is true. R. Powell says that after 15 years' experience with basswood in Wisconsin, he

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considers the orange at Riverside, Cal., to be the freer yielder. He says:

"There is scarcely a day while the trees are in bloom but that the branches can be shaken so as to wet with nectar the ground under the tree. The orange-pickers are always wet all day while they are at work; in fact, teams that are cultivating have to be washed after the day's work is done."

Is Spider-Plant Tender?

"The 'spider-plant' or 'flower' is *Cleome pungens*. It is a native of the West Indies, and requires stove treatment in this country." —*British Bee Journal*.

Is there not some mistake about this? It requires no stove treatment in Northern Illinois where it is too cold for peaches.

Bee-Culture and the Government

In the 1909 Report of the Secretary of Agriculture, Washington, D. C., appears the following paragraphic summary of the work done in the interest of bee-culture, which shows that substantial progress is being made:

BEE-CULTURE.

The work on bee-diseases has been continued. Samples have been received from many parts of the country, and the information gained from this work has been of great value, especially in the way of giving information to State legislatures which are contemplating the passage of laws providing for a much-needed inspection of apiaries. Notifications of the nature of bee-diseases, especially in cases of new outbreaks, have been of much value in preventing their further spread. New studies have been made of the structure and development of bees, of their activity, of the status of bee-keeping, and, in co-operation with the Bureau of Chemistry, the Bureau of Entomology has begun work in wax-analysis.

Kalender Fuer Deutsche Bienenfreunde, 1910

This is the title of a calendar for the year 1910, intended for the use of German bee-keepers. It is a neat affair of 6x4½ inches bound in cloth, and containing nearly 200 pages, edited by Dr. O. Krancher, who is the editor of *Deutsche Ill. Bztg.*, at Leipzig. Both paper and printing are excellent.

For each month there is a page occupied by a calendar, the rising and setting of the sun being followed by a blank in which to record the temperature of each day. Then follow 2 or 3 pages of instruction for the work of the month, and 3 or 4 blank pages for making records. Articles by leading German bee-keepers occupy 85 pages. Especially interesting among these is one by Alex. Schroeder, of Trieste, Austria, who writes in an entertaining manner of his visit to some American bee-keepers.

For convenient use there is attached to the book a pencil. This might be expected to write good German, coming directly from Germany, but alas, in the fingers of this deponent it will write only English, and none too satisfactory English at that.

An Appeal to New Jersey Bee-Keepers.

At the last annual meeting, on December 18, 1909, in Trenton, of the New Jersey Bee-Keepers' Association, our Foul Brood Bill was thoroughly discussed, section by section, and approved, and the membership present determined

to do all they can to get the Bill enacted into law at the present session of the Legislature.

But there remains much to be done by all other bee-keepers in the State. In the first place, we would like all other members who have not done so to send us their annual dues of 50 cents for 1910, and ask for a printed copy of our Bill. Then we want all the other readers of the *American Bee Journal* to join our Association. Send us the annual dues of 60 cents, and get a copy of our Bill.

If there are any readers who can not see fit to join us, we would like to have them write us, enclosing stamp, asking for a printed copy of the Foul Brood Bill, and tell us if there is any disease among their bees, or in their neighborhood, or if there are any careless bee-keepers around them, or if there are any box-hives.

We are asking New Jersey readers to join our Association, as the larger our numbers the greater prestige it will give us in asking for a Bill. If only a few ask for this Bill, it will look as if they were trying to create an office for one of them. Then the Association needs more funds to carry on the work properly. There is considerable expense connected with getting a new piece of legislation enacted like this, such as postage, printing, telephone costs, traveling expenses. It is not fair that this should be borne by a few bee-keepers, as the law will benefit bee-keepers throughout the whole State.

By the time you read this our Bill will have been introduced. We want every New Jersey reader of the *American Bee Journal* to write his Senator and Assemblymen from his county to support our Bill. Write a short, business-like letter. Explain briefly what foul brood is, that it is a germ disease, how it spreads by infected honey, what danger the careless bee-keeper is, and how our Bill will eradicate the disease. Compare our interests with the dairyman's interests, and explain that the bee-keeper's property has as just a claim to protection against contagious diseases as the cattle-raiser has to protection of his herds against contagious diseases, by legislation. (We have laws protecting cattle against contagious disease.) Mention further that California, Colorado, Idaho, Michigan, Nebraska, New Mexico, New York, Ohio, Texas, Utah, Washington, and Wisconsin, have foul brood laws; that Connecticut and South Dakota passed foul brood laws last winter and other States are trying to do so.

We would like to ask especially those interested in bees in Essex County, Hudson County, and Union County, to see, and to write to, their Assemblymen and Senators from their respective counties. Those three counties contain a majority of the members of the Assembly, therefore we must get them in favor of our Bill. *Without the favorable action of the Assemblymen from those three counties, our Bill will fail.*

I trust this will be our last effort, and that we will succeed as, indeed, we will, if each bee-keeper will do his part.

Join our Association at once.

ALBERT G. HANN, *Sec.-Treas.*
Pittstown, N. J.

[The following is a copy of the proposed New Jersey Foul Brood Bill:—
EDITOR.]

AN ACT

For the suppression of contagious or infectious diseases among bees in New Jersey by creating the office of Inspector of Apiaries, to define the duties thereof, and to appropriate money therefor

SEC. 1.—BE IT ENACTED by the Senate and General Assembly of New Jersey that the Governor shall appoint a competent Apiarist for a term of three years, recommended by the Executive Committee of the New Jersey Bee-Keepers' Association, as State Inspector of Apiaries, who shall, if required, produce a certificate from the Governor that he has been so appointed. He shall be subject to summary removal for neglect, incompetence, or malfeasance in office on complaint of the New Jersey Bee-Keepers' Association, or of twenty persons who are actual bee-keepers, his successor to serve for the balance of his unexpired term.

SEC. 2.—Said Inspector when notified, in writing, of the existence of foul brood or any other infectious disease of bees by the owner or caretaker of an apiary or by three disinterested taxpayers, shall inspect all reported apiaries and all others in the same locality, and if satisfied of the existence of foul brood or any other infectious disease, shall give the owner or person having charge of any such apiary full instructions as to the manner of treating them. Within a reasonable time after making the first examination the Inspector shall make a second examination, and if the condition of any of the colonies affected is such as in his judgment renders it necessary, he may personally treat the disease, or, if in his opinion it is necessary to prevent further spread of the disease, and the owner or caretaker neglects or refuses to treat them according to the instructions of said Inspector, then the Inspector may burn or otherwise destroy such diseased bees, combs, or other material that might cause the spread of the infection.

SEC. 3.—Said Inspector of Apiaries shall have access, ingress and egress to and from all apiaries or places where bees are kept in this State and any person or persons who shall hinder, resist, impede in any way the Inspector in the discharge of his duties shall on conviction be liable to a fine of not more than \$50, or not more than 30 days in the county jail.

SEC. 4.—Said Inspector may, in his discretion, order any owner or possessor of bees dwelling in box-hives (being mere boxes without movable brood-frames) in apiaries or localities where foul brood or other infectious disease exists, to transfer such bees to movable frame hives within a specified time and in default of such transfer, the Inspector may destroy or order the destruction of such hives and bees therein.

SEC. 5.—Should any owner of, keeper of, or other person having diseased bees or their larvæ, or of any infected hives of combs, appliances or utensils for keeping bees, sell, barter, or give away or allow the same to be moved, such person shall be guilty of a misdemeanor and upon conviction, such person shall be fined not less than \$10 nor more than \$25.

SEC. 6.—Should any person whose bees have been destroyed or treated for foul brood, sell or offer for sale any bees, hives, combs or appurtenances of any kind after such destruction or treatment unless authorized to do so by the Inspector, or should he expose in his bee-yard or elsewhere any infected comb, honey, or other infected thing or conceal the fact that such disease exists among his bees, such person shall be guilty of a misdemeanor, and upon conviction such person shall be fined not less than \$10 nor more than \$50.

SEC. 7.—Said Inspector must read over, deliver, or have delivered a copy of this act to every owner or keeper of bees before proceeding against him for any violations of this act.

SEC. 8.—The Inspector shall make a full report to the Governor at least once a year, stating the number of apiaries inspected, the number found to be diseased, and the number treated and such other information as he may deem important, which report shall be published in full.

SEC. 9.—There is hereby appropriated out of any moneys in the State Treasury not otherwise appropriated five hundred dollars per year for the suppression of contagious diseases among bees in New Jersey.

The Inspector shall receive five dollars per

day and traveling expenses for actual time served, which sum shall not exceed the moneys hereby appropriated to be paid by the State Treasurer and said Inspector shall be authorized to deputize a known competent apiarist to act in his stead or to assist him as he may need at a salary of \$3.50 per day and traveling expenses.

SEC. 10.—An emergency exists, and this act shall take effect immediately after its passage.

Approved by the Executive Committee of the New Jersey Bee-Keepers' Association.

J. H. M. COOK, *Pres.*
ALBERT G. HANN, *Sec'y.*
E. G. CARR, *1st Vice-Pres.*
WM. E. HOUSEL, *2d Vice-Pres.*
W. W. CASE, *3d Vice-Pres.*

The National Association

Through a letter received Dec. 27, 1909, from General Manager N. E. France, Platteville, Wis., we learned that the membership of the National Bee-Keepers' Association was 3520 at that time. Also that 1280 of them were in arrears on their annual dues. We hope that all who are owing will pay up at once. And then, it is the new president's ambition to have a membership of at least a round 5000 by the next annual meeting. If the 1280 pay up, and all the balance of 2240 renew as their dues expire, then there would be needed just 1480 more new members to make the desired 5000. That is not such a large number to secure in 8 or 9 months, is it?

We hope that every local bee-keepers' organization on the continent will join the National in a body, which can be done at a rate of 50 cents per member. The officers of such local associations should try to have this done. Both the Illinois State and the Chicago-Northwestern did this recently. As the Illinois State Bee-Keepers' Association has the largest membership of any State organization of bee-keepers, it naturally has the largest membership of any State in the National. As there are many conventions of bee-keepers to be held soon—such as the Wisconsin, Michigan (and Minnesota has just met)—there should be a large addition to the National's membership from these sources. And then, if each affiliated local organization would make an effort to increase its membership, that would also help the National.

It requires both money and members for organizations to do anything worth while these days. The National has done a great work during its 40 years' existence, and ought to be able to go on now and do even greater things for its members in the future. But let us first secure the membership and a full treasury, then its officary can plan to do some of the needful things for beedom that only a large and influential organization can do. We are sure that, in the meantime, any of its officers will be glad to receive any suggestions that may be thought to be helpful in any way.

The 50th or Jubilee Year

The American Bee Journal was started in January, 1861, so 1910 is its 50th or Golden Jubilee Year. Samuel Wagner was its founder and first editor. The year 1873, Rev. W. F. Clarke was editor, and beginning with January, 1874, Thomas G. Newman became its

owner and publisher. He continued until June 1, 1892, when the present editor and publisher purchased it, and has ever since continued. We really began work in the American Bee Journal office April 1, 1884, so that we have been connected with it for over 25 years.

And this is its 50th or Golden anniversary year! It should be a great year in many ways for the "Old Reliable," as many of its friends have come to call the American Bee Journal.

First, we desire very much to increase its circulation. It seems to us that it should have the largest circulation of any bee-paper in all the world. It is entirely independent of any bee-supply business, and in every other way. It believes fully in the "square deal" principle, and means to give such to every person with whom it has to do. We believe those who know us best, know that is true. We want only what is right.

Again, we wish to increase the advertising patronage of the American Bee Journal. We want only clean, honest advertisers represented in its columns. We will not knowingly have any others.

Now, we are going to ask those who are reading the American Bee Journal.

to help. We would like to have each present subscriber, as far as possible, send us one or more *new* subscribers between now and April 1, 1910. Surely, that can be done in 3 months. And we don't ask you to work for us for nothing. We offer many good premiums for doing such work, as will be seen from time to time in these columns.

We have not said very much as to the contents of the American Bee Journal for 1910. That is hardly necessary for those who have read it regularly; they *know* that what it *has* contained right along is a good indication of what is to follow. The full year's index in the December number shows what appeared during the past 12 months.

Let us send you some sample copies with which to solicit subscriptions, and see if you cannot easily get one, if not two, new readers for the American Bee Journal for 1910, even before April 1st. We believe most of you can do it with little effort.

Shall we not all, both publisher and subscribers, co-operate during this year in a way that shall make the American Bee Journal's Golden Jubilee Year the best in all its long and interesting history?



Conducted by EMMA M. WILSON, Marengo, Ill.

The Chicago-Northwestern Convention

Well, the Chicago-Northwestern convention is past and gone—only a pleasant memory. A good convention it was, too. The only sad thing about it was the absence of so many familiar faces. Mr. Dadant, the Roots, Hutchinson, Mr. France, the Dittmers, Mrs. Stow, and a number of others. We surely missed them, one and all. We had the pleasure, however, of seeing a number of new faces, among them two of Mr. Dadant's sons (Louis and Maurice), one of whom, Mr. Louis C. Dadant, was elected secretary and treasurer of the Association.

There were 17 ladies present. Not so bad a proportion of the fair sex, was it? And they showed quite as much interest in the convention as their brothers, although the brethren did most of the talking. Sometimes the president had his hands full to keep two or three of them from talking at a time. And yet they talk about women always doing all the talking!

Miss Stewart, the lady who reported for the convention, must surely have found it hard work—part of the time, at least—to keep things straight. I wonder which she thinks it easier to report for, men or women. I really do not remember seeing, at any time, two

of the women struggling to speak at once. Just score one for the women, please.

One of the interesting features of the convention was Mr. Ferguson's demonstration with his uncapping machine. It surely did the work in a twinkling. It was a pleasure just to see those frames slip through the machine and come out perfectly uncapped on both sides of the comb. If we worked for extracted honey, I would want a Ferguson machine.

A topic discussed, which seemed to be of vital interest to the entire convention, was European foul brood. It is gaining such headway that unless something is done to check it very soon, it threatens to wipe out the entire bee-industry in Illinois. Oh, for a foul-brood law!

I was very much interested in a conversation I had with Miss Mathilde Candler, a Wisconsin bee-keeper of no small experience. She said, "I discovered diseased brood in quite a number of my colonies, and was convinced they had foul brood." Then she told how she concluded that she must bury all affected colonies. How she went to work and dug many weary hours until she had a large hole ready for them. After sleeping on the proposition, things did not look quite so discourag-

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ing, and she concluded that she was not quite ready to bury her bees alive, after all—at least not without giving them a fighting chance. So she sent a sample of the diseased brood to Mr. N. E. France, and he sent back the joyful news that it was not foul brood, but *pickled brood*.

She was more fortunate than some of the rest of us. What particularly interested me was the way she faced the situation. Wasn't she plucky to tackle digging that big hole, all by her lonesome self.

But, really, I can't tell you all the good things of the convention. How I wish every lady bee-keeper in the land had been there to see and hear for herself. Why can't we have more lady bee-keepers at our conventions?

Honey for Chapped Hands

Mme. Qui Vive advises the use of honey for chapped lips, thus, in the Chicago Record-Herald:

If you don't happen to have anything else in the house to apply to chapped lips, try honey. It is very soothing, and any time you don't want it there you can eat it. The flavor is preferable to that of cold cream.

The Bee a Symbol of Industry

The Youth's Companion prints the following paragraph which shows that the German housekeeping sisters still consider the bee as a symbol of industry:

The busy bee is not so persistently held up as an example to girls as it once was. But there are some women in New York who still believe in it. The German Housewives' Society gives badges of honor to model servants every year. Twenty-five who had been two years in their places received golden bees the other day—the symbols of consistent industry.

Honey-Cakes

Clara Van Buren, of Elgin, Ill., gives the following in the Chicago Record-Herald:

Melt one-fourth a cup of butter. Add one cup of strained honey. Let cool, then add the grated yellow rind of a lemon, one teaspoonful of lemon juice, two ounces of sweet almonds, blanched and chopped fine, one-fourth a teaspoonful of mace, half a teaspoonful of soda and two cups and a half of flour sifted together. Mix thoroughly, then set aside, covered, in a cool place for 12 hours. Roll into a sheet half an inch thick, cut into squares and bake about 20 minutes in a moderate oven. When baked brush over the tops of the cakes with a cup of sugar and half a cup of water, boiled to a thick syrup. Let the syrup cool slightly before using.

Honey-Production in India

Mrs. M. C. Mason, a missionary at Tura, India, writes Gleanings in Bee Culture as follows:

There is not much inducement to bees to make any amount of honey here, as they can eat directly from the fresh flowers; still, they do produce some very nice honey, and once in a while we get some that is eatable. If we could get it first hand or in the comb it would be all right; but the natives are much given to straining it through any cloth, and that may be one taken from off the body, often so dirty that Mrs. Root would not allow her floor to be scrubbed with it.

The likelihood is that the bees in India are just as eager to store honey as their sisters in the farther North. A

colony here with 100 pounds of surplus on the hive works just as hard as if no supers were there, so long as it has room to store. However it may be about "inducement" for the bees, there would be little "inducement" for humans to eat honey strained in the manner mentioned. Ugh!

Bee-Keeping in the Public School

If bees as teachers of children in the public schools were appreciated elsewhere as they are in School No. 190, in New York city, there would hardly be a large school in the land without at least one colony of bees. The school mentioned has 4 colonies. It is probably generally supposed that the only object in having bees as a study for the pupils of public schools is to learn something of their natural history. "Nature study" is nowadays quite a fad, and a good fad it is. But according to the ideas of Miss Goldie, the principal of School No. 190, the pupils get from the bees something of vastly greater importance than anything that can be classed under the head of nature study. Listen to what she said to a reporter of the New York World:

"It is astonishing what the children have been able to get out of watching and studying those insects. In all my years of teaching I have known nothing that would so develop a child's power of observation and ability to relate, orally or in writing, a mass of true scientific information derived from actual investigation. Almost any child in the school can, at a glance through the glass, tell

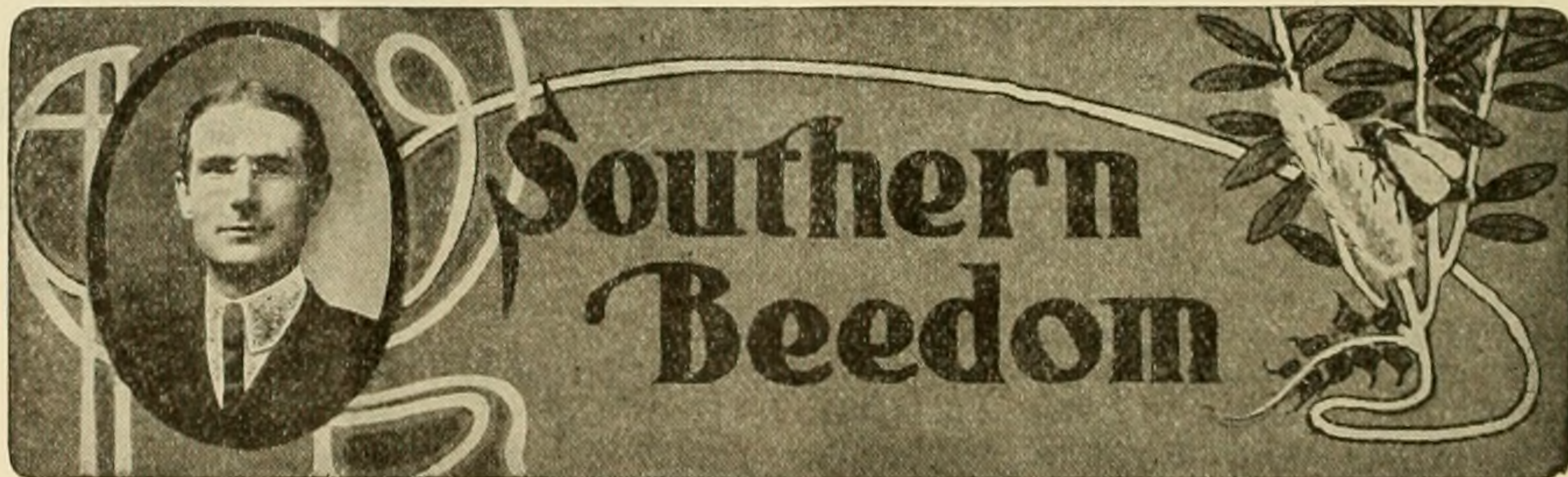
the old bees from the young ones, picking them out from thousands, and they know that by little characteristics that the ordinary eye would be stone blind, too.

"It is worth something to get nearly a thousand girls in such a frame of mind that they are frightened by the buzzing of an insect that can sting. It is worth something to get a herd of boys in such a frame of mind that under no circumstances would one of them step on or otherwise intentionally kill or injure a useful insect of any sort. If any boy in this school ever finds a bee lying outside numbered by the cold, he picks it up and brings it in to the hive.

"In rainy or stormy weather when bees are interrupted in their work, they make a noise that is much more threatening and angry than the contented hum with which they do their task in pleasant weather. The children have observed that, too, and of their own accord made comic little parables to the effect that they ought not to grumble about the school work that they have to do at home.

"The children have drawn their valuable lessons in loyalty to the school, the city and their homes from the care and devotion with which the bodyguard looks after the queen of the hive. We have had two swarmings caused by rival queens, and the pupils know all about the results of factional war in a hive. They know that the old-fashioned expression, 'neater than wax,' is based on the fact that no creature is cleaner than the bee. A bee that is sick or dying always knows and voluntarily goes out of the hive to die rather than allow her dead body litter the quarters of her fellow-workers.

"The pasteboard cases in which we put the boxes of honey taken from the hives are made by the boys of the school as part of their shop-work, and there is no part which they do better, because that appeals to them as being very practical and commercial so long as they know that they are also interested in the production of the article that is to go in the cases. And of course the fate of the drone offers such an obvious lesson that the smallest youngster in the school can absorb it without much teaching."



Conducted by LOUIS H. SCHOLL, New Braunfels, Tex.

Bulk Comb Honey--The Hives and Super Arrangements

The beauty of the whole thing is that any kind of hive can be used for bulk comb honey production. So, no matter what kind, style, size or shape hives you now have, whether you have been unsuccessful with them in producing section honey or not, or whether they are not just suited for extracted honey, makes no difference. Any hives that can be made to receive a shallow super above can be converted into a bulk-comb-honey hive, so that no matter what kind of hive one now uses, or how many one has, the change to bulk-comb honey will be very slight as compared with the advantages of its production as a more profitable venture.

Of course, I might admit that some hives are better than others, no matter what kind of honey is produced, and although this is a fact, it is nothing compared with the difference in hives for the successful production of comb honey in the small, miserable 1-pound section boxes. The majority of the

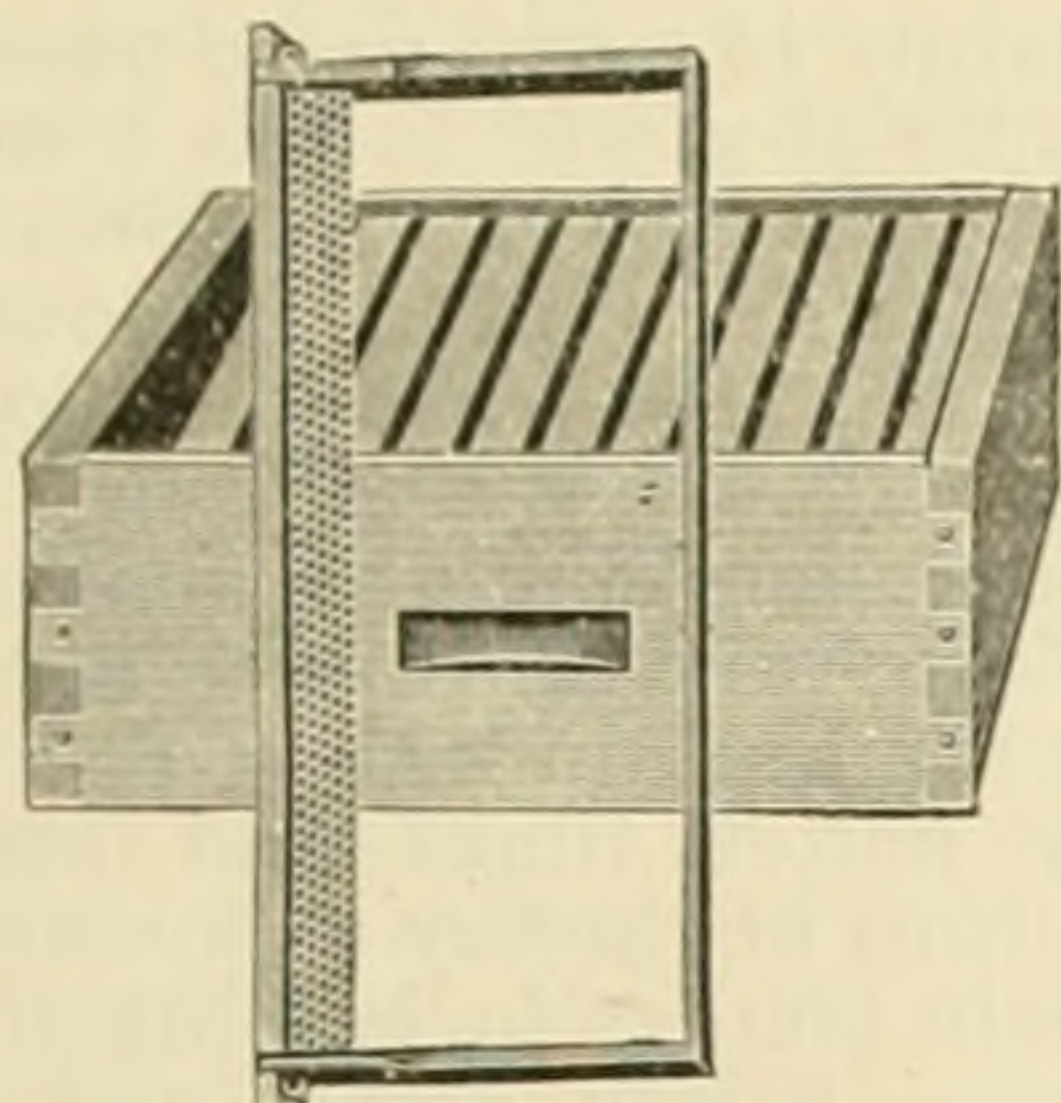
hives now in use are of standard size and variety, and such that allow tiering up of supers above, especially hives that have been used for section-honey production. With these the supers can even be converted into shallow-frame supers—just the ideal for bulk comb honey.

Many bee-keepers are already using shallow frames for extracting purposes, and hence need make no change in their hives and super arrangements. If the deep frames are used for extracted honey, it would be advisable to turn these sets with deep bodies into brood-chambers for increase whereon shallow supers can then be added. The deep or Langstroth frames, or like ones, are unsatisfactory for our purpose, being too deep, and a deep super of them is too much room for most satisfactory results; besides, they do not allow the use of full sheets of thin super foundation; and possess other disadvantages.

The majority of hives in Texas are of the 10-frame Langstroth size, on which we use shallow supers as shown in Fig.

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1. These supers are made in either 8 or 10 frame sizes, so they can be obtained either for 8 or 10 frame Langstroth hives, if you have them. In our system we prefer the shallow Hoffman self-spacing frames, as a self-spacing

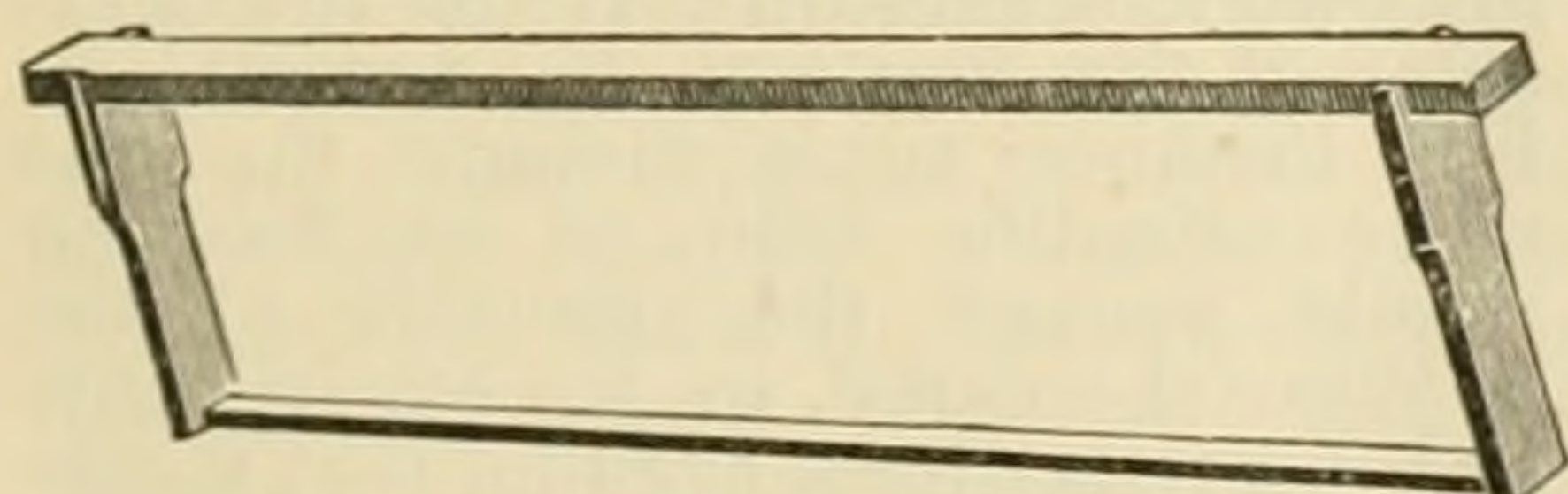


2.—SHALLOW SUPER FOR CHUNK HONEY

frame is absolutely essential for our purpose, as will hereafter be explained.

Fig. 2 represents one of our supers with 10 frames. The super is $5\frac{3}{4}$ inches deep, while the frames are $5\frac{3}{8}$ inches in depth. These hang on plain, square shoulders or rabbets without tins. No tin rabbets are necessary. The frames, $5\frac{3}{8}$ deep, as shown in Fig. 3, are the regular shallow Hoffman style, as put out by most manufacturers, except that they differ in the top-bars used. As made regularly at the factory, they are too wide. These are $1\frac{1}{8}$ inches wide, making the spaces between the top-bars of the frames too narrow for best results, as the passage-way from one super to another is cut off too much, and discourages the bees more or less, so that a loss in surplus honey results. They are made only $\frac{3}{8}$ inch thick, and with a deep, wide groove for inserting foundation-starters, so that they are too weak, and sooner or later sag, and allow bur and brace combs to be built between the tops and bottoms of the several supers.

Our frames have a narrower but thicker top-bar, full $\frac{3}{4}$ -inch wide, and full $\frac{1}{2}$ -inch thick, which makes the frames much stronger; no sagging results, and the trouble with bur combs is thus prevented. We have no groove for foundation-starters in these top-bars, as, first, it only weakens them, is an extra expense, and then we absolutely do not need them with our methods of fastening the foundation. On the contrary, they are an abominable nuisance to us, and prevent fast work, as they are in the way. Even if we should use them the first time, they would be filled with wax each successive time foundation was put in the



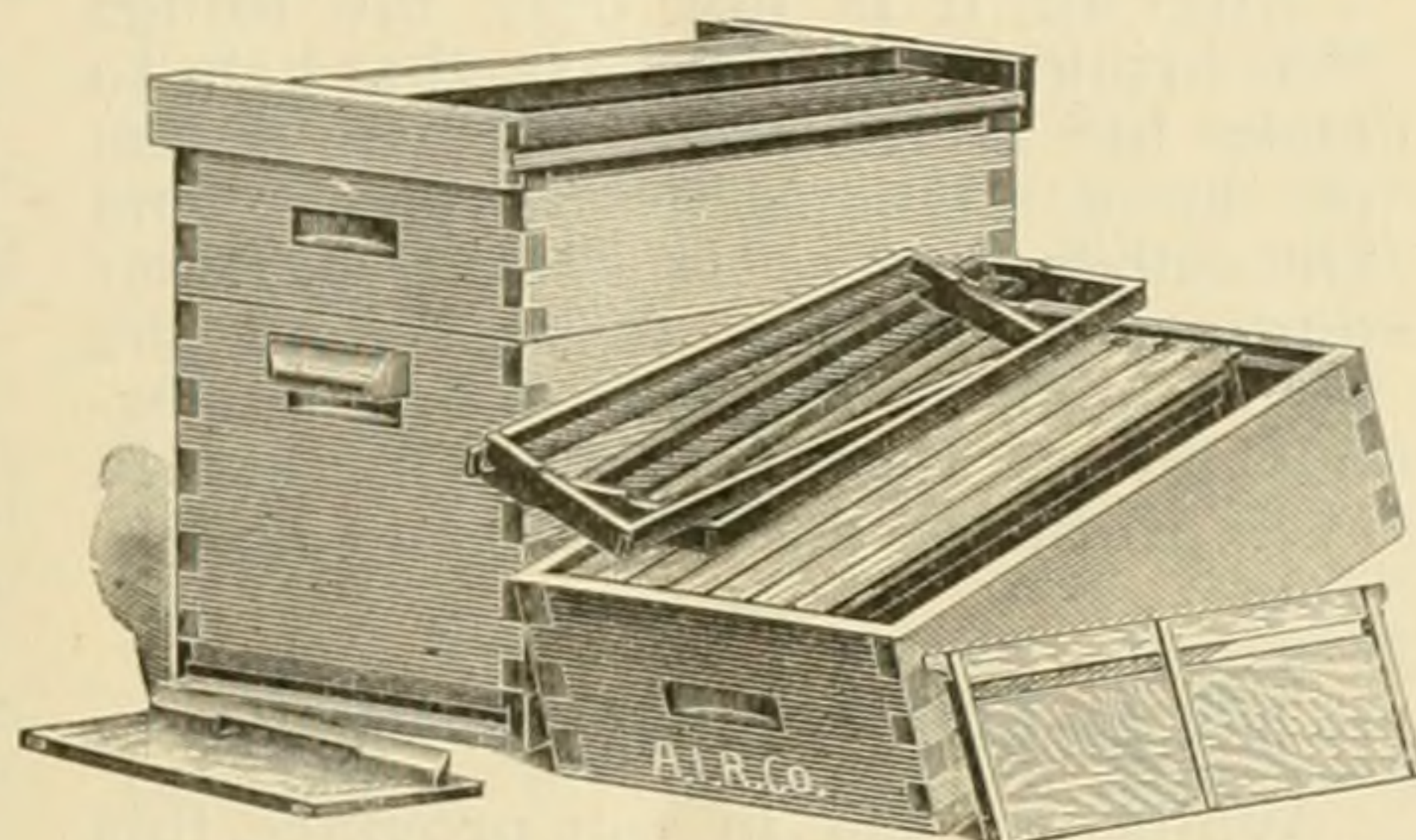
3.—SHALLOW FRAME FOR CHUNK HONEY.

frames, and our experience has long taught us that it did not pay to clean out these grooves. How the foundation is fastened in them will be described later.

In answer to numerous enquiries from those wishing to procure the proper supers for producing bulk-comb honey the coming season, we

recommend the above-mentioned supers either 8 or 10 frame size, as needed for the hives already in use. It would be well to state here that when ordering these, special mention about the kind of top-bars wanted will have to be made, giving the desired width— $\frac{3}{4}$ -inch, full, and depth, full $\frac{1}{2}$ -inch, not omitting that no groove for foundation is wanted—or the regular wide ones will be sent.

Here, and by those who use them, these frames are known as the "Scholl" frame, and several of the large bee-keepers' supply manufacturers have been asked "to put the Scholl frame on the market." This is in all respects nothing else but the shallow $5\frac{3}{8}$ Hoffman self-spacing frame, but with the $\frac{3}{4}$ -inch wide, and $\frac{1}{2}$ -inch thick, top-bar, without a groove to weaken it. This is the frame that we have advocated for a number of years, and we have several times called attention to it, especially for use, not only for bulk comb-honey production alone, but for the shallow, divisible brood-chamber hives, which we use extensively in our work. As this hive has given us the best satisfaction and results in the production of bulk-comb honey for many years, I will describe it in the next article, for the benefit of those who desire to procure new hives, or for others who wish to follow my system of work this year.



1.—HIVE AND SUPER FOR CHUNK HONEY.

How Far Do Bees Fly?

It would seem that from all that had been written and said on the subject of how far bees will fly for honey, there is but little left to be said or written on the subject, still this is like the wintering problem in the North—it's one of the subjects that just won't down.

I am ashamed to confess it, but it is one of the few things connected with apiculture that the more I experiment the less I really seem to know. As it is a subject that all bee-keepers are more or less interested in, for one, should like to see it thoroughly discussed by all, this winter, through the columns of the American Bee Journal. I think there is little danger of the subject becoming stale and of little interest to the readers. Away back in my boyhood days, when I first started with bees in a practical way, I thought I knew they would fly from 4 to 6 miles, and store honey at a profit; and I can't help having the same feeling to some extent even yet. But when I come to read the testimony of such men as E. R. Root, Louis H. Scholl, C. P. Dadant, J. L. Byer, and a host of others I could mention, all claiming bees seldom fly over $1\frac{1}{2}$ miles for stores, then, perhaps, I become somewhat in the plight

of Josh Billings, when he said, "What's the use of a man knowing so much when half he knows isn't so?" In those days I lived in Johnson County, Tex., in what is known as the crosstimbers—a belt of timber reaching practically across the State where I lived. This strip of timber was about 10 miles wide, and I lived near the center. On either side of my home, at a distance of from 5 to 6 miles, was black, waxy, prairie land, which is very rich, and the natural home of the wild marigold and horsemint, which, at that time, were the principal honey-plants of north Texas. In the timber the soil was a deep, sandy loam, and I never saw a stalk of wild marigold growing there, and none of the kind of horsemint that furnished the famous horsemint honey of Texas years ago. But as tated, on the prairie, 5 or 6 miles away, these plants grew to perfection, and in almost endless quantities, and, in favorable years for their growth, these prairies were almost a bee-paradise. (They are now all in big farms, mostly planted in cotton.) My bees, in the center of the crosstimbers, worked freely on these plants on both sides of me.

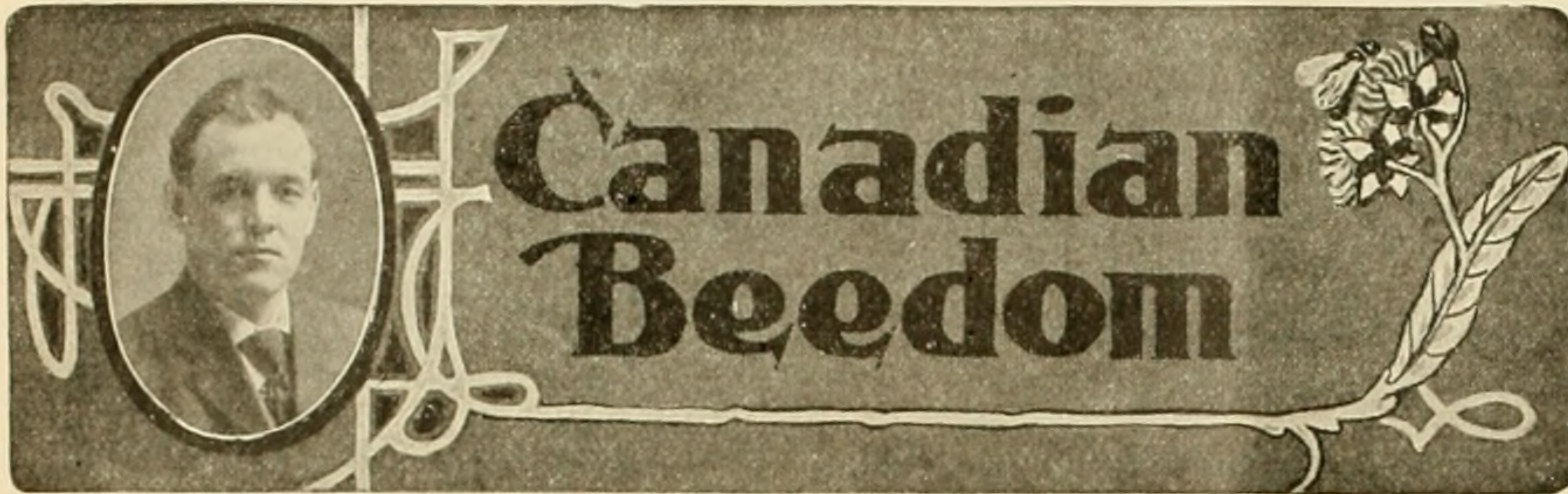
Some might say, "Are you not mistaken? Is it not possible there were some patches of these plants not known to you, that your bees worked on much nearer, etc.?" I am not mistaken. I was brought up on the farm, and knew all the country for many miles around.

Others might still insist that the honey stored by my bees was from some other source, and not from these plants, as I thought. Here, again, I insist I am not mistaken, for when bees work on marigold they become dusted over with a yellow dust from the bloom, that looks very much like bees do that are at work on the goldenrod; and marigold honey is of a pinkish red, and has a flavor all its own. Then, when they work on the horsemint they become dusted on their backs, between their wings, with a dust as white as flour. It's no need to tell a Texan he doesn't know the flavor of horsemint honey. Not only that, I was the first to get the yellow banded bees in that part of the country, and I frequently saw them working on those plants 4 or 5 miles from the apiary, and they would store from 25 to 30 pounds of surplus honey per colony, each good year, from those plants. Then, if bees seldom go further than $1\frac{1}{2}$ miles for stores, does it seem possible that such a great number of colonies could be kept in one yard and yet secure such yields of honey as the late E. W. Alexander secured? I confess it hardly seems reasonable to me. But when such men as I have mentioned above, say they have known bees to be in a starving condition, and good pasturage not more than 2 miles away, it causes me to wonder where we are at.

I could give other instances where I know bees went from 3 to 4 miles to work on smartweed bloom, but with the hope of seeing the subject more ably discussed by others, I will desist for the present.

L. B. SMITH.
Rescue, Tex.

I am well pleased with the American Bee Journal, as it has been a great help to me.
JOHN G. WAGNER.
Route 3, Elkader, Iowa.



Conducted by J. L. BYER, Mount Joy, Ont.

Late Bee-Flights and Good Wintering

The late flights already referred to should be a factor towards good wintering of the bees indoors or outside, and as all other conditions seemed favorable bees should come out in good shape next spring. There is just a possibility that there may be a little honey-dew in the hives—at least I am afraid of a little among my own bees—and if there is much of that article present, of itself it is sufficient to overbalance all other favorable conditions grouped together. At least that has been the experience in one or two years when the honey-dew was much in evidence. Indeed, the result of trying to winter bees on that substance was so disastrous that most of those who passed through the experience would take no chances if they knew for sure that there was much of the stuff in the hives. This year, if it is present it is in small quantities, and came in at the same time that the buckwheat was in bloom.

Good Fall Bee-Weather

Whatever the weather conditions may have been over the country as a whole during the past autumn, Ontario can certainly go on record as having had ideal weather during that period, at least in so far as it applies to the interests of bee-keeping. Although some men who winter their bees in the cellar, had at the time of the Ontario convention (Nov. 9th) already placed them in winter quarters, yet the great majority of bees intended for inside wintering were outdoors at a later date than usual. Only 40 colonies of mine are being wintered in the cellar, and as they had continuous flights more or less all through November, they were left outside till Dec. 4th. At that date they were in fine condition for going in, having had a good flight but two days before, and as there was no snow on the ground, the hives were nice for handling. The day was warm enough for the bees to fly, but having had a good flight such a time before, they gave little trouble when being carried in. After being placed in the cellar, they came out of the hives a little, but in the course of a couple of hours they quieted down nicely.

November 28th the bees carried in some pollen from the few venturesome dandelions that were in bloom, and this I believe establishes a record for our bees in the matter of late gathering of pollen. Whether the bees I put in the cellar on Dec. 4th would have been better off if they had been in a month earlier, is something I cannot know for

a certainty, but with conditions as they were, we certainly felt safer at the time with the bees outdoors.

As to the late-blooming dandelions mentioned as the source of pollen gathered so late in the season, it is only in 3 months of the year (January, February, and March) that it is impossible to find any of the flowers of this true friend of the bee-keeper, as I have seen during the past years, at least a few blooms in all the other 9 months of the calendar. True, it is only during May, and sometimes in early June, that the blooms are in great enough quantity to amount to anything, yet the flowers that show up in November, and this year in December, help to make the more dreary season of the year more pleasant.

After all, it is not only the things that bring in the dollars, that help to make life inviting, but the late bloom of the dandelions in November and December just as truly answer their purpose in helping to carry out the Divine plan as do their more numerous sisters that show themselves in such profusion during May and June.

Honey Crop Sold Early in Ontario

While we had in our province, this past season, a fair crop of honey, for some reason the supply seemed to disappear in record time. No question but that the Northwest provinces took a great deal, but aside from that the honey being of such a superfine quality had no doubt a great influence in increasing home consumption. These and other factors combined, have been the means of cleaning out the supply of honey to such a degree that some of the large dealers are now sending out inquiries for more supplies—an unprecedented condition for the time of the year, in so far as I have any recollection. Prices have been good, and as a natural sequence you do not hear of any bees being offered for sale here in Ontario this year. Everything considered, such as prices, demand, etc., coupled with the more general recognition of bee-keeping as a *business*, certainly seem to indicate fair things for the future for the apiculturist, and it is not to be wondered at that in this strenuous competitive age more are being attracted to the calling each year.

Speaking of the demand for honey this year, my experience would certainly lead me to believe that honey is rapidly growing into favor as a staple article of food. Last year I kept about double the honey for home trade, as compared with other years, and as a result I was sold out before Dec. 1st.

This year I thought to be on the safe side, and kept a half more than last season, and at this date (Dec. 13th) I am entirely sold out. By "home trade" I mean only what is sold or ordered from the house, as I have not solicited a sale for honey for two years.

It certainly is much more pleasant to have people anxious to buy honey at a fair price than it is to be forced to go begging for sales at a ruinously low figure, as was the case not so many years ago.

And just here I might mention that after making due allowance for higher prices prevailing on nearly all kinds of products, better times and increased consumption of honey as a staple, one of the main factors in helping to bring about these better conditions for the apiarist is the existence of the so-called "honey exchange" here in Ontario—an institution that is justly gaining the confidence of nearly, if not all, of the principal producers.

Ontario Experiment Apiary at Guelph Hereafter

The Experimental Apiary, of which Mr. Morley Pettit is the head, is about to be moved to the Guelph Agricultural College, and become part and parcel of that institution. This is as it should be. There is no reason why apiculture should not have reached the same place of importance at the College as poultry-keeping and butter-making. The start is being made very late, but it is never too late to get right. The professor in apiculture should be a necessary part of the College staff, as is any other professor there. Bee-keeping offers a career as inviting as poultry, and can often be combined with it. If Mr. Pettit is given his proper place at the College, he will have no time to go out hunting for foul brood.—*Canadian Bee Journal*.

The foregoing speaks for itself. The change contemplated is no doubt a good one, and Mr. Pettit will find many facilities there at the College that were absent at Jordan Harbor. In Mr. Pettit we have an efficient helper, and judging from the proceedings at the late convention of the Ontario Association, he will have plenty to do, *i. e.*, if he can decide on what will be the most profitable line of investigations to carry on.

At the convention Mr. Pettit asked for suggestions from the members assembled, as to what they might desire to have done in the way of research in apicultural work. It was most amusing to note the different ideas of the many who expressed opinions on the matter, and I am afraid that Mr. Pettit came to the conclusion that, after all, he would have to depend mostly upon his own judgment in deciding the character of the work to be undertaken. For instance, some thought that the more scientific side of bee-keeping should engage the attention of the Provincial apiarist, in his experiments and investigations, arguing that it was time the men who were in the business for a living should be receiving some help, as those were the ones who had borne the brunt of the fight in getting needed legislation, etc. Others thought the more simpler experiments should receive attention, such as, for instance, deciding the different questions as to wintering, indoors or outside, spring management; whether it was advisable to stimulate or not in the early spring;

and the hundred and one different questions that confront the beginner.

As to what effect the decision of the Provincial apiarist might have on old bee-keepers, regards his solution of these little matters, as was amply illustrated right in the convention, Messrs. Miller and Sibbald, two of our very successful bee-keepers, happened to be sitting side by side, and it was pointed out that Mr. Miller was strongly in favor of having packing under the bottoms of the hives when wintering bees outside, while, on the other hand, Mr. Sibbald would have none of the packing under the hive, as he deemed it to be simply useless. The writer has had hives for quite a few years in the same apiary, about an equal number packed both ways, and cannot see a particle of difference in favor of the packed bottoms, so would naturally dispense with them in making winter-cases for the future.

I ventured the opinion that no matter what the decision of the Provincial apiarist might be on the question, both Messrs. Sibbald and Miller would continue doing just as they have been doing, and as there was no dissent from this assertion, I make bold to assume that all other experiments along these lines would be received the same way, and all would continue doing as they were accustomed to, provided, of course, that such practices had been giving good results.

Bees Wintering on Buckwheat—"Gambling"

My own bees are heavy with buckwheat stores—so heavy, in fact, that some of the sugar bought for feeding was not all used, as it seemed like feeding for nothing when the hives were already so heavy. If there should be bad results from the buckwheat, then next spring we will be wishing that more sugar had been fed—if the bees winter well, then we will be congratulating ourselves on saving a few dollars. Such is life, and if we only always *knew* just what was going to occur, how we would manage!

But if all the uncertainties of the business were removed half of its charms would also disappear, as I have an idea that these same uncertainties lend spice and interest to the pursuit, and help to make of true bee-keepers the enthusiasts that they generally are.

While in Cobalt last summer, speaking with Mr. Hand, the writer marvelled at the gambling spirit that seemed to be so prevalent in so many of the mining ventures in that country. The retort came at once, "A few weeks ago you did not know if you would get a pound of honey, when all at once weather conditions became just right, and in 6 days your bees gathered for you over 20,000 pounds of honey. What could you find in the mining country here, more of a gamble than bee-keeping is?" As my friend was formerly in the bee-keeping business, and thoroughly familiar with all its details and uncertainties, I was rather at a loss to answer him at once, other than to remark that at all events the "gamble"

in the bee-business was at least legitimate—something that was not always the case in mining stocks.

Call it what you may, the gamble of uncertainties of many conditions uncontrollable by the apiarist helps, as I have already intimated, to make the calling one of the most fascinating

pursuits available to us sojourners on this mundane sphere—yea, make it possible for at least one body of workers so to enjoy their chosen vocation as not to be in sympathy with the commonly expressed idea that each one thinks "the other fellow has always the best job."



Bulk Comb Honey Production

BY F. GREINER.

I am heartily in favor of bulk comb honey as advocated by Mr. Scholl, of Texas. Although we are well rigged up with our comb-honey supers, and its being a nice, clean job to handle comb honey in sections, as compared with the Texas or Scholl method of producing honey, yet it may be wise if we Easterners would look into this method of comb-honey production.

As I understand it, the honey is produced in shallow unseparated supers with ordinary inexpensive frames, said shallow frames are either filled with very light comb foundation or just starters, at the pleasure of the producer. In either case it will be much easier to start the bees working in the supers than it is when using section supers. When I was using undivided supers, many years ago, or at the beginning of my bee-keeping, it seemed so easy to get the bees to take hold in them; now, with the modern super divided into 24 little, separated rooms, it requires all the skill of an expert to obtain anywhere nearly the same results.

Our Texas friends fill up their cans or pails with extracted honey after all the comb honey the receptacle will hold, is put in. I am just a bit afraid to do this. With our honey here, and with our cold weather, that honey would soon granulate, and then we would be in a pickle, or rather a predicament, from which to extricate ourselves without incurring a loss, might bother us. I wonder whether the Texas honey does granulate under such conditions; and if it does, how our friends guard against the difficulty. Of course, by not filling the receptacles till wanted, and using extracted honey for filling in, which had been liquefied before, or had been heated to about 140 degrees Fahr., and cooled again, a part of the trouble might be avoided.

I am just a little skeptical as to the wisdom or advisability of filling the interstices with extracted honey—not sure that our customers would like that.

This kind of comb honey and extracted honey combined would very likely have to be all sold in a retail way, directly by the producer to the con-

sumer. This would necessitate the adoption of a small can or pail suitable for such trade. If I remember rightly, the bee-men in Texas use a large can with a 4-inch screw top. It seems to me that the "fishing out" of the combs, dripping with honey, must be a mussy, disagreeable job, and I doubt if any groceryman here could be induced to go into it. We would like to hear from our Texas people, what their experience is along these lines.

I am quite sure many of us bee-keepers of the North and East might find sale in our respective vicinities for a great deal more honey than is now consumed, if offered in this cheaper form. It cannot be denied that the majority of people prefer comb honey to liquid honey. I have labored hard for 30 years to create a liking for extracted honey. I have always offered only the very best white and good flavored honey that could be produced in my vicinity, but the fact is, by far the majority of people prefer the most inferior grades of comb honey to the very finest honey in the liquid form. Calls for a dollar's worth of cheap comb honey are very frequent, and all my honey from *unfinished* sections is cut out and put up in tin pans—a dollar's worth in each—and thus sold. To satisfy this demand for cheap honey, I never have enough to go around.

Any experienced bee-keeper knows that bulk comb honey can be produced, in individual supers referred to, for a good deal less than even the unfinished section honey in the divided supers; and the quality would be very much in favor of the former. We would have good reason to expect an increased demand for the new product. Whereas formerly my sales from the unfinished sections amounted to from \$15 to \$20 each season, this might be tripled the first year, if it was noised about that such honey was for sale. The demand would be growing from year to year; although I would not expect to see the time that my whole output could thus be disposed.

"A dollar's worth" seems to be about what many people would prefer to buy at a time; even our village customers have fallen in line with the farmers, and will expend a dollar for honey when a larger or more costly package, or even a smaller one, would

not find favor. The question then arises in my mind, How many pounds of this mixed product can I afford to give for one dollar, taking 14 cents as the basis of the price of section honey, and 8½ cents for the extracted; also taking into consideration that these last-named prices are wholesale; while our new product will be sold in retail?

I wish I knew how well the friction-top cans, as offered by the Cannery Co., of Chicago, at \$7 per 100 for the 10-pound size, would suit. I am inclined to order a batch for a trial, anyhow.

This is a subject which might be discussed at bee-keepers' conventions this winter. Many of our producers may scorn the idea of giving this matter a trial, but if we by adopting the Texas method, and dispose of a portion of our honey in the home market, we would make a gain by keeping that much honey out of the usually glutted city market, and this in turn might have the effect of raising the price of the commodity.

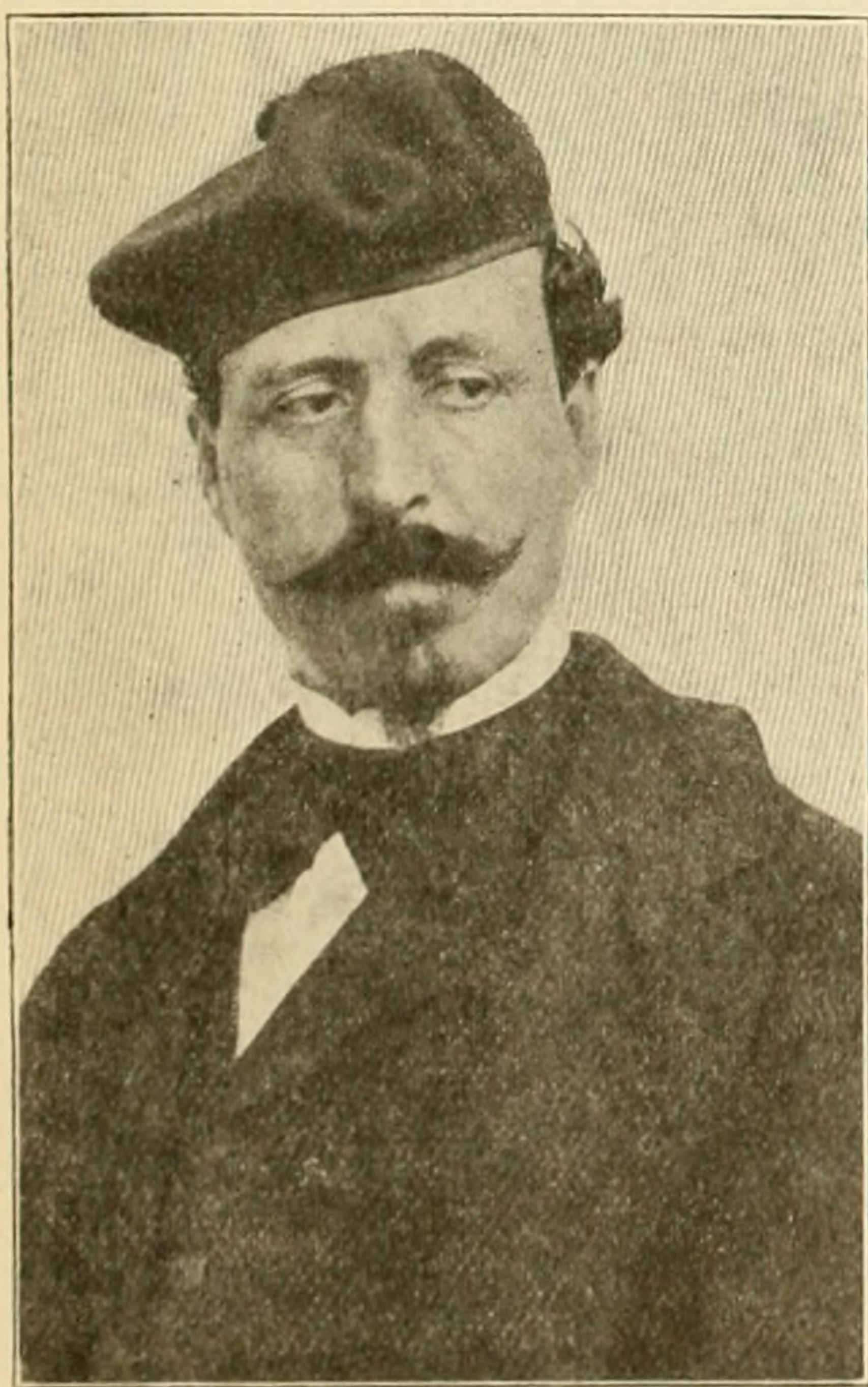
There can be no doubt that sooner or later the scarcity of suitable timber to make sections from, will force us to make a change in our method of comb-honey production. We would be wise if we so planned as to be independent of the basswood-timber supply.

Naples, N. Y.

Progress of Bee-Culture in Italy

BY C. P. DADANT.

The death, during the month of September, 1909, of two noted Italian apiarists, has drawn the attention of the bee-keeping world to that country and



COUNT BORRÓMEO.

of the progress achieved by it in apiculture.

Italy, some 60 years ago, was a divided country, the greater portion of

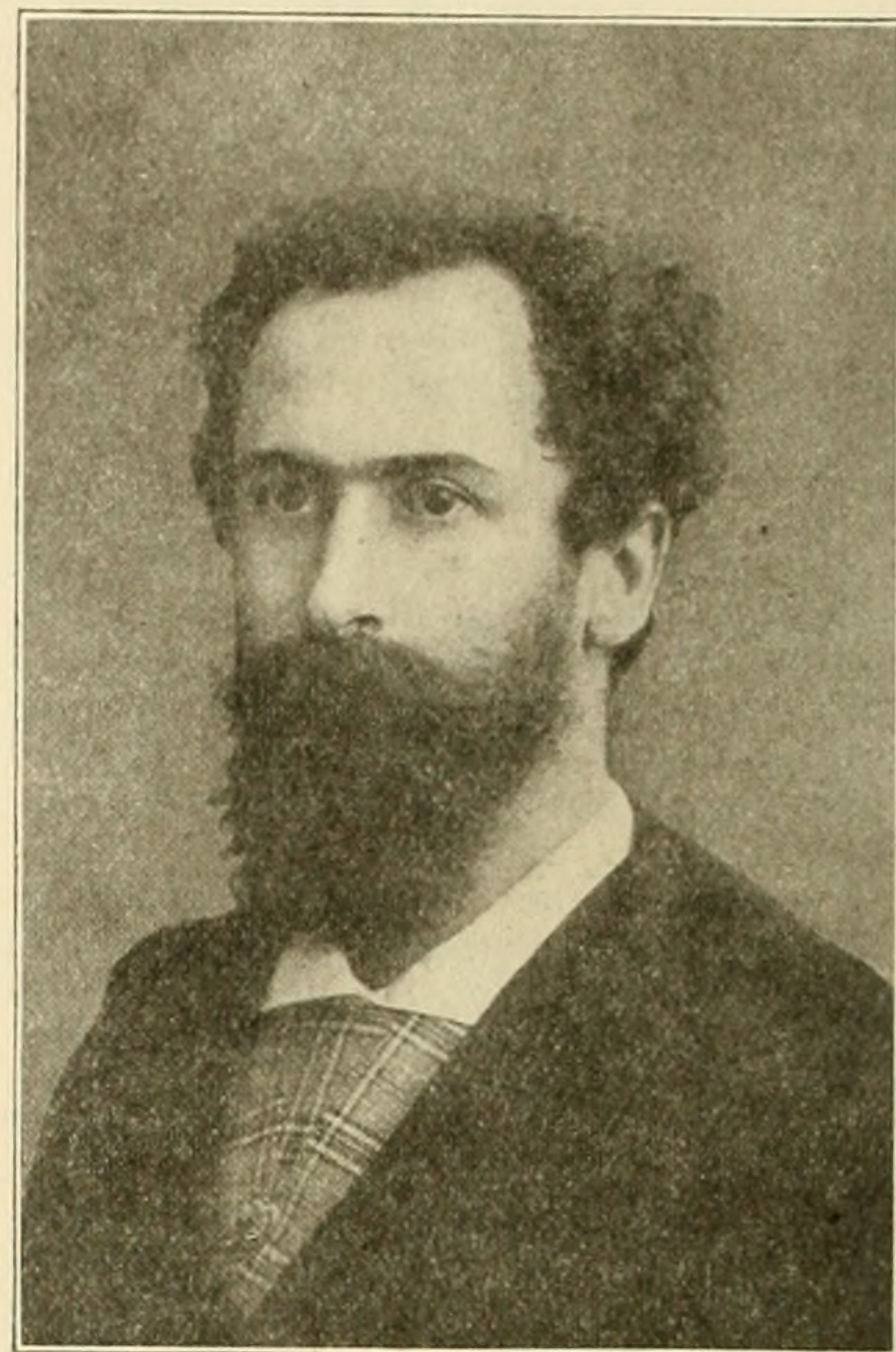
it being under the iron rule of the Austrian monarchy, a small part under the Pope's rule, and the remainder under other small rulers. The unification of the country by the overthrow of the Austrian power and the securing of an independence that was long sought, under the influence of the spirit of liberty set aflame by the patriotism of Garibaldi and his volunteer legions, gave an impetus to progress, and it is hardly to be doubted that Italy would not yet today be as progressive as she is, even in the culture of bees, were it not for the political progress achieved in the middle of the past century.

Germany had already achieved very important progress in apiculture when Italy came to the front; but Germany had the good luck of being the birthplace of two great apiarists—Berlepsch and Dzierzon—the inventor of modern methods and the parthenogenesis; not to mention a number of scientists who helped in discoveries in bee-anatomy. America followed the footsteps of Germany. To make sure of this, one needs only to peruse the first two or three years of the old American Bee Journal. But the pupil soon got ahead of the master, and at the present date the Dzierzon and the Berlepsch hives can not be compared in efficiency of manipulation to any of our modern hives. Langstroth was the man who set the pace here, by his inventions and his accurate researches.

Italy then took the cue. In the sixties, one of her leaders, Major Hruschka, invented the honey-extractor. But to use this machine a practical hive was needed. Both the German and the American hives were tried, and the latter, I believe, took the lead very promptly. In 1868, "L'Apicoltore," their national bee-journal, was founded. A Central Association for the Encouragement of Bee-Culture was organized. Let us bear in mind that Italy, like all the old monarchies, is composed of classes very far apart in social positions. The contadino or peasant, at that time, had no education; in many places he lacks education yet, but he is gaining slowly and surely. On the other hand, the nobility is among the most aristocratic of Europe. The Viscontis and the Borromeos trace their ancestry back to the middle ages. But it was among these aristocratic men that the progress began. They bent their energies in the most democratic fashion to the spread of what they recognized as progress, and proud as they were of their ancestry, they did not consider it a degradation to put their hands at useful work and to preach the gospel of progress to the uneducated. They mingled with the mass to teach new methods, and counts, doctors, engineers and ordinary tradesmen set themselves on a basis of equality before the little honey-bee. Is this not worthy of our consideration? Perhaps we can hardly realize what such a thing means, in a democratic country like ours, where all men are equal.

It would be useless and impossible for me to name all the men who made Italian bee-culture what it is today. Crivelli, Visconti, Lurani, Rauschenfels, Dubini (the author of a splendid treatise), Borromeo, Barbo, etc. The work of the last named, extensive mi-

croscopic studies, was brought to the reach of every one by the art of Clerici, who made beautiful lithographs of most of them, and these lithographs



COUNT BARBO.

were published under the auspices of the Central Association. They were since re-published by the editor of the journal "L'Apicoltore," Rauschenfels, who is today upwards of fourscore years of age, but still on the path of progress.

Bee-culture in Italy has also been urged forward by the demand for Italian bees from all parts of the earth. But more than anything else the work of its translators has been beneficial. From the beginning of its publication articles have been translated for "L'Apicoltore," first by Dr. Dubini, later by others. Our American readers would be astonished to see how well acquainted the Italians are with the writings of Doolittle, Dr. C. C. Miller, A. I. Root, Hutchinson, and hundreds of others in America. In the same way they quote from German bee-culture, France, England, Belgium, Switzerland. There is not a magazine in the world which is more cosmopolitan in its make-up than "L'Apicoltore."

But, dear reader, do not infer from the above that the bee-keepers of Italy are all progressive. This would be a big error. Neither are the bee-keepers all progressive in America. It was lately found out by Mr. Holekamp, Secretary of the Missouri State Bee-keepers' Association, that there are 42,000 bee-keepers in Missouri alone. How many of those are up-to-date apiarists? Not one-tenth I dare say. And Missouri does not hold the record for ignorance, for we have other sections of the country much farther behind. Dare we criticise other countries?

While the Steinheil trial was in progress in France, and our newspapers were throwing ironical jests at the rendering of justice in French courts, in

our own country—in proud Illinois—mobs were dealing out lynch law to black and white alike at Cairo. While we look at the mote in our brother's eye, let us not forget the beam which is in ours, and bids fair to deprive us entirely of eye-sight.

Can we draw a moral from the action of the Italian noblemen who have so pushed bee-culture forward among the masses? Yes. They were only a handful who took hold of this work, but their united effort has done wonders. It is not so much the numbers of progressive men that cause steps forward, as the quality of the men who do this work. So in whatever line we see possibility of progress let us unite, work in harmony, and let us not leave a stone unturned which may help progress among our fellows.

Hamilton, Ill.

Southern California as a Bee-Country

BY W. K. MORRISON.

MR. EDITOR:—In answer to your query with regard to Southern California as a bee-country, I wish to say that my knowledge of it is not sufficient to allow me to pose as an authority. The general observations which follow may, however, answer your purpose for the present.

San Diego county is certainly the banner honey-producing county of the whole United States. Last season was a rather poor one for the bee-keepers, but the total honey crop was not far from 75 carloads, of which 50 carloads have already been shipped, and the remainder has been partially contracted for by Hamburg firms, which goes to show the Germans are willing to pay more for good honey than any other nation.

Imperial county was until recently a part of this (San Diego) county, but now it forms a sort of kingdom of its own; but a railroad is being rapidly constructed to connect that section with San Diego city, so that the latter will form the exporting point for that county, and possibly for all of Southern California and part of Arizona.

The prospects are good. Formerly high freight-rates and poor country roads held the bee-business back, but now the rates are dictated by the steamship people, who transport goods to Salina Cruz, in Mexico, where they are transhipped to Port Mexico, in the Gulf of Mexico, and thence to New York, Liverpool, Southampton, London, Havre, or Hamburg. By this route there is not only a saving of freight-rates, but a saving of time as well. Even when the Panama canal is opened, five years hence, there will be no saving, as the Mexican route is about a week shorter. At present the time taken to New York or Liverpool is about 22 days. In shipping honey and beeswax these facts are important. The Cape Horn route has been entirely superseded.

Other features of the situation are the extensions of various railway lines. The Santa Fe is busily improving its road-bed by extensive alterations and improvements, so that its fast trains

will travel straight through to Chicago without being remade. Los Angeles will simply be a whistling station on the way to San Diego. Not only so, but the Santa Fe intends to reconnect Temecala with Fallbrook so as to give it another through line via San Bernardino. This line would pass through an ideal bee-country. Various branch lines project out from San Diego, and extensions of these will soon take place.

One of these extensions is from Fosters Station on to Ramona and Warner's Hot Springs, and thence on to the Imperial country. This will pass through a great bee-country only partially developed. The reason for this extension is curious. It has been discovered that a section of country around Julian, in San Diego county, is great for producing apples, equal to, and probably surpassing, Hood River (Oregon), Idaho, Utah, Colorado, New Mexico, or any other of the famous apple-growing sections. I recently attended an exhibition of these apples in San Diego, and they were certainly worth a long journey to see. This little town of Julian can certainly surpass such famous apple States as New York, Michigan, or Arkansas. I saw such old-time varieties as Yellow Transparent, Early Harvest, Red Astrachan, Red June, Summer Pearmain, Ben Davis, Missouri Pippin, Nonesuch, Winter Pearmain, Winesap, Rome Beauty, Alexander, Spitzenberg, R. I. Greening, Maiden Blush, Bellflower, Northern Spy, and even a far-north variety like Wagner, grown to perfection. After the exhibition was over the apples were auctioned, and two boxes brought \$18 each. That's going some. At present this apple section is without railroad facilities. Good apple lands, for this reason, can be readily obtained at low prices as yet. Moreover, it is a great section for honey-production—none better.

The new Spreckles railroad from San Diego to Yuma, Ariz., will open up some entirely new bee-country. It jumps from the United States into Mexico half a dozen times, hugging the boundary line all the way. It is said to be an extension of the Rock Island system. If so, great developments can be confidently looked for. The population of San Diego has trebled in 9 years, and in all probability it will have 100,000 by 1915.

Another improvement that will work for the benefit of the bee-industry is the good roads movement. San Diego has recently voted \$1,250,000 for road construction throughout the country districts. This will help the bee-keepers, as many are situated far from railroads, and have long, hard hauls, which almost render the work unprofitable.

Of late years conditions have improved for the small farmer. Poultry, eggs, etc., bring fine prices, and the mild climate renders the work pleasant and agreeable in every way. Turkeys bring 25 cents a pound, live weight, and the demand is unlimited. No business dovetails so nicely with the bee-industry as raising turkeys, for a California bee-ranch forms a perfect home for these liberty-loving birds. In fact, the conditions could hardly be improved. Fallbrook and Escondido are

honey-shipping centers; they are equally great on turkeys.

As regards the price of land, there is no reason to pay fancy prices. I have heard of several bee-ranches for sale at what seemed to me very reasonable prices. The only way to see and understand this section properly, is to come over the Santa Fe to San Diego, and then make short trips back into the country. Conditions are different from what they used to be. Nice country homes can be obtained, surrounded with flowers, vines, figs, olives, oranges, lemons, etc. There is no need to rough it, unless you wish it. The school facilities are excellent.

Anybody can be suited as regards climate. If you want to live where there is no winter, locate along the coast. For a dry climate, for rheumatism or consumption, select a place 20 miles inland, and from the ocean's fogs, or back 150 miles on the Colorado desert. If you like a little winter weather, with a regular rainfall for crops, try a location 40 or 50 miles inland, with an elevation of 3000 to 4000 feet. There are some excellent health resorts for the afflicted ones.

Living is not expensive—not as expensive as in the Central States. Excellent cottages with all modern improvements can be had in San Diego at from \$12 to \$15 a month, and in small places still cheaper.

I mention this because many seem to think living expenses are high in California. Everything seems to be high in San Francisco, but the situation there is abnormal. For a large city, Los Angeles is a cheap place to live, all things considered. Another point is, there is work for all who want to work, at living wages, so that no one need be afraid to make the jump. California never was better, and more people would make it better, in my opinion. It will accommodate many more millions before being overcrowded.

San Diego, Calif.

Packing for Hives in Winter

BY LOUIS MACEY.

I have read everything I could get hold of on this subject, and have tried the "Three sticks across frames for bee-space—2 thicknesses of burlap, and then a super $\frac{2}{3}$ full of chaff as an absorbent or ventilating cover"—with satisfactory results, only I now tack the burlap to the bottom of the super, so if a nice day comes and I want to see how the bees are doing, I can lift the super off without spilling the chaff.

As to packing cases, however, I have seen nothing to fill the requirements that were not too expensive. Where one has a large number of hives ("store-boxes"), as recommended by a recent contributor, are not to be thought of, especially in a prairie country where people even buy laths at 40 cents a bunch for kindling; "store-boxes" command a premium, and there's not enough to go around; besides, no ordinary "store-box" is sufficiently weatherproof to keep the wind out and the packing material dry, as it should be kept; neither will a case made of boards, after the first year, un-

less well made out of good material and well painted, and such a case costs too much for the average bee-keeper.

So, while running my "thinkworks" overtime, I chanced to see a lot of tar-paper where a railroad grading gang had torn down a temporary stable. I picked up some 40 or 50 pieces about 7½ feet long, and thought I would try it. I first wrapped 5 or 6 thicknesses of newspaper around a hive, and then the tar-paper, tying with binder twine. I didn't like it; it looks like very *thin* protection, and if it breaks at the corners, or a piece gets loose anywhere, the wind will beat a tattoo with it that must be exceedingly annoying to the bees. So I quit, and fired up my "thinkworks" again, and finally evolved a case that will beat any other outdoor protection I have ever heard of or read of—wind-proof, rain-proof, non-conducting, and cheap enough for anyone. I never had any occasion to buy tar-paper, and don't know what it costs, but I know it's cheap, and I don't think it will cost 10 cents a hive to pack them snug.

In the first place, my hives are all (except 3) grouped in twos, *a la* Miller, and facing south, and were already "top-packed"—with chaff in the super, and cover put on loosely.

I happened to have a lot of short posts, and I set these, one at the southeast and one at the southwest corners of the 2 hives. I let one corner of the post come against the corner of the hive, and the rest stand out south as far as it would to shed the wind away from the entrance. A piece of 1x6, and 2 feet long firmly driven in the ground would answer the same purpose.

Now a sheet of tar-paper is set on edge in a semi-circle around the hives, working it well down to, or into, the ground, so the wind can't get under; and then with two strips of lath, nail it fast to the posts. If you use boards in place of posts, it will take just about 8 feet of paper to reach around to the edges of the boards (with two 10-frame hives). The tops of the posts should be about 3 inches lower than hive-top.

Now take a handful of straw, chaff, leaves, or whatever you have to pack with, and shove it down at the back corners of the hives where the paper is inclined to touch the hive, *first*. This pushing out at the corners will draw in the back somewhere, but don't do this too much. Now mark around on a line with the tops of the posts, and with a sharp knife slit the paper from the top edge down to this line, making slits about 10 to 12 inches apart, or a little closer at the corners. Now with all the packing in, and packed tight up to to line next to the paper, and sloping to the hive top, fold in the paper so the corner flaps will overfold the others (with new, pliable paper, if you are a good hand, you can fold in without slitting, which is better). Now another sheet 3 feet long laid over these flaps will cover the top completely, and you can secure with plenty of weights, or if you use wooden covers tack to the end-pieces of the covers.

Stuff some old pieces of gunny sack between the hives in front to keep the chaff from being worked out by chickens, etc., and the job is done. It takes much less time to *do* than to *describe*.

Tar-paper is offensive to the mice, too, and I don't think they are so apt to nest inside this as in a board case, but if you use straw or chaff for packing, put it out and let the chickens scratch all the grain out before you use it around the hives, and if the hive-entrances are more than ¾-inch, contract them with a strip of tin tacked on.

VENTILATING BLOCKS.

I tried Dr. Miller's plan of putting ¾-inch blocks under the corners of the hives for ventilation to repress swarming. I think them a great help, but my experience was contrary to his, the bees used both sides and back as entrances, and when I removed the blocks they clustered around the back a long time before going around to the front entrance.

North Platte, Nebr.

Why are These Things So?

BY G. M. DOOLITTLE.

Why are what things so? And what is there of interest in the matter to the bee-keepers of the United States? These thoughts came to me upon laying down a paper published 23 years ago in which I read this sentence:

"We [the bee-keepers of the United States] should do all we can to maintain decent prices for honey."

Very well, I agree to that, and as far as I know all who take and read our bee-literature of today are with me in this matter. And from what knowledge I have, there are few bee-keepers of the present who do not read the bee-literature, in comparison to what there were 23 years ago; as there has been a great drifting toward "specialty" in our pursuit during those years; and the specialist in any calling in life is the one of all the rest who keeps abreast of the times by reading up on the subject of his or her specialty.

Very well, again. And have not the bee-keepers done all they can to maintain decent prices for honey? Certainly, the specialists. Those who have read our bee-papers during those 23 years, well know that there has been no subject more thoroughly gone over than this matter of prices for our product. We have adopted attractive styles of packages, gone over all the ground looking toward the shipping of honey, so it should arrive in market in an inviting condition; established rules for grading, so that the fancy product should not be mixed in the same crate with that of an inferior quality; tried to form associations and honey companies to proclaim and boom this graded product, etc. And what has been our success in this matter? Let us analyze a little and see what advantage these things have been to us.

In this old paper in which I found the sentence quoted, I find comb honey quoted at from 12 to 16 cents a pound; and on turning to the quotations of today I find that the average of the many houses quoting honey remains at the same 12 to 16 cents. And thus it would seem that all our efforts during the past 23 years to advance the prices of honey, by getting it to market "graded to a feather," as the poul-

try men would say, putting it up in fancy sections, fancy shipping-cases, forming associations and companies to educate and buy the honey of those who once put the same on the market at ruinous prices, etc., have only enabled us just barely to "hold our own" as to prices, so that honey put on the market in the best possible shape conceivable in the minds of bee-keepers, brings only the same price that it did 23 years ago. Rather poor encouragement, is it not?

But what more encouragement do I want than to be able to buy my bee-papers with the same number of pounds of honey that I could 23 years ago? Then, I can buy my bee-books with the same amount of honey; and my queen-bees necessary for the improvement of stock; and—and—and—! I tried to say supplies, in which to hive my new colonies, sections in which to store my honey, cases in which to ship my honey to market, etc.; but I could not. And they tell me that the reason I cannot purchase these supplies with the same honey I could 23 years ago, and thus "maintain decent prices for honey," is because *lumber* is becoming very scarce through the denuding of the forests. Perhaps. But if you take a socialist paper you will find something said about a *tariff* on lumber, which enables the lumber trusts to cry the "denuding of forests" to their advantage. But, hold on! I have no special reason to complain of the exchange of my honey for my bee-supplies. Back a few sentences I said something about "holding our own," and quoted a poultryman's expression. Whew! that poultryman's product almost takes my breath away, as I look back over the 23 years. Eggs today 40 to 50 cents a dozen. Then, 20 to 25 cents. Why is not our honey 30 to 40 cents instead of 15 cents? Talk about holding my own! Look at butter, meat, flour—in fact, almost all a family needs for their existence (except honey), and what show has the honey-producer with these things?

Only this morning I had to pay to my neighbor agriculturist 15 cents a pound for lard, so that Mrs. Doolittle could put a crust on the pie I am supposed to have for dinner; and that brother agriculturist robbed me of nearly half of my honey that I sold for the money to buy that lard with, when a comparison is made of the prices of honey and lard 20 to 30 years ago. Then, two or three days ago I had to pay 34 cents a pound for the butter that I spread on my pancakes before I put on a lot of honey, spreading the butter thin and the honey thick, thinking in this way to equalize things a little, when I remembered that we bee-keepers used to talk in bee-conventions that the price of butter and honey was supposed to "go hand in hand," and would probably so continue down through all the time.

What *is* the trouble? Has the United States been "denuded of cows" like they have of forests, or of hen's, or of hogs? Will the socialist tell us about *tariff*, and a farmers' trust enabling them to hold the prices of butter, lard, eggs, etc., up to where it takes from two to three times the amount of my honey to buy the same amount of their

product that I could get as an even exchange 20 to 30 years ago? Have I been guilty of lying when I have told my brother agriculturist and friends having large families, that bread with a little honey spread on it would be relished, and be better for the children than butter? And was I wrong when I told them that honey was cheaper than any kind of sauce, because it would keep indefinitely, so as to be just as good a week, a month, or a year after putting on the table, if all was not eaten at a single meal; while sauce that was not eaten up was poor or worthless unless eaten soon after it was made, or a can containing the preserved product opened?

But I will not enlarge further. If there is one in the bee-keeping ranks who can solve the question, why honey does not advance in price in something nearly an equal ratio with other farm products; and why it is that when farm products drop somewhat in price, honey generally takes a "slump," we should like to hear from him.

I am very anxious to hear through the columns of the American Bee Journal the "unravelling" of the mystery, and ask in the heading of this article, "Why are these things so?"

Borodino, N. Y.

Apiarian Exhibit at Kansas State Fair

BY J. C. FRANK.

I am sending a view of "The Golden Apiary" exhibit at the Kansas State Fair, held at Hutchinson Sept. 11 to 17, 1909. The judges were C. P. Dadant and Dr. G. Bohrer.

The premiums awarded were as follows:

Best 3-banded Italian bees and queen in observatory hive—1st, Golden Apiary, \$5; 2d, W. I. Measer, \$3; 3d, J. J. Measer, \$2.

Best 3-banded Italian queen in mailing-cage—1st, W. I. Measer, \$3; 2d, Golden Apiary, \$2; 3d, J. J. Measer, \$1.

Best Golden Italian bees and queen in observatory hive—1st, W. I. Measer, \$5; 2d, J. J. Measer, \$3; 3d, Golden Apiary, \$2.

Best Golden Italian queen in mailing-cage—1st, Golden Apiary, \$3; 2d, J. J. Measer, \$2.

Best display of bees and queen—1st, Golden Apiary, \$5; 2d, J. J. Measer, \$3; 3d, W. I. Measer, \$2.

Best case of white comb honey, 20 sections or more—1st, J. J. Measer, \$5; 2d, W. I. Measer, \$3; 3d, Golden Apiary, \$2.

Best case of amber comb honey, 20 sections or more, any variety—1st, Golden Apiary, \$5; 2d, J. J. Measer, \$3; 3d, W. I. Measer, \$2.

Best case of white clover honey, 20 sections or more—1st, W. I. Measer, \$5; 2d, J. J. Measer, \$3.

Best case of alfalfa comb honey, 20 sections or more—1st, Golden Apiary, \$5; 2d, W. I. Measer, \$2; 3d, J. J. Measer, \$1.

Best display of comb honey—1st, Golden Apiary, \$10; 2d, J. J. Measer, \$8; 3d, W. I. Measer, \$5.

Best special designs in comb honey—1st, J. J. Measer, \$8; 2d, Golden Apiary, \$5.

Best comb of white honey for extracting—1st, Golden Apiary, \$3; 2d, J. J. Measer, \$2; 3d, W. I. Measer, \$1.

Best comb of amber honey for extracting—1st, J. J. Measer, \$3; 2d, Golden Apiary, \$2; 3d, W. I. Measer, \$1.

Best dozen 1-pound jars of white extracted honey—1st, Golden Apiary, \$3; 2d, J. J. Measer, \$2; 3d, W. I. Measer, \$1.

Best dozen 1-pound jars of amber extracted honey—1st, Golden Apiary, \$3; 2d, J. J. Measer, \$2; 3d, W. I. Measer, \$1.

Best sample of sweet clover extracted honey, 1-pound jars—1st, W. I. Measer, \$3; 2d, Golden Apiary, \$2; 3d, J. J. Measer, \$1.

Best display of extracted honey—1st, Gold-

en Apiary, \$10; 2d, J. J. Measer, \$8; 3d, W. I. Measer, \$5.

Best 5-pounds of yellow beeswax—1st, Golden Apiary, \$5; 2d, J. J. Measer, \$3; 3d, W. I. Measer, \$2.

Best designs in beeswax—1st, J. J. Measer, \$8; 2d, W. I. Measer, \$5; 3d, Mrs. Delia Measer, \$2.

Best sample of honey-vinegar, with recipe for making—1st, Golden Apiary, \$3; 2d, J. J. Measer, \$2; 3d, W. I. Measer, \$1.

Best display of bee-keepers's supplies—1st, W. R. Randle Seed Co., \$10; 2d, Golden Apiary, \$8.

Best and most attractive apiary display—1st, Golden Apiary, \$10; 2d, J. J. Measer, \$8; 3d, W. I. Measer, \$5.

For best manipulation of swarm of bees in cage by any person—1st, Golden Apiary, \$10.

Best collection of honey-producing plants and flowers, mounted—1st, J. J. Measer, \$5; 2d, Golden Apiary, \$3.

This was said to be the best exhibit that was ever put up at the Kansas State Fair.

Dodge City, Kan.

1.---Bee-Talks for Beginners

BY JIMSON RAGWEED, OF INDIANA.

I am a bee-keeper, honey-dealer, supply-dealer, office boy, janitor, and I look after a number of other details. I have even expended some money in advertising bee-supplies, but I have resolved that if Carnegie wants to die poor just let him try advertising bee-supplies. I have just finished a good dinner, consisting of Dutch potato salad, pigs' feet, and fruit salad with whipped cream, and three candied cherries in the whipped cream, and now I feel like talking.

BEGINNERS AND BEE-LITERATURE.

I have helped to initiate a whole lot of beginners in the mystic realm of bee-keeping, and am still at it, and what a pleasure it is to watch some of them grow and secure the very best results—and how aggravating to see others who never cease making blunders! Many of these beginners are readers of the bee-publications, and many of them never will subscribe, although a bee-paper and a text-book ought to be a part of the first outfit with any beginner, especially since our bee-publications are now gotten up so beautifully and so elegantly illustrated. Some claim that they cannot understand the terms used in the bee-papers, but I believe that with even a limited experience this would all reveal itself.

BEE-KEEPING WITHOUT VEILS.

One man explains that he would be fascinated with the business were it not that all the engravings which come before him in the bee-books, where one is manipulating a hive, show the operator bundled up with veil and gloves, and that he thought the business must therefore be very dangerous. In looking over my books I find this to be true, and it just spoils the engravings, too, as well as alarming the beginner. Can it be that Dr. Miller, Ernest R. Root, and W. Z. Hutchinson, don a veil every time they open up a hive? Judging from various engravings I infer that they do, and that reminds me that if I had the three of them engaged in my apiary I could not afford to pay them as much as the other boys who do not require veils. However, it would be gratifying to know that they were not smoking

cigaretts as soon as my back was turned, for they cannot smoke cigarettes and wear a veil.

I have always advised beginners to use a veil, and I always keep a surplus for visitors, but with me the charms of bee-keeping would disappear if I had to continue the use of a veil. I do not use a veil, and I do not get stung, and I use the least possible smoke, but this cannot be learned from books—it requires actual experience, and one can become so familiar with their bees that a fighting, stinging bee can be picked up before the bee can get a foothold with its feet, which it must do before using its sting. Of course, some of the foreign races are very vicious, and a veil would be required, and one must learn, for his safety, to consider weather conditions, the time of day, and the honey-flow. I do remember an early experience where a foreign bee that had not yet become Americanized, stung me inside the nostril, and it hurt so badly that I felt that to take my pen-knife and cut my nose off would be a relief.

ROBBER-BEES IN THE APIARY.

I am frequently asked how to stop robbing, and it is about the most difficult question that is ever presented, for, after robbing is started, it is very difficult to stop it, and it should be impressed on all that prevention is the best remedy. In visiting good, progressive bee-men I have been greatly surprised how much robbing was tolerated. Many have the habit of placing any waste honey in the open air to be taken by the bees as a matter of economy, not realizing that this will demoralize a lot of bees, for it seems to me that "once a robber always a robber," and the robbers have a way of reporting any "find" to their comrades.

I have observed some peculiar incidents in connection with robbers. Once I overlooked a brood-comb containing some honey which I left at the base of an apple-tree. On returning to the yard I found that the bees had carried away the honey, and a throng of bees were hovering about the base of all trees in the orchard. I wondered if the first scout, on returning with its morsel, had not told one of the sentinels, in the bee-language, that the loot was to be found at the base of one of the trees.

On another occasion I left a dish of honey in a south window of my honey-house, and in a little while there was a throng of bees at each south window of my house, and the same thing prevailed at my neighbor's, a block away. Evidently the discoverer had stopped and shouted at the top of his voice, "Come on, kids! right out here at a south window!"

If I should spill a few drops of honey or sryup on a hive cover I would immediately wipe it away with a wet towel, rather than have my bees take it up and then become demoralized; and I am very sure this would be good economy.

CHUNK HONEY INCREASING.

Because bees are so very interesting we find a great many men keeping a few colonies just for the pleasure of studying their wonderful ways. If de-

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tails were carefully studied the profits could be greatly increased in many instances. For instance, if one is not required to case his honey for shipment to another market, the product can be increased by omitting the separators, for anything that divides the cluster will surely retard comb-building. A larger section would also aid in securing a larger yield; but it is well to keep in line with standard goods. I find that many bee-keepers are shipping their honey to a distant market when it could have been sold at home for even better prices.

One most excellent way of getting returns is to produce comb honey in shallow extracting frames, and then cutting it out and place it in pails of say 3 pounds of comb and 2 of extracted. This is called "chunk honey," and the demand is constantly increasing. It relieves the burden of carrying over a lot of unfinished sections from one season to the other, and more honey can be secured because the working force is not divided with sections and separators.

VARIABLE BEE-KEEPERS—FALL FEEDING.

Some bee-keepers get very enthusiastic over their bees during the honey-

flow and then neglect them during fall and winter. A colony of bees could yield a hundred pounds of surplus and starve with an empty brood-chamber during winter. If you permit this to happen, the humane society ought to get after you. Fall feeding is always more satisfactory than spring feeding, and there is no danger of overfeeding in the fall, for if an abundance is provided they will begin in the supers that much earlier the next season.

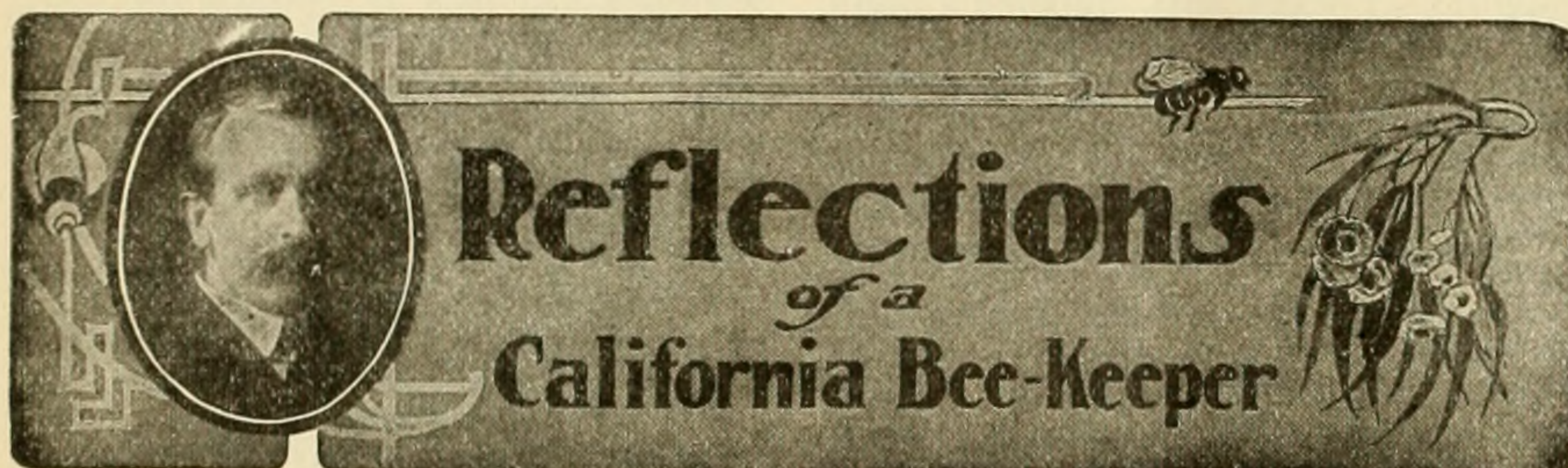
SIZE OF HIVE PREFERRED.

Some of us are undoubtedly prejudiced in our methods of doing things. If you prefer a 10-frame hive to the 8-frame size, by all means adopt the one that you prefer. With me I find that my bees build *up* more readily than they *widen out*, and for this reason I prefer the 8-frame hive tiered up according to the strength of the colony. In wintering I think I get best results in the smaller brood-chamber, for I would prefer a specified amount of honey stored in 8 combs rather than have the same amount distributed in 10. In regard to these disputed points it is always well to say that difference in locality may require different methods.

(To be continued.)

uncertainty as to its real nationality impels me to christen it the "Wonderberry." And 'tis a wonder in other ways, besides. It may not be the best of our "wizards'" plant-productions; it is certainly no mean one, and I am giving him the benefit of the doubt as to his being its putative father, to put it that way.

To the bees it must be a wonderberry, for, as far as I know (and I am acquainted with about all the blackberries under cultivation in this part of the world) it is the only black-fruited berry that blooms through a good portion of the late fall, and sometimes in a limited way, even into December. It makes good bee-pasturage; the pity is that there are not more of them grown. It begins to ripen its fruit, which is borne in prodigious quantities, just about the time raspberries and common blackberries are going out of season, and it so continues to ripen an



By W. A. PRYAL, Alden Station, Oakland, Calif.

And Alfalfa Bows to the Bees

Some years back a few alfalfa growers raised quite a how-de-do because bees extracted nectar from their alfalfa blossoms, and, forsooth, the crop, especially of seed, was ruined. Of course, bee-keepers never believed that such could be the case; in fact, they just knew the contrary was true. We all remember the case of the Australian farmers who were only too glad to have bees brought near their clover-fields that the seed-vessels would be fertilized by these insects.

From "Kimball's Dairy Farmer," Oct. 15, I learn that Prof. Coburn, in his admirable work, "The Book of Alfalfa," pays a very high compliment to the honey-bee in the necessary work it does for the seed of this plant. He says:

"It has been discovered that the honey-bee is of more importance to the alfalfa than the alfalfa is to the bee."..... "The peculiar construction of the alfalfa blossom renders it unable to fertilize itself, and its shape makes cross-fertilization very difficult. In the marvelous 'balance of good' in nature, alfalfa, like thousands of other plants, is aided in its lease of life by the insect world. It is not known just how many insects or birds assist this remarkable plant, but the honey-bee is the most conspicuous, the most industrious, the most eager, and certainly the most useful."

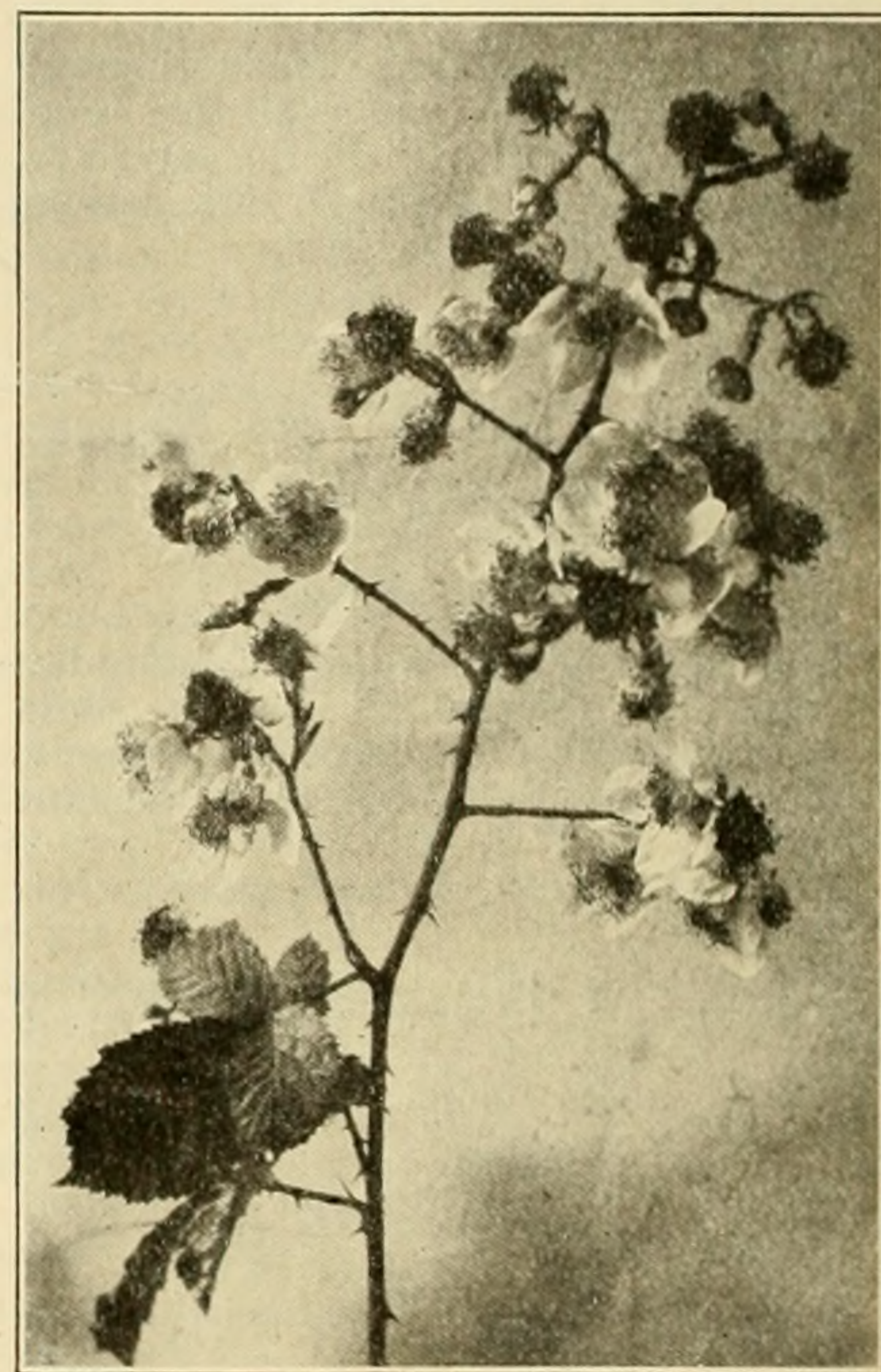
Then the author cites several experiments that were carried to a success-

ful conclusion to prove that without the bee there would be no alfalfa seed.

Good! Plant more alfalfa, ye farmers and stockmen, and invite a few of the nicest people in the world to come with their honey-bees and be your neighbors.

True "Wonderberry," or the Himalaya Blackberry

A good many persons who have made the acquaintance of the Himalaya blackberry look upon it as an Asiatic fruit; others claim it as purely of California parentage. Just what it is I am at a loss to say, as it is one of Luther Burbank's "creations," whatever that may mean. It was only a few months ago that our noted plant breeder, in a remarkable letter he sent the Rural New-Yorker, stated that this fruit was one of the many notable creations he sent out. Whether that means that he produced it from seed of his own hybridizing, or if it is one of his "pick-ups," like the Australian Crimson Rhubarb, Spineless Cactus, and, I am led to believe others, including the so-called Wonderberry, or *Solanium nigrum burbankii*, as it might, through courtesy, be called, I cannot say. At any rate, I should judge it has some claim to at least a partial birthplace in the Himalayan Mountains. And all this



HIMALAYA BLACKBERRY BLOSSOMS.

abundance of luscious fruit for over a month, and slacks off gradually for several weeks more, and sometimes it runs on even into winter.

The vines are rampant growers, and often push their luxuriant growth 20 feet all about them. They should be grown on trellises; usually the wood lives on for a number of years, being in this regard unlike other blackberries. As a preserving fruit for jams and jellies it is par excellence. I don't know if it will succeed in the East. It is worth trying for its fruit and the bee-forage it furnishes.

Eucalyptus for Quick-Get-Richers

I notice that a lot of the papers and magazines are publishing the advertisements of promoters of eucalyptus hardwood schemes, most of which claim that thousands of acres of this valuable

tree are being planted in this State; that by buying stock in these schemes one cannot help but get rich.

The eucalyptus is all right; so is the planting of it, but I would caution any one having anything to do with

these schemes. Better get some land and raise your own trees; you will then surely know "where you are at." Gold bricks and eucalyptus stock are good things to let alone, even if some of them seem genuine.

for bee-keepers or not. Some time ago the Bee Keepers' Review contained several articles on the same line written by a man well qualified as a breeder of fine horses. They appeared to be ably written, going into details which, if carried out, might produce results, but it seemed to me that it would be somewhat difficult for us everyday bee-keepers to understand and carry out the instructions given. If anyone has tried to put them in practice, I do not remember to have seen any account of it.

According to the teaching of the clipping here quoted, the matter is much simpler: It is merely to select for breeders those which give not more than ten per cent better results than the average. For instance, if your average per colony this year was 60 pounds per colony, and you had one or more colonies yielding 100 pounds each, and one or more yielding 66 pounds each, you are to breed next year from those which gave 66 pounds each. The idea is that the 100-pounders are freaks, inconstant in habit, and so are likely to hark back to poorer work, while the 66-pounders are more likely to be permanent in their posterity.

If I may be allowed to venture an opinion, the idea that a hen which has overstrained herself by too heavy laying has weakened herself thereby and will consequently have a weakened posterity hardly applies to bees. But, of course, I don't know for certain.

I suppose it is undisputed that in many cases where a new strain has been established in some class of domestic stock, the starting point has been with some animal which showed a marked departure from the ordinary type—a sport or freak—and then the effort was made by selection to make permanent that freakish departure.

I must confess that for years I have been breeding from freaks. In other words, I have bred from queens whose worker progeny gave me the largest yields. The result has been exceedingly satisfactory, so far as yield is concerned. Whether I might not have done as well or better by persistently breeding each year from stock whose yield was only ten per cent above the average, I cannot say.

I am confident of this, that if a bee-keeper breed each year from stock better than the average, he will be sure to improve his stock, whether he follows the plan of breeding from stock 10 per cent above the average or from that which is 100 per cent better.

Requeening Colonies.

I have 170 colonies of bees, 70 of them with Italian queens that I bought of reliable queen-breeders. The balance (100) are composed of common bees, partly Italian and mixed with black bees. Now, I do not feel able to buy queens for the 100 colonies, and ask for the best way to requeen them, and wish you to be particular to give me a method that a common bee-keeper ought to be able to understand and use. I do not care to try cell-cups or any method that is adapted to experts. I wish to requeen the 100 colonies from cells reared from eggs of some of the best queens I now have. "SOUTHWEST."

ANSWER.—I can do no better than to repeat my reply to "Tennessee" in another column. The second plan given is the way I rear queens for my own use, and by using brood each time from the best stock I have developed bees that are truly hustlers. You can do the same. Only don't make the mistake I did, and regard only gathering qualities. Look out for temper at the same time.

Transferring Bees—Getting Extra Brood - Combs — Introducing Queens—Best Honey Strains of Bees.

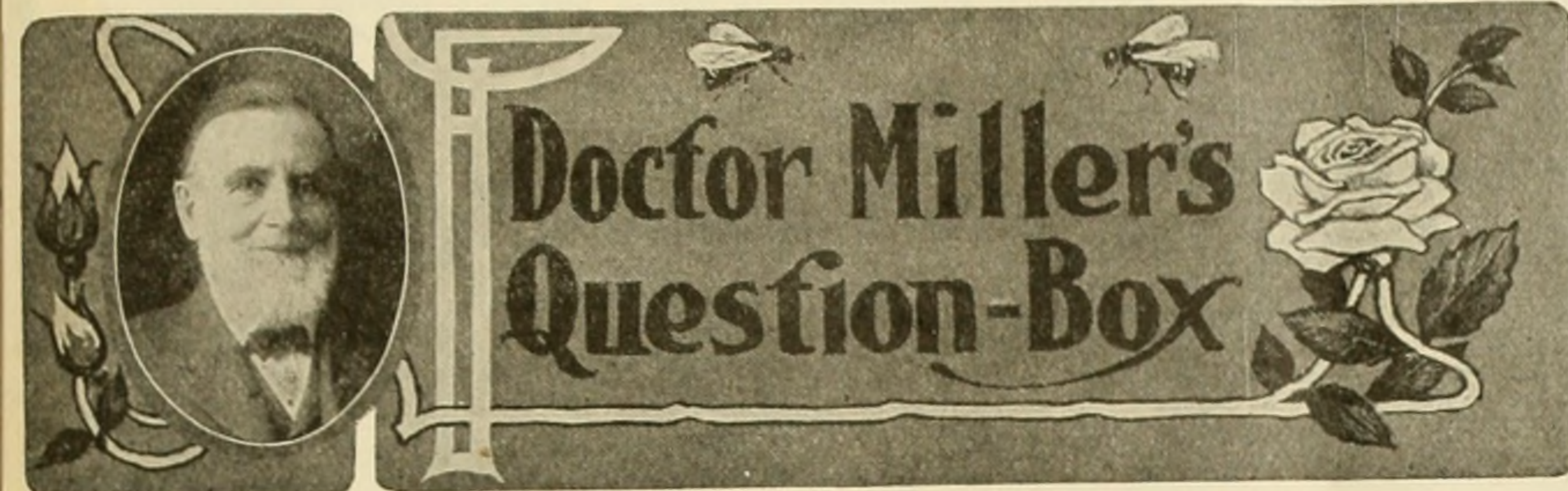
1. I have one colony of bees with crooked combs which I am unable to get out of the hive. Would you transfer them early in the spring, or wait until they swarm?

2. How do you like putting a hive with one frame of brood over the colony to be transferred, and a queen-excluder between, when you catch the queen in the upper hive?

3. What is the best way to get extra brood-comb for late swarms? They do not draw out foundation well. I use shallow frames in the supers.

4. Would like to rear a few queens, but think the Pratt method too complicated for a beginner. Can you tell me a simple way to rear them?

5. Can you give me a safe way to introduce a breeding-queen? I was not very successful



Send Questions either to the office of the American Bee Journal or to
DR. C. C. MILLER, Marengo, Ill.
Dr. Miller does not answer Questions by mail.

Wintering in Outside House—Hive-Ventilation—Wintering Queenless Colonies.

1. Is it a good idea to put bees in an outside house for wintering? Will it be better than leaving them on the summer stands?

2. Is it a good idea to ventilate the hive near the top by boring a small hole to let the damp air out?

3. Will a colony of bees that loses its queen in October or November live through the winter? and can they be kept until May, or until the shipping season begins?

ILLINOIS.

ANSWERS.—1. It will be all right if they are well packed and warmer on top than on the sides, only you must be sure that there is a clear entrance for them to fly whenever a day is warm enough.

2. Some favor and some oppose the idea. The important thing is to have warm packing on top.

3. They are not so likely to live over, but sometimes they do. It will probably be more profitable to unite them with a colony having a laying queen, even if you divide again in the spring.

Getting Increase of Colonies.

I am a beginner and have fifteen colonies. I would like to increase. I divided one colony the past fall. In August I took 3 frames out of one colony, bees and brood together. I did not look for the queen. I did not know if I had the queen in the old or new hive, but they are both all right at the present time. Would you advise dividing that way in May or June, or not at all in that way? If not, kindly explain how is best.

PENN.

ANSWER.—Your plan of dividing could hardly be easier, but it might be better. If you take the 3 frames of brood and bees and put them on a new stand, all the older ones will return to the old stand, leaving a rather discouraged lot of bees not in condition to rear the best kind of a queen. Better make sure which is the queenless part and leave it on the old stand. Then a week later you can let the two hives swap places, if you like. You will see that by having on the old stand the part that is rearing a queen, at least for the first week, there will be a stronger force, especially of the older bees, and you will have a much better chance of a good queen.

Keeping Bees Warm in Winter.

I thought that all bee-keepers who wrote about bees advised keeping them warm in winter, so that they would not "burn" so much honey to keep up heat, but when I read, in "Forty Years Among the Bees," page 304, about your warm cellars and plenty of fresh air, I thought it would not take so much honey as it would in a cellar without the furnace. But when I turned to page 324 and saw what you wrote later on, you say that the bees in the warmer part of the cellar starved to death. How can you tell in what temperature bees will use the least stores in winter?

A neighbor of mine says that to have plenty of cold air by having cracks in the sides of the hives and setting them on boards with the hives apart so the bees will keep too cold to eat much honey, is the best to winter them. He left a colony up in an apple-tree where he hived them, and said that they did fine until a snow-storm came and blew the hive down. Another neighbor claims that in hiving swarms that get contrary and will not stay in the hive, to tie a red wasp in the head of the hive they will stay all right. This is supposed to be put in, in case the queen gets lost or killed. Another one claims his mother had a swarm and the "king" got killed, and she made a "king" out of flannel and tied it up in the hive, and they did all right.

TAR-HEEL.

ANSWER.—About 45 degrees above zero is considered the temperature at which bees are most nearly dormant, and at which they will consume least stores. If colder they must consume more to keep up the heat, and if warmer they are more active and use up more stores.

Your neighbors seem quite original in some of their views. You do not mention the color of the "flannel king." The wrong color might be fatal!

Breeding to Improve Bees.

Please read the enclosed clipping on trapped stock as layers, and give your idea of it as to whether it could be carried out in bee-keeping. I think the same system ought to be. Then we would get some good stock.

NEW YORK.

In the long and interesting clipping you have sent, the part to which I think you refer reads as follows:

"We believe it is an error to breed from the 'abnormal' hen. By 'abnormal' I mean a hen whose laying record is too far removed from the average ('normal') of the flock of which she is a member. For instance, when our flock average for last year was 162 eggs per hen, we considered all hens varying more than ten per cent from the record 'abnormal.' This applied to those laying above as well as those laying below the average, and we considered hens laying uniform eggs between the numbers 170 and 180, the best breeders in the flock. These we housed by themselves to use in further developing the strain.

"In this selection great care was taken to pick out only such breeders as showed strong vitality. It is the heavy layer of weakened constitution that will nullify all previous good work accomplished with the strain, since she cannot transmit to her offspring the first essential to a successful career as an egg layer, viz., a healthy, robust body.

"It seems to me the way to improve a strain of egg layers is not to take the star performers who have (judged by the average performance of the flock) overstrained themselves, but rather to take those that have done a little better (not exceeding ten per cent) than the rest. If a whole flock can average 162, the all-round best birds, for that flock, are slightly above the average."

I am not a scientific breeder of either bees or biddies, and so not competent to pass opinion as to whether there is much in this

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with the candy method last summer. My bees are hybrids.

6. What do you think of feeding sugar in the spring?

7. Do you think some strains of bees will gather much more honey than others, under the same condition? What strains do you recommend?

TENNESSEE.

ANSWERS.—1. Wait till they swarm; hive the swarm, setting the old colony and swarm close together, and 21 days later cut up the old hive, melt the combs, and add the bees to the swarm. If, however, you want increase, you can transfer at the end of the 21 days.

2. It will work all right. Here is something you may like better: Drum out all the bees, putting them in the new hive on the old stand with a frame of brood, put on an excluder, and then the old hive. In 21 days the worker-brood will be gone from the old hive above.

3. You can get combs built out only by having them filled, as bees do not build comb beyond their needs. Instead of shallow frames, you can put a story of deeper frames above, and then extract them. Or, you may brush bees and queen from the combs into the hive, leaving one brood in the hive and filling up with foundation, then put the frames of brood in an upper story, and excluder between. Then, when the brood has matured above, you may take these upper combs, extracting from them if necessary.

4. When the harvest begins, take from your best colony two frames of brood with queen and adhering bees, and put them in a hive on a new stand. Ten days later let the hives exchange places. Then divide the queenless part into nuclei of 2 frames each, making sure that each nucleus has a good cell centrally located, and imprisoning each nucleus for 2 or 3 days. The one on the stand where the queen had been needs no imprisonment.

Another way: Get a fresh comb built in the colony containing your best queen. About ten days after this comb is started, take it away and put it in the center of a strong colony from which you have removed the queen. Nearly all the cells the bees start will be on this comb, because it is freshly built. These cells may then be distributed to nuclei at pleasure.

You will find some valuable information about this simple way in "Forty Years Among the Bees."

5. Yes. I can give you a way that is entirely safe. You must have some frames of brood just hatching, with no unsealed brood. One way to secure these is to put the frames of brood over an excluder on a strong colony 8 or 9 days before you want to use them. Brush all the bees off these combs, leaving not a single bee. Put them in a hive that you will set over a strong colony, with a sheet of wirecloth between the two stories, and close up *bee-tight*, of course after putting in the queen. In five days you may allow a very small entrance somewhere into this upper story, but of course not connecting with the lower story. As soon as you think enough bees have hatched out to keep the bees from chilling, remove to a new stand. Possibly there may be enough bees at the end of the 5 days, in which case it will be better to remove to the new stand before allowing any bees to fly.

6. Not so good in spring as in fall, but will do if you have no honey. But some pollen must be present, for bees cannot rear brood from sugar alone.

7. Yes, there is a difference. Italian 3-banders are probably as safe as any.

Oil-Heater in Bee-Cellar—Medium Brood in Shallow Extracting Frames—Feeding Combs of Honey.

1. Will an oil-heater burning in the cellar for a few minutes affect in any way the bees that are stored in it?

2. Will medium-brood comb foundation be all right for shallow extracting frames? and will it do to put full sheets of foundation between drawn combs in supers?

3. In giving combs of honey in early spring to a colony, do you put them in the center of the brood-nest? Do you scratch or break the cappings?

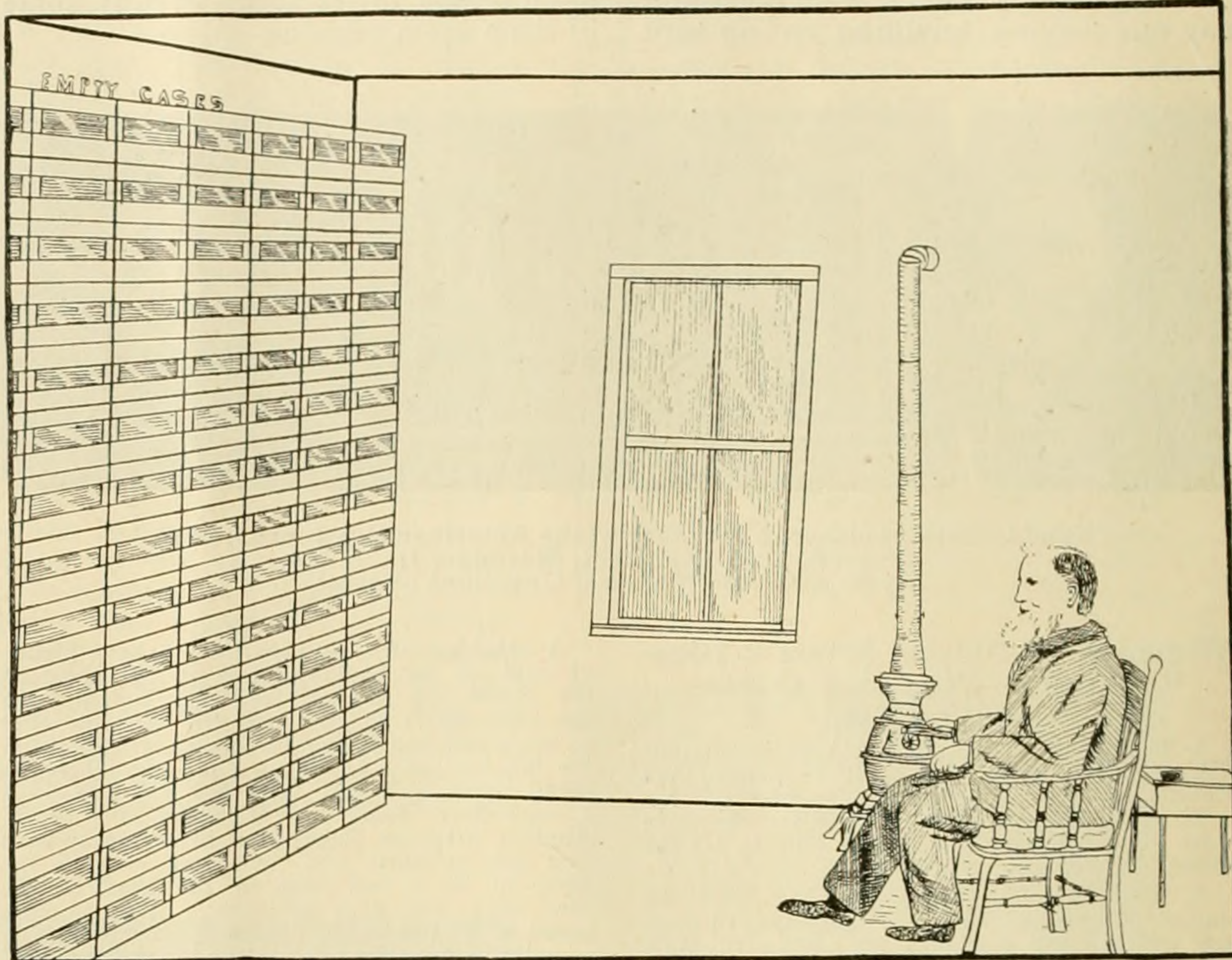
It is wonderful what a fund of information we have in the American Bee Journal. It saves us a lot of mistakes and blunders.

IOWA.

ANSWERS.—1. Yes, it will warm them up and it will injure the quality of the air. Hot stones or jugs of hot water tightly corked will leave the air better.

"DOT HAPPY BEE-MAN."

(Drawing sent specially for the American Bee Journal by Leon C. Wheeler, of Barryton, Mich.)



DR. MILLER—How lucky! There's a railroad car famine, and if I had any honey to ship I'd likely have trouble to get a car. Fortunately, I've no honey to sell, so I won't have to bother. How happy I am!

O I wish von of dose happy bee-mans,
I don't got to vork any more;
I loaf all day on der shtove round about,
Und hops mit mine feet on der floor.

2. The medium brood will be all right. It will give better combs to keep the foundation by itself, as there is likely to be some irregular work if combs and foundation are mixed.

3. Put them next to the combs containing brood, but not between them. It is not a bad plan to break the cappings.

Bee-Moth in Winter.

I have a good colony of Italian bees that did well the past summer. When removing the quilt on top in preparing them for winter I found a bee-moth between the quilt and frame.

1. Will the bee-moth work this winter?
2. Will the bee-moth (or grub worm) when matured, die, or will it build a cocoon and then hatch? If so, into what?
3. How and when is the best time to get rid of it?

MAINE.

ANSWERS.—1. The moth is likely to die before spring without laying any eggs; but there are very commonly eggs or young larvæ that will live over in the hive.

2. The grub, or larva, when it comes to full size, spins a cocoon and comes out a moth, and in course of time the moth dies.

3. The best thing is to keep colonies strong so the bees will keep the moth at bay, although Italians will defend themselves even if tolerably weak.

Moving Bees to More Pasturage.

The honey source here is white clover and basswood. Ten miles west from here is 40 to 60 acres of wild raspberry bushes, fairly well covered. People came 10 to 14 miles to pick berries from this patch last summer. It was just covered with berries. In a town 14 miles east of here they started a cucumber pickle factory last summer. The farmers around there raise from $\frac{1}{4}$ to $1\frac{1}{2}$ or 2 acres each of cucumbers.

1. Would it pay to move my bees 10 miles west to a 40 or 60 acre patch of raspberry bushes next summer, back here for the basswood flow, and 14 miles east to the cucumber

fields after the basswood flow, as there is "nothing doing" here after the basswood flow?

2. How many colonies could I move to this raspberry field to best advantage? I have heard that raspberry bloom almost always will yield nectar.

3. How is cucumber as a nectar-yielding plant? and how many colonies could be kept at one place to the best advantage, when the farmers raise $\frac{1}{4}$ to 2 acres each?

MINNESOTA.

ANSWERS.—1. I can only guess, and my guess is that it would pay to do so if nothing is yielding at home at the time of raspberry and cucumber flow.

2. If no other bees are there, 100 colonies or more might do well.

3. Hard to tell. Depends somewhat upon size of farms. If each farmer plants half an acre, you will readily see that there will be four times as much pasturage if the farms average 40 acres as if they average 160 acres. I should guess that 100 colonies might do well with 1 acre in every 100 in cucumbers.

Spacing Hoffman Frames—Queen Returning from Mating—Space Above Brood-Frames.

1. Are shallow extracting frames (Hoffman) spaced right for brood-frames?

2. Will new swarms, put on these shallow frames with full sheets of thin super foundation, wired and waxed to top-bar, hold in place and not melt down?

3. Will a virgin queen taken in a trap when she comes out to mate, if the queen and trap are carried off a few rods, opened, and the queen takes her flight, be sure to come back in safety?

4. How much space do you want between super and brood-frames?

5. Do your bees build comb and fill in badly between the top of the brood-frames and the bottom of the sections first put on?

6. Is there any practical way to prevent this nuisance, and have them do good work?

MASSACHUSETTS.

ANSWER.—1. I think they are generally made

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to space $1\frac{3}{8}$ inches, which is all right for brood-frames. Of course they might be made differently.

2. I don't know. If the hive has no chance for ventilation except the ordinary entrance, I should expect a break-down, especially if the weather is very hot. With abundance of ventilation below and on top it might be all right. But with the slack horizontal wiring that is sometimes advised I should expect so much stretching at the upper part as to make the comb unfit for brood-rearing.

3. I think so. Of course I suppose you mean to take bees in the trap with the queen.

4. $\frac{1}{4}$ inch.

5. No; but more than I like.

6. Years ago I had $\frac{3}{8}$ -inch space between top-bars and super, and there was a bad mess in the space. I then used Heddon slat honey-boards. That left the mess as bad as ever between top-bars and honey-board, but almost entirely clean between honey-board and sections. With $\frac{1}{4}$ -inch space between top-bars and super there is so little building that I prefer not to use the honey-board. Possibly the size of the top-bars ($1\frac{1}{8} \times \frac{7}{8}$) has something to do with it.

Italianizing—Rearing Queens.

1. A friend bee-keeper told me that if I had a colony of Italian bees and black bees, and wanted to get pure stock of Italians from that colony, I could get them by boring a two-inch hole in a block of wood and cage a young queen, or, in other words, a ripe queen-cell and a fine drone of her kind for 7 days, and the queen would be mated with that drone. Is that so?

2. What are the best bees for me in Rappahannock Co., Va.?

3. Do you think I can rear my queens all right now if I can get them mated the way I want?

I have black bees and Italians.

VIRGINIA.

ANSWERS.—1. There might be one chance in a million for success if it were not that the drone would be likely to die before the end of 7 days.

2. Probably Italians as nearly pure as you can keep them.

3. You can rear the queens all right; but will probably never control the mating.

Rheumatism and Bee-Stings.

I would like a little space in the American Bee Journal to probe the truth of bee-stings being good for rheumatism. Last year I suffered very much with rheumatism. I took every precaution and fixed so they could not sting me. This year I did not have time to fix for them, and they stung me whenever they wanted too. In fact, they made me very sick at my stomach. The trouble all seemed to settle there, and that was the last of my rheumatism. Before, at this time of year, I could hardly get my clothes on for pain. The bee-stings drove the trouble into my stomach, and when my stomach trouble left me I was well of rheumatism, and have been ever since. Now what did it? I took no medicine. This is a true statement. It was the last time I worked with them this year, that they stung me so badly and made my stomach hurt.

TENNESSEE.

ANSWER.—No doubt some would credit the cure to the stings, while others would deny that the stings had any effect. The trouble is to tell whether a cure comes on account of the stings or merely after the stings. So many cases have been reported where the stings were believed to have effected a cure that one can hardly blame people for having faith in them.

Sweet Clover and Alfalfa.

1. I have about 2 acres of pasture I have thought I would sow in sweet clover, and possibly the cow would eat some and the bees some, and it would fertilize the ground some; and in the fall it would die and there would be about as much blue-grass as if the sweet clover had not been there. I saw not long ago an advertisement where some fellow had yellow sweet clover seed for sale. Which is the better, yellow or white?

2. Can I sow it on the sod and get a crop next year? and when is the best time of year to sow?

3. If I were to get a stand of sweet clover and then sow alfalfa in among it without breaking up the ground, would the alfalfa catch? It is said that the sweet clover im-

pregnates the ground with the proper bacteria. What do you think of the alfalfa idea?

ILLINOIS.

ANSWERS.—1. It depends upon circumstances which is better for you. One kind yields probably as much nectar as the other, but the yellow is 2 to 4 weeks earlier than the white. If you have a good yield of white, or Dutch, clover, the white variety of sweet clover is better, as it follows the white clover. In a failure of white clover, yellow sweet may be better than white sweet.

2. You are not likely to get a good catch by sowing sweet clover on sod; but you may succeed if you sow in early spring and let stock tramp it in the ground while the ground is wet and muddy.

3. The same thing may be said about a catch of alfalfa as is said in the previous reply about sweet clover. Good idea to get in alfalfa for cattle and horses, but the likelihood is that in your locality it will be worthless for bees.

Dog-Bane or Bitter-Root.

Has the weed commonly known as dog-bane, bitter-root, or honey-bloom (technical name is Apocynum androsæmifolium) any special value as a honey-plant? NEW YORK.

ANSWER.—I don't know, but the fact that it has not been reported as a good honey-plant makes it a pretty safe guess that either it is not a very good yielder, or else it is not found in sufficient quantity to be worth considering.

Making T-Supers.

I would like to have a T-super. I have made some hives, but don't understand how a T-super is made. Will you kindly describe it? BRITISH COLUMBIA.

ANSWER.—The T-super is a plain box without top or bottom. It should be the same width as the hive on which it is to be used, $\frac{1}{4}$ inch deeper than the sections to be used in it, and $\frac{1}{4}$ inch longer, inside measure, than the length of the 4 sections. Thus, a super for an 8-frame hive, to contain 24 sections of the size $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$, will measure, inside, $17\frac{1}{4} \times 12\frac{1}{8} \times 4\frac{1}{2}$ inches. To support the sections at each end, a strip of tin is nailed on, that projects $\frac{1}{4}$ inch inwardly, and 3 T-tins, each 12 inches long (which can be bought of supply dealers), will be supported by 3 squares of sheet-iron nailed on the bottom at each side, or else by staples driven in and bent over.

Producing Honey Without Separators.

I saw an article in the November issue about producing comb honey without separators, and I don't understand the method. I would like to have you explain it. KANSAS.

ANSWER.—I can hardly see what there is to explain. According to Mr. Morrison the single requisite for getting straight sections without separators is to have the sections narrow enough. He says they must be $1\frac{1}{4}$ inches in width, and you will see that in the same article Mr. Hutchinson thinks $1\frac{1}{2}$ is narrow enough. Except that one matter of width, there is nothing special about the sections. If you want to try the experiment, all you have to do is to order sections of any size you desire, only so the width is $1\frac{1}{4}$ inches, unless you want to try Editor Hutchinson's $1\frac{1}{2}$ inches. Whether any change must be made in your supers depends upon the kind of supers you have. A T-super will need no change, but if you use any kind of frames of bottom supports for the sections, then these must be of the right width.

Spiders and Bees—Chaff Cushions—Feed for Spring—Getting Bees Down Into Brood-Nest—Queen Candy.

1. Do spiders ever injure bees?
2. Is not the purpose of the chaff cushion partially defeated by placing a super-cover, or enameled cloth, over the brood-frames, and under the cushion? I see this plan advocated in Gleanings.
3. Which would be best to feed bees in the spring to encourage brood-rearing, syrup from granulated sugar, or candy made from honey and powdered sugar?
4. How can I best get a colony of bees down into the brood-nest in very cold weather? They are clustering on the empty extracting frames which I neglected to take off before

this, although there is plenty of honey below. (Dec. 20, 1909.)

5. How do you make queen candy? ILLINOIS.

ANSWERS.—1. Not to any great extent. If their webs are allowed at the entrance of a hive, a few bees will be caught and killed.

2. No; the object is to keep the hive warm, and especially to have the top of the hive warmer than the sides; and the cushion will help to confine the heat whether over or under the cover.

3. Probably the candy, just because it has some honey in it.

4. It seems almost impossible that the bees should have clustered on the extracting-frames unless there was considerable honey in them. On a day when it is warm enough for the bees to fly, shake and brush them from the extracting-combs down upon the brood-combs. If you are afraid the bees will starve before a flight-day comes, take them into a warm room late in the day, and operate at night with very little light. But it is quite possible that when a warm day comes the bees will shift their location of their own accord.

5. Take a small amount of extracted honey warmed and work into it enough powdered sugar to make a stiff dough. Let stand a day or longer, and if it becomes thin work in more sugar.

Transferring Bees—German Bee-Paper—Preventing Swarming.

I am only a starter in the bee-line, and have to learn a lot to be successful. I started with 3 colonies 2 years ago, and did fairly well. A few months ago I bought 11 colonies, which are housed in ordinary boxes, turned upside down, and I expect to have a hard job to transfer them next spring, as the bees have built the combs solid in the box, and there is no way of getting at them.

1. My idea is to set an 8-frame Langstroth hive on top of the hive next spring, and after making some opening on top of the old hive, drive up into the new hive with smoke. Of course I intend to give each about 3 complete frames, and the rest foundation. Do you approve of this plan? Maybe it would be better to set the old hive with the bees on top and drive them down into the new hive.

In the American Bee Journal I often see the Pratischer Wegweiser mentioned. Being a German, it would be good for me to have it. Kindly tell me how to get it.

3. I would also like to get a little handbook of preventing the swarming of bees that is practical, and does not cost too much. NEW YORK.

ANSWERS.—1. Either plan will be all right if the bees will move, but you may find them very stubborn about it. They will travel up more readily than down, and pounding on the hive will help no little to make them go up. Instead of making an opening in the top of the hive it may be a good deal better to turn the hive upside down. That is on the supposition that the bottom is not nailed to the hive, and, even if it is, the bottom can be knocked off.

2. Praktischer Wegweiser fuer Bienen-zuechter is published in Oranienburg, Berlin, and costs 75 cents a year.

3. I do not know of a handbook on that subject. The nearest that comes to it is probably "Forty Years Among the Bees," which can be had for \$1.00, postpaid, at the office of the American Bee Journal.

Hives—Drawn-Combs for Swarms—Best Strain of Bees—Best Super Chaff Hives.

1. I use 10 frame Woodman Protection hives with Langstroth frames. Would it not be a good plan to extract the honey mostly in the spring at the beginning of the honey-flow and give the queen more room to hatch, as last year my hives were full of honey in the fall and the bees died off heavily in the fall, and did not consume much honey through the winter, although they swarmed quite early, but little swarms? I think this is because the queen did not have much room to hatch. What do you think?

2. In hiving a swarm don't you think it a good plan to supply the new swarm with drawn combs, 3 or 4 of them or more, as it would give the queen room to lay at once, and they would breed up faster?

3. Which is the best super for comb honey, and gives the best results, and the most convenient to use? Would not one extracting-

frame on each side of the sections be a good arrangement to use for best results?

5. I have 10 colonies in chaff-hives, and 11 in single-walled hives. The 11 are packed on three sides. The temperature stands at 30 degrees about all the time. I can not make it any warmer this year. I give them $\frac{3}{8}$ x 5 inch entrance, and 4 of them a 7-inch entrance. They are very heavy colonies. Would you advise a larger entrance or not? The cellar is very dry and is ventilated well, and the bees seem quite quiet. I have a chaff tray on all.

6. Would it pay to use all chaff-hives even if one does winter his bees in a cellar, as they afford better protection in the fall and spring, and bees will breed up faster? I want to start in with the best that can be had.

MICHIGAN.

ANSWERS.—1. It is a good plan to extract some of the honey from the brood-combs *if in all hives you find the queen has not room enough to lay in spring or early summer.* But that's a thing that rarely happens, and I very much doubt whether that was the trouble with your bees last year. Very early the queen requires not a great deal of room, because there are not enough bees to cover a large amount of brood. As the season advances the honey is used up very rapidly, giving the queen constantly more room. At any time you think there is danger that the queen is crowded for room, look and see whether there are no empty cells in the hive. If all the cells are filled either with brood or stores, then there is a possibility that the queen may be crowded for room; but not till then. Even if you should find a colony with its queen crowded for room, instead of extracting any honey, it may pay better to take out a frame filled with honey and exchange it for an empty comb in some other needy colony.

2. Yes, giving ready-built combs will save the bees just so much labor and material.

3. Generally, leather-colored Italians are preferred for work. Hybrids, as the cross between blacks and Italians is called, are among the worst to sting.

4. If rightly used, I know of nothing more convenient than the T-super. As to amount of honey stored, probably one kind of super will give as much as another. Some have reported good success by having extracting combs and sections in the same super. But a T-super would hardly answer for that purpose. Wide frames would be better.

5. It will probably be better if you give in the cellar the full-sized entrance, and keep the cellar as nearly as you can at 45 degrees. Even at 30 degrees, better enlarge the hive-entrance.

6. I do not know of any one who has tried it extensively who thinks it pays to have chaff-hives for wintering bees in the cellar.

would, help us to control this great damage. Also, I speak more or less to granges and farmers' clubs, and a little good-tempered advice and information on the spraying evil would count for much. The farmer is an intelligent, practical man, as a rule, and if I can show him just what other States find it wise to do, he will be more impressed than by anything I can say. It is a fact that localities in this section were so thoroughly poisoned that squashes failed to set, and there is no doubt that the apple crop itself was greatly injured. But preparation is being made for much more extensive spraying in bloom next year, the effort being to destroy the codling-moth larvæ (*carpocapsa pomonella*).

GEORGE W. ADAMS.

Rt. 1, Rowley, Mass., Dec. 24.

[We are going to ask any of our readers who can do so, to mail Mr. Adams copies of any laws that may be on their statute books, on this subject. We hope they will be prompt in doing this, so that Mr. A. can have the desired information in time to make good use of it.—EDITOR.]

Complete Failure of Honey.

I have 8 colonies of bees in the cellar, apparently doing well. Last year was a complete failure for honey here; bees got little more than enough to winter on. But we hope for better results next year.

ARTHUR FITZPATRICK.

Flandreau, S. Dak., Dec. 27.

Very Poor Season for Bees.

The last season was a very poor one for the bees; about one-third of a honey crop from clover. Bees went into winter fairly well supplied with stores from smartweed, and we hope next season will be better.

J. F. VIGOR, M.D.

Pomona, Kans., Dec. 20.

Good Prospect for White Clover.

My bees are prepared for winter on the summer stands.

The past one was another poor honey season in this locality, and that was the third poor season in succession. We produce mostly extracted honey, but we try to produce some section honey, and did not get a single section in the last 3 years. We got only about 300 pounds of extracted honey last season from 70 colonies. Some of the colonies needed feeding to bring them through the winter. As I have been in the business nearly 40 years, I will not give it up yet. There is a good prospect for white clover for the coming year, so I still live in hopes that we may have a bountiful crop next season.

MAX ZAHNER.

Lenexa, Kans., Dec. 1.

Bee-Stings and Rheumatism.

I often see articles in the American Bee Journal and in "Der Geflegelzuechter," on bee-stings as a cure for rheumatism, and I consider it my duty to tell my experience.

Early last spring I began to feel pain in my left arm between the elbow and the shoulder, and started to rub it with different salves and liniments. When I did not get relief I went to a doctor, who said it was muscular rheumatism, and that I should take some medicine. Things went on for more than a month, and the pain grew worse. In the morning I could hardly dress myself, and a friend told me that Turkish baths would fix me up. I took two, and in the meantime rubbed my arm till the skin was sore, but the pain remained. Then I gave my bees a chance, although I did not think much of it at first. But I thought it would do no harm.

I collected about a dozen bees in a glass, and set them on the spot where I had the pain. By shaking the glass and knocking at it I got the bees angry so they would sting, and I repeated it three or four times, at intervals of about a week. I felt relief the next day after the first trial, and the pain disappeared inside of a few weeks, and I have had no pain since. I want to say that my arm did not swell at all at the spot where the bees stung, but it swelled very much near the wrist.

As to any "shock" received when the bees stung, I cannot agree with Dr. Bonney (see November, 1909, issue). When a bee sat on my arm I expected a sting, and took it as a matter of course that it would hurt a bit.

Someone may say it was not rheumatism that was bothering me, and I can't swear it

was, but I know since the bee stung me I am rid of the pain in my left arm.

Brooklyn, N. Y., Dec. 25. A. WENZ.

Poor Clover Prospects for 1910.

We have had no honey crop to speak of, and honey dew to winter on means disaster before spring.

I commenced the past season with 145 colonies, increased to 170, and got 3,300 pounds of comb honey, or about 22 pounds per colony, spring count. Does this sound like prosperity? If this is bad, last year was at least a little better. I commenced the season of 1908 with 68 colonies, closed with 145, and secured 7181 pounds, or over 105 2-3 pounds per colony, spring count. I wintered every colony.

But with 170 colonies now, I do not expect to have 100 alive next spring. I extracted the black stuff out of the brood-nest of one out-yard, which may winter better. But as we had a terrible drouth and no show for a fall crop, I did not extract from the other yard.

The clover outlook is poor, as the drouth killed most of the young clover that started in spring during the wet time we had. So the bee-prospects for the coming season are anything but bright. This is the condition over a big portion of the Central States, notwithstanding a certain usual report of fine show for a clover crop in 1910. I think we ought to have the truth, whether good or bad. An intelligent reader who has carefully followed the reports in bee-papers, of crops and conditions, need not be told that we will not have any big crop of clover honey, generally, next season. Of course, some sections or localities will have good crops (always do), but no matter what reports come in, a certain publication usually publishes that clover prospects were never brighter. Having said this, I want to say, also, that the American Bee Journal has tried to give us conditions just as they are. We all thank you, and appreciate your honesty in this and also other interests of bee-keepers generally.

I run out-yards on somewhat of Dr. Miller's plan.

Cantril, Iowa. A. B. TACKABERRY.

Keeping Bees in a Bee-Shed.

The picture is one of my bee-shed apiary of 20 colonies situated in the suburbs one-half mile from the city, near the most beautiful park in the State. The lot on which the apiary is located is 80x120 feet, set with small fruit; 50 red raspberries, 25 blackberries, nicely trained to tree-shapes and tied to stakes, 600 strawberries, 40 dwarf pears, a few plums and currants, also two large beds for vegetables. These added to the profits from the bees make a very profitable investment. The small cottage in the picture is furnished with easy chairs. On the table will be found the late number of the American Bee Journal and other bee-publications and literature. The bee-people often drop in and discuss the good and bad of the bee-business, as well as the best methods of securing a large honey-flow.

These 20 colonies of bees take very little of my time, other than putting on the supers and taking off the honey, and a little extra time during the swarming season, cutting out queen-cells. As to the pleasures of bee-keeping, there are many. Among other pleasures, who does not enjoy sitting by a hive and watching the little busy workers coming and going hither and thither, each one doing its part, gathering the honey from the meadows far and near.

THE BEE-SHED.

For keeping bees on a small scale where you do not have the room of the farm or the shade of the apple orchard, I am in favor of the bee-shed. I suppose the majority of the bee-keepers throughout the country are those having from 2 to 25 colonies, and they are kept in the rear of the garden lot, or on small places. The shed gives a permanent and handy place for them. They are less liable to annoy any one, and I feel certain they keep to their place and work better.

I have ample room in the shed to work with the bees from the rear of the hive. I find the bees will not come into the shed and bother while working with them as they do out in the open. I can work with the bees on sunshiny or rainy days, whenever you may have time. This is very important to those who are engaged in other vocations than bee-keeping. Many persons who keep bees are employed at inside work, and for them to go out in the middle of the day in the hot



Honey-Remedy for Ear-Ache.

A recipe for ear-ache remedy: One drop of honey to a little warm water, well mixed; one to two drops in the ear. Sure thing. Bees did very little here last year.

Virginia, Ill., Dec. 20. F. M. DAVIS.

Only One-Third of a Crop.

Bees did not do well this year. I got only about one-third of a crop, but am living in hopes of a better one in the coming new year of 1910.

H. A. RUSHTON.

Jackson, Mich., Dec. 27.

Laws Against Spraying in Bloom.

Allow me to ask if the American Bee Journal can furnish a brief account of the law in the different States against spraying while in bloom. Having suffered heavy loss myself, and finding many others have been greatly damaged, in many cases not knowing the cause, I want authentic information for use in a practical way.

I do a good deal of work within a radius of 50 miles, among people who wish expert advice and assistance, and this brings me in touch with people of influence who could, and

American Bee Journal

sun, is at last uncomfortable, and, in many cases, may be injurious. The shed is ventilated with two small windows, and all work done in the shade with comfort.

The shed should be built wide enough to store the supers back of the hives, and everything will be handy and convenient, which is very desirable when you have only a small space to be given to bee-keeping. The shed is built so the sun shines on the front of

with a rush and put for a stable. The owner told me to take an old, lame horse to go after the bees, but when we saw the stable boy lead him out to water, we protested that he was too lame, and for the humane part we would rather not use him. I told the man to give me any other horse, and if it was not all right I would fix it with my brother-in-law, he being owner of the horses. So, after much talk, he consented to give us another, and we

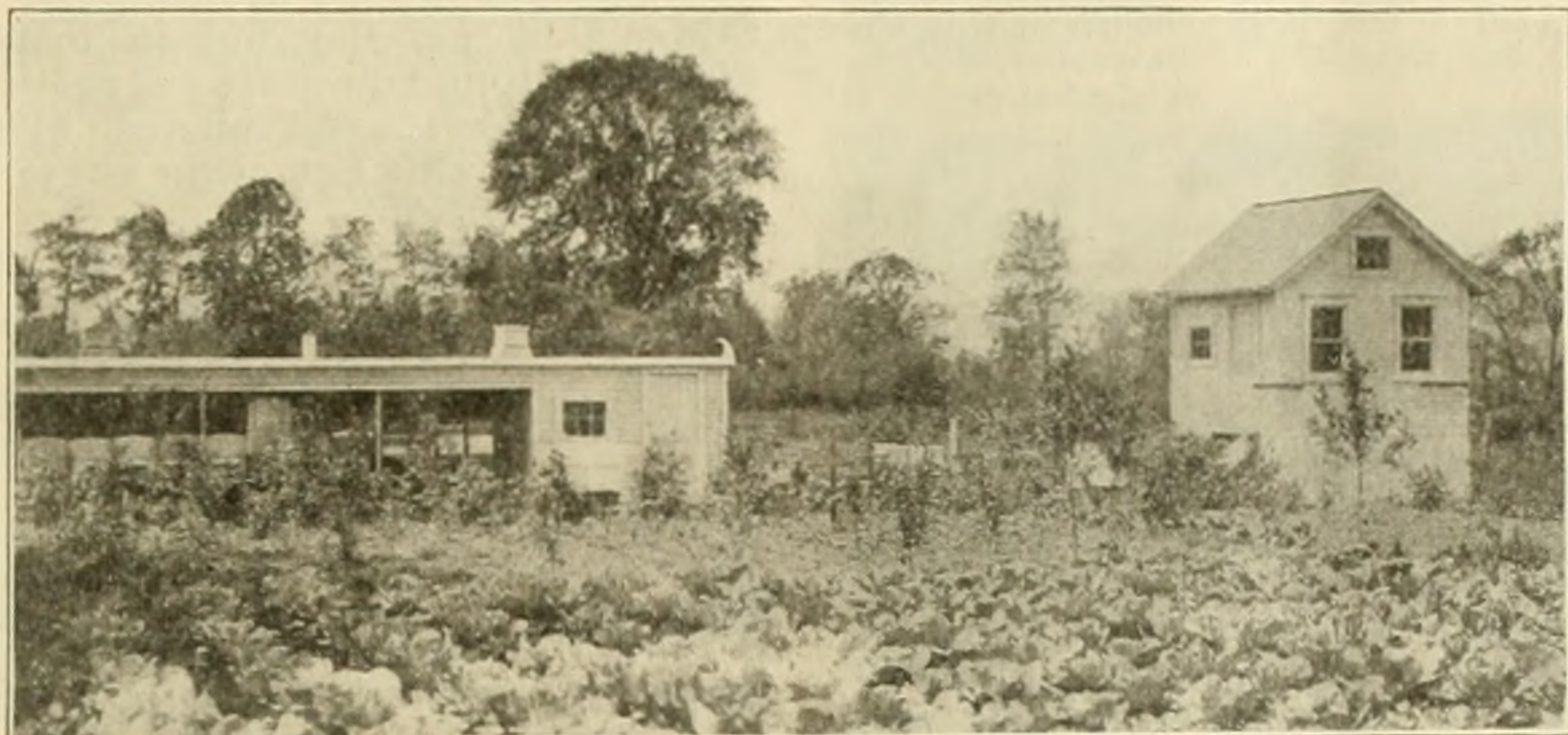
In the fall of 1907 I visited my brother, who, for many years, had been a very successful bee-keeper. I had left a technical college for lack of interest, and one day we were discussing the important question of my future. My interest in bee-keeping had been aroused at the time when my brother bought his first colony of bees, but I had never owned a bee myself. Brother knew that it would do me good to see some of the world while young (I was then 22), and—why not go to America to study bee-keeping? Among other bee-papers he had been reading some of the American, and we knew the names and methods of some of the most prominent bee-men of your country.

I had secured a position with Mr. R. F. Holtermann, of Canada, for the season of 1908. I wanted to spend the previous winter in America, too, but I had no position in view. Depending upon good luck, I sailed October 16, 1907, from Helsingfors, Finland, and three weeks later I landed in New York City. My plan was to go to Medina, Ohio, and I arrived there on a Saturday, and the next Monday my work began with the A. I. Root Company. They were kind enough to give me an opportunity to work in their factory, allowing a thorough study of modern bee-supplies.

I afterward went to Brantford, Ont., entering the position as assistant to Mr. Holtermann. The time spent with this splendid bee-keeper was of very great importance to me. After working half a year with him, I again secured a position with the A. I. Root Co., where the forepart of last winter was profitably spent. But I had a desire to see the South—the land of flowers and honey; and, about Feb. 1st, a ticket for Texas was bought. There I spent a month with John W. Pharr, getting some very valuable information about queen-rearing.

March, April and May, 1909, were spent with J. W. K. Shaw & Co., in Louisiana. Here I grafted my first queen-cups, and learned in a practical way the principal "tricks" of the queen-trade. But the heat of the South did not agree with me (you must remember that our home is situated at 60 degrees north latitude, or the same as South Greenland, though that country is colder than ours).

Fortunately I secured a position as assistant apiarist with Messrs. C. P. Dadant & Sons, of Illinois. My stay with these splendid people



SHED APIARY OF E. F. GILES, OF ALTOONA, PA.

the hives early in the morning, warming the bees and giving them an early start.

HIVES AND MANAGEMENT.

I use double-walled hives, winter and summer, and winter the bees in the shed just where they stood during the summer. All moving of hives into the cellar, etc., is avoided, which simplifies the work of bee-keeping very much. The shed protects them from the snows and cold winter blasts, and under these favorable conditions they winter fine. In the spring they are warm and protected, and breed up nicely for the honey-flow.

I use the 8-frame hives, and during the past season had one swarm. As soon as the colonies are strong enough with bees in the spring, about 2 weeks before the honey-flow I make whatever increase I may desire, artificially. I take 2 frames of bees and brood from a hive, put them in a new hive, give a queen-cell, or a queen. In the old hive I put in place of the frame taken out 2 frames of foundation. In a short time the new frames are filled with brood. In the new hive I add frames of drawn comb or foundation from time to time, and by fall they are a strong colony, and winter well. During the honey-flow I cut out the queen-cells about every 10 days, and give the bees plenty of super-room.

I believe the cutting out of the queen-cells, giving plenty of super room, and artificial increase early in the season, form one of the best methods to control swarming. As swarming is a natural condition, I do not believe it can be entirely wiped out. I run my apiary for comb honey.

The first super I put on is of small extracting frames made to fit an 8-frame super, that takes a $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ honey-box, frame filled with full sheets of foundation. The bees seem to take to this readily, and when they get a good start in the extracting frames, I place under it a super containing the one-pound honey-boxes.

I note the bees draw out the comb in the little extracting frames well, and fill it with honey, which seems to be wider and fuller than in the one-pound boxes. It is fine for table use. I put full sheets of foundation in all frames and the one-pound honey-boxes, thereby helping the bees as much as possible in their work. Under this system of handling bees, which I have learned through the American Bee Journal, and a few little things which I have picked up through experience, it has proved satisfactory to myself, and the past season I had colonies that stored 50 to 150 pounds of comb honey, with only one swarm. Altoona, Pa., Aug. 2. E. F. GILES.

A Beginner's Experience with Bees.

A little experience a friend and I had with this our first venture with bees, while not very encouraging, was at times quite laughable.

About May 11, 1909, we ate our suppers

just spun right over the road about 6 miles into the country.

Well, we got our bees, (3 colonies), and tied them in the wagon, and started for home. Everything went fine for about 3 miles, other than our feeling cold, and my friend complained of his fingers feeling quite cold; but all of a sudden he yelled, "Look out!" And sure enough, I did. But it was a case of the horse shying and putting us into the ditch, though he never purposed to stay for a second.

When our senses were collected we found that we were lying in a puddle of water so deep that when I stood up it was over the tops of my rubber boots. Everything was dumped out but the horse, and he took French leave.

Our bees were in box-hives, and after fooling for 15 minutes or more we succeeded in relighting our lantern and righting our hives. A fine predicament, 3 miles from home, and soaking wet!

Our first thing was to find a telephone, and after talking over the wire, we decided we had better go for home. Yes, we had to hoof it all the way, and found the horse browsing near the stable. Then we took the old lame horse and went home for a change of clothes and a bite to eat. After that, away we went for what was left. We put our horse up, ate our breakfast, and then it was just time to go to work.

We have had lots of joshing and laughing about that night trip of ours. But our courage is still good, and we hope to be heard from as producers later, though the honey crop has been a total failure around here this year. I think I have had more hard luck for a beginner than is meant for one man in a dozen years. But, then, it may be worth a good many dollars to me later on.

E. H. BISSELL.

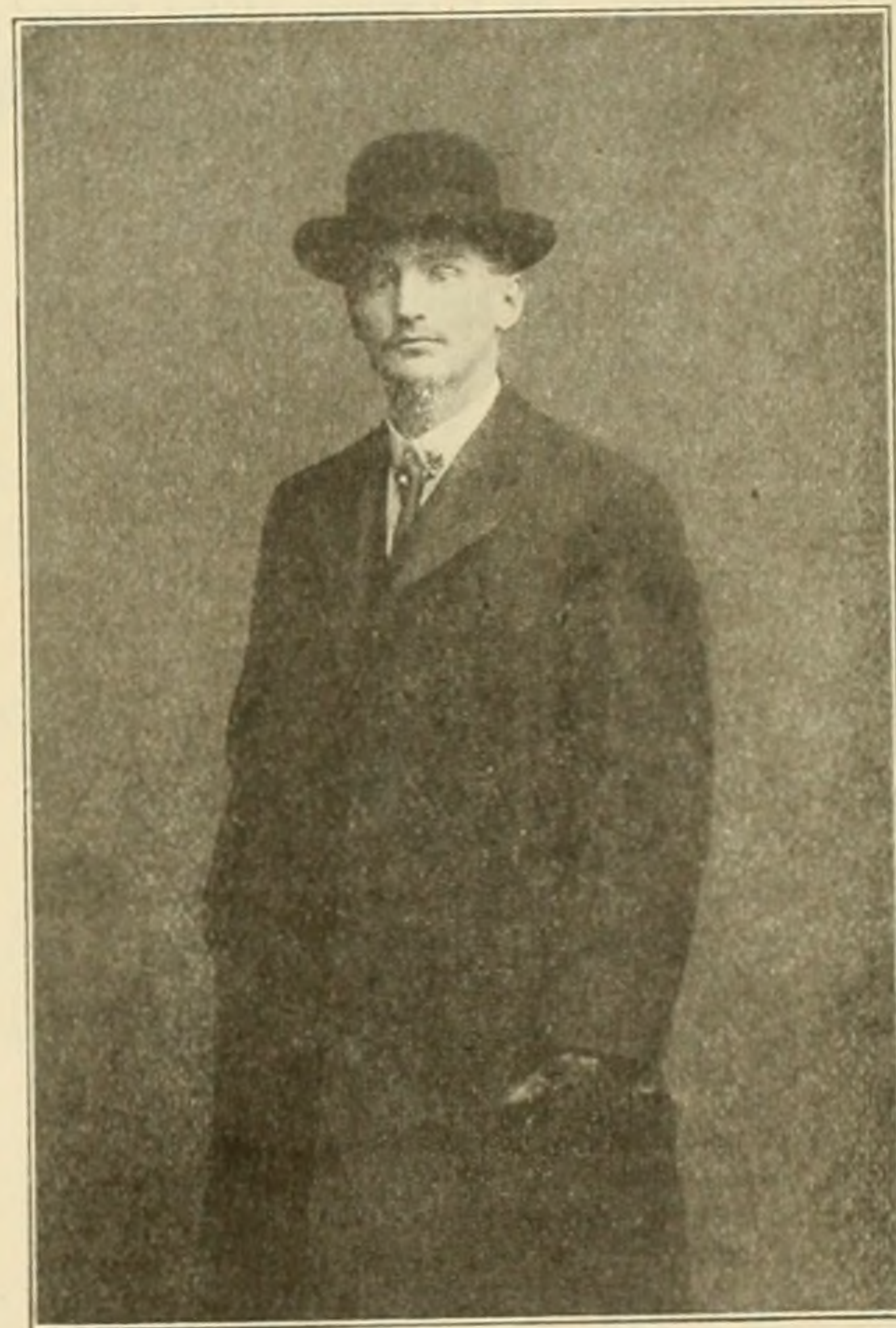
Brewer, Maine, Dec. 25.

Letter from a Finland Bee-Keeper

To my bee-keeping friends in the United States and Canada:

It has been my desire to express my feelings towards my bee-keeping friends in North America, by means of an article in one of the bee-papers of that country. When I left Finland with the intention of learning bee-keeping in America, I never thought that I would like it there as well as I did. Though the climate did not agree very well with me, the people and the conspicuous political and social freedom certainly won my sympathy and commendation, and the bee-keepers, especially, showed such great friendliness and hospitality, though I was a perfect stranger to all of them, that I am obliged to say that I felt sorry to leave a country of such remarkable characteristics.

It might interest some of you to listen to a short account of my entire trip to your country, how it was started, and how it was finished.



PAUL MICKWITZ.

was not only a pleasure, but also of great instructive value to me.

By this time the government of Finland aided me with \$300, which should be used for traveling among prominent bee-keepers in the United States and Canada. This was accomplished during the months of last August and September. Several dozen bee-keepers in various States were called upon. I had many more on my list, but it being so late in the

season, I am sorry to say my time was limited, and the route had to be drawn as straight as possible.

Now, I want to extend my sincerest thanks to all the bee-keepers I visited, for all their hospitality and kindness in answering questions pertaining to bee-keeping, etc., also to all those ladies of the house who had extra work for my sake.

I am at home. The cold, Northern winter is fast approaching, and our bees ceased long ago to fly about the fields. Next summer I will start a little apiary of my own, and, believe me, I am anxious to put into practise some of the valuable information secured in your country.

PAUL MICKWITZ.

Helsingfors, Finland, October, 1909.

[We are glad to give a place to the foregoing appreciative letter from Mr. Mickwitz. As mentioned in these columns before, we had the pleasure of meeting him several times when in this country, and he is certainly a promising young bee-keeper. We shall hope to receive something from him from time to time about bee-keeping in Finland, after he has had opportunity to try out some of the American methods of bee-keeping that he learned while here. In the meantime we wish Mr. Mickwitz all the success he anticipates.—EDITOR.]

Poor Season—Feeding Bees.

The past was a poor season for bees in this part of the country. In early spring it was so cold that there was no bloom to speak of. Fruit-bloom was nearly all killed, so the bees got nothing until the middle of June, then the weather turned warm, and basswood, sweet clover, and alfalfa came into bloom, and we had the best flow of honey that I ever saw for 3 weeks; then it ended as suddenly as it began. When the honey-flow started the hives were empty, as far as honey was concerned, and when it ceased the brood-chambers were full, and nearly all of the colonies had filled one super, and some were starting to store in the second super, but there was very little of the honey sealed. Then we had a drouth that lasted till Sept. 1st. By that time the hives were about empty of honey. The bees had taken all of the honey out of the supers and the swarms were starving. By the last of September almost all of the swarms had starved.

After that we had rains, and the asters bloomed for one month, so all of the colonies that did not swarm will have enough to last them till spring. As I enquire of the farmer bee-keepers how their bees are, they say that 2 out of 3 colonies are dead, and the one that is alive will not live till fruit-bloom next spring. I don't believe there will be 20 percent of the bees alive next spring around here. The owner thinks there is no use to try to feed them. In October I fed all of my bees that were short of stores. Some that did not have more than 5 pounds of honey I fed sugar syrup. I gave them 10 pounds of sugar in 5 pounds of water, and now I give each of them a cake of candy weighing 6 or 8 pounds, made from sugar and water. I put one quart of water in a dishpan on the kitchen stove and, when the water begins to boil, I pour in the sugar and keep stirring all the time. When it gets so that it will form a lump when dropped into cold water, then I remove the pan from the stove and keep stirring until it begins to grain. Then I pour it into a bread-pan, and after it is cool I place it on top of the brood-frames, first laying 3 or 4 one-inch sticks across the frames to give a passage for the bees from one comb to another. Over the candy I put burlap cloth, then some newspapers, then put an empty super on filled with dry leaves. Then I put on a weatherproof cover; then I feel satisfied that they will winter all right. I don't put anything in the candy, and have never had any loss of bees so treated, or any trouble with the candy getting so hard that the bees could not make use of it during the winter. After warm weather comes in the spring, if there is any candy left, I melt it into syrup and feed it in a division-board feeder to stimulate weak colonies.

J. L. YOUNG.

Manhattan, Kans., Dec. 4.

A Rare Tree Swarm of Bees.

I am sending a photograph of myself and a large, fine swarm of bees that I found September 6, 1909, hanging on a limb 13/4 inches through, 43 feet from the ground, in the open, without any protection whatever, with combs 2 feet long on the limb, and 13 inches deep. At the time I found it, it was completely covered with bees, and at first sight it resembled a young bear hanging with

his back down. Two weeks later I went with a spring wagon, extension ladder, a box, and ropes, to get it.

I went up the tree, roped the limb properly so it would hang when cut off just as it was before, sawed it off, and from where I was I lowered it slowly near to the ground, fastened the rope securely, and went down. Then I took a sheet of cheesecloth, slipped it under the bees, wrapped it up snugly to the cluster, and tied at both ends of the combs so no bees could get out; then the limb was cut off a little beyond the combs at each end, set in a box large enough not to mar



MR. GUERNSEY AND SWARM ON LIMB.

the combs, and taken home 13 miles, in safety, with the loss of but very few bees.

After a rest of three days I took them in the box to Ionia (2 1/2 miles), into a photograph gallery and lifted them out and held them as you see them, 5 minutes or more, and had several views taken. Only 3 bees left the cluster and went to the skylight. It was a fine, warm day.

Then I gave an exhibition, as you see them here, on the streets for several hours; brought them home, and packed them in their little box where I expect to winter them successfully outdoors, as I winter my bees outdoors exclusively. Next season I will confine them to a certain space and make them build the combs as I want them, to my fancy, then hang it out on a tree in the open. A swarm like this I have never been able to find, or ever heard of one in Michigan, although it is a common thing in a warm climate.

Ionia, Mich.

A. H. GUERNSEY.

Ontario County, N. Y., Convention

The Ontario County (N. Y.) Bee-keepers' Society will hold a meeting in the Town House at Canandaigua, N. Y., on Jan. 17 and 18, 1910, to which we would cordially invite you.

Naples, N. Y. F. GREINER, Sec.

Wisconsin State Convention

The 31st annual convention of the Wisconsin State Bee-keepers' Association will be held at the Court House, in the city of Madison, Wednesday and Thursday, Feb. 2 and 3, 1910, beginning at 10:30, Wednesday morning.

We have the promise of papers from Mathilde Candler, F. Wilcox, Harry Lathrop, George W. York, A. C. Allen, and N. E. France. These are all well-known names, and their papers will be such as to create interesting discussion and bring out plenty of questions. We

also have other prominent and well-known bee-keepers who are considering the writing of papers for this convention, or in some other way giving the benefit of their experience and years of observation. The Question-Box will be an important feature.

We advise all who will attend to stop at the Simons Hotel, which is always headquarters for the bee-keepers. The rate is \$1.35 per day, but in order to secure a room, you must engage it several days ahead, and enclose \$1.00 in your letter. This is a clean house. No bar in connection.

We invite every member to renew his membership, and every bee-keeper to become a member. The annual dues for the Wisconsin State and National are \$1.00 for both, or you may become a member of the Wisconsin State alone by sending 50 cents to the Secretary.

Let us hear from you with your dues, together with your questions, and, if possible, attend the convention.

Augusta, Wis. GUS. DITTMER, Sec.

Michigan State Convention

The annual convention of the Michigan State Bee-keepers' Association will be held in the parlor of Hotel Wentworth, corner E. Michigan and Grand Avenues, Lansing, Mich., Feb. 23 and 24, 1910. A fine program is in course of preparation, and will appear in the February number of the American Bee Journal. All are invited.

L. A. ASPINWALL, Pres.

E. B. TYRRELL, Sec.,

230 Woodland Ave., Detroit, Mich.

Eastern Illinois Convention

The second annual meeting of the Eastern Illinois Bee-keepers' Association will be held in a hall adjoining the Junction House at St. Anne, Ill., Jan. 31 and Feb. 1, 1910. A good program has been arranged, and we expect a large attendance. All bee-keepers are invited to come. The question-box method will prevail. Special rates at the hotel. Those desiring to attend can correspond with either the president or the secretary.

REV. HOWARD, Pres. H. S. DUBY, Sec.

Gardner, Ill. St. Anne, Ill.

To Illinois Bee-keepers

At the December meeting of the Chicago-Northwestern Bee-keepers' Association it was voted to join the National and the Illinois State Associations in a body. The annual membership fee to the Chicago-Northwestern is \$1.00. This dollar will not only make you a member of the three associations, but will entitle you to the reports of the three associations, published in one volume, bound in cloth. The book alone is worth the price of membership. Send dues to Louis C. Dadant, Secretary Chicago-Northwestern Bee-keepers' Association, Hamilton, Ill.

Notice to Oklahoma Bee-keepers

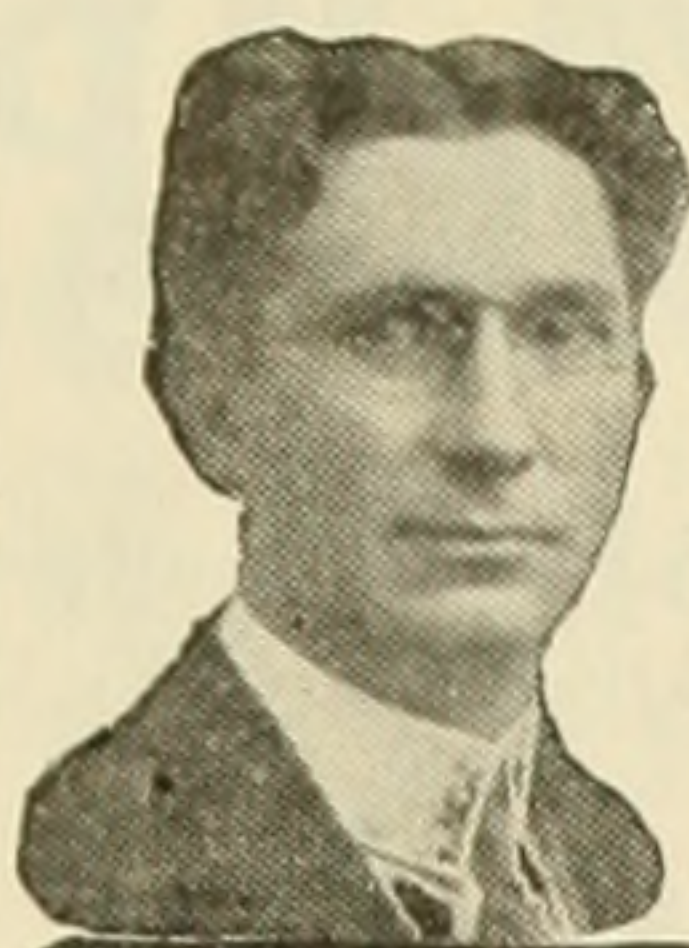
Bee-keepers from over the State met at Guthrie, Dec. 30, 1909, and a State Association was perfected with the following officers:

President, N. Fred Gardner; Vice-President, Geo. H. Coulson; Secretary,

American Bee Journal

F. W. VanDeMark; Treasurer, G. A. Garrison.

A Constitution and By-Laws were adopted, and the semi-annual meeting will be held in Guthrie, April 4, 1910. The annual meeting will be held at Stillwater some time in January, 1911, during the Farmers' Short Course. The Association will at once incorporate and endeavor to increase and encourage the production of honey throughout Oklahoma. The following bee-keepers were present: Geo. H. Coulson, Jacob Goenwein, G. A. Garrison, R. J. Martins, J. A. Nininger, E. Q. Couch, C. C. Platt, Keith Sellars, C. S. Mayhew, N. Fred Gardner, F. W. VanDeMark, and A. Rhoads and J. H. Tate, by proxy. F. W. VANDEMARK, Sec. Stillwater, Okla., Dec. 31, 1909.



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W. W. THOMAS
The Strawberry Plant Man
152 Main Street, Anna, Ill.

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Box 85 MUNCIE, IND.

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Five famous poultry-show judges, known all over the country, contribute to the latest edition of "Poultry Secrets"—Michael K. Boyer's remarkable book. J. H. DREVENSTEDT tells his method conditioning

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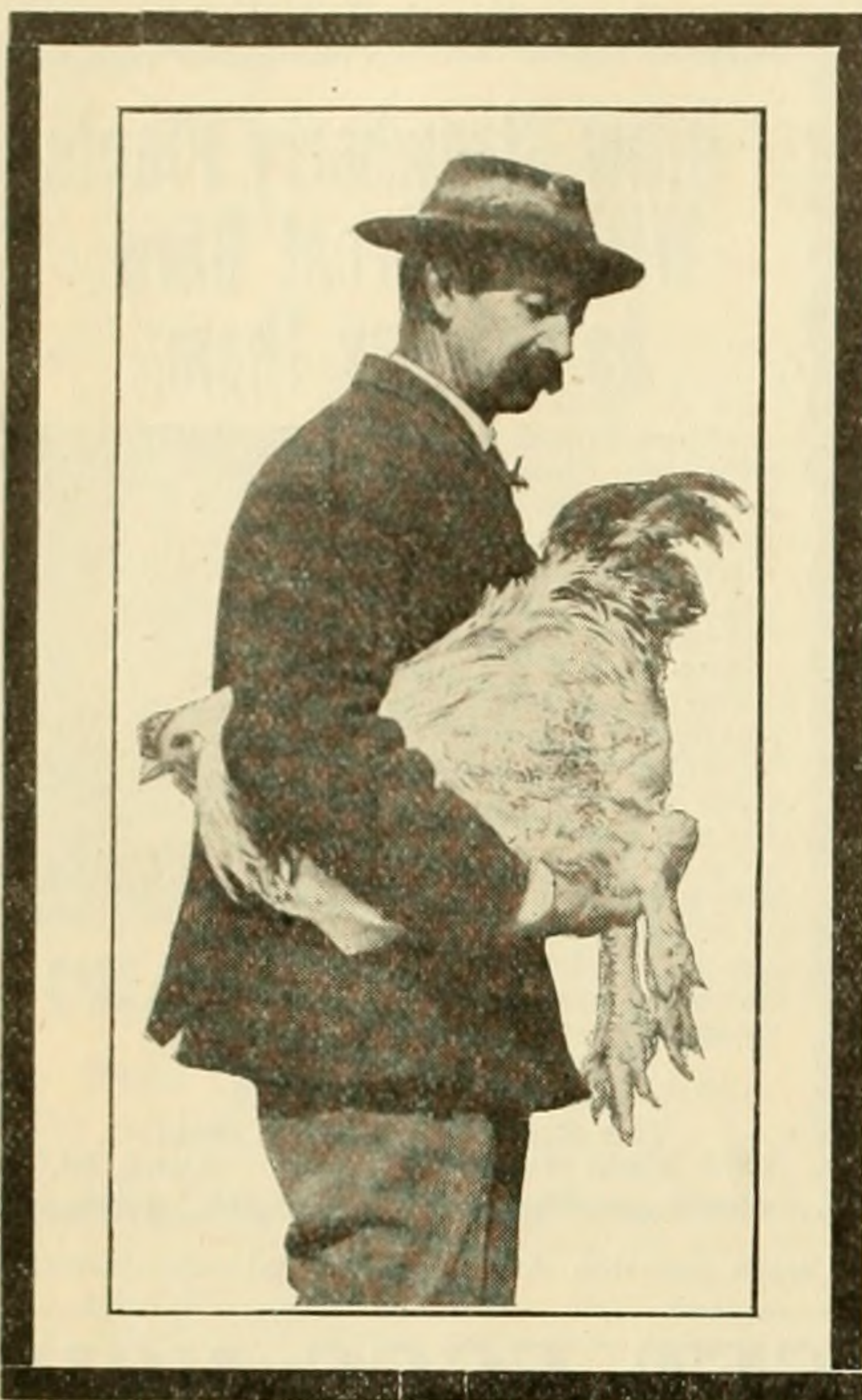
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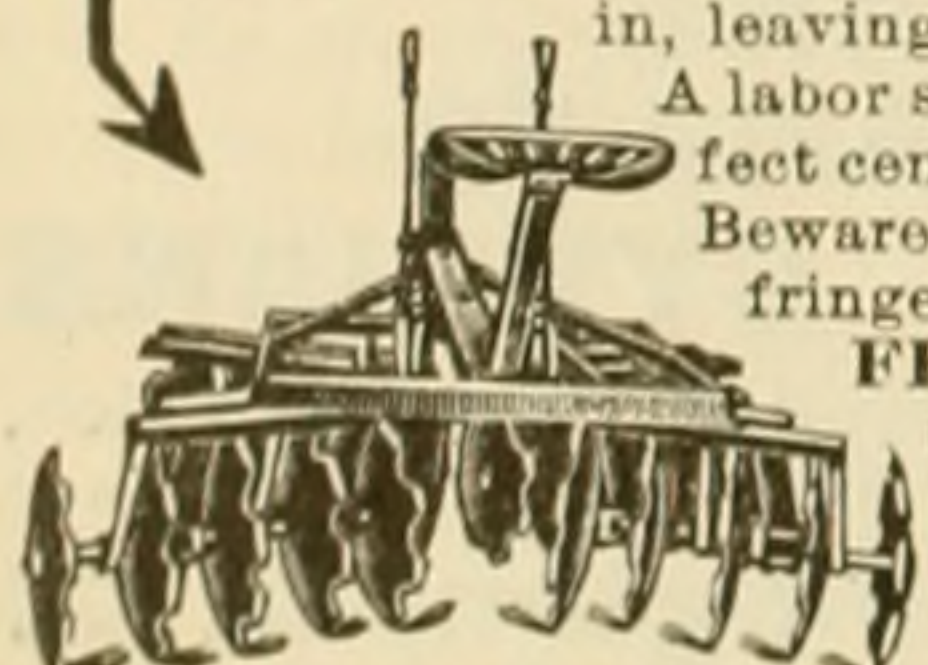
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How About Your Advertising?

Have you anything to sell? Any bees, honey, hives, or anything else that you think the readers of the American Bee Journal might want to buy? If so, why not offer it through our advertising columns? See rates in the first column of the second page of every number of the Bee Journal. We try to keep our columns clean and free from any dishonest advertising. Such can not get in, if we know it.

Our Clubbing List.

We have arranged with some of the best magazines and other publications to offer them in connection with a year's subscription to the American Bee Journal. If there are any others that you would like to subscribe for, be sure to let us know what they are, and we will quote you price. Our list so far as made up is as follows, the prices applying only to the United States, outside of Chicago:

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The picture shown above is a reproduction of a motto queen-button that we offer to bee-keepers. It has a pin on the underside to fasten it. PRICES—by mail—1 for 6 cts.; 2 for 10 cts.; or 6 for 25 cts. Address,

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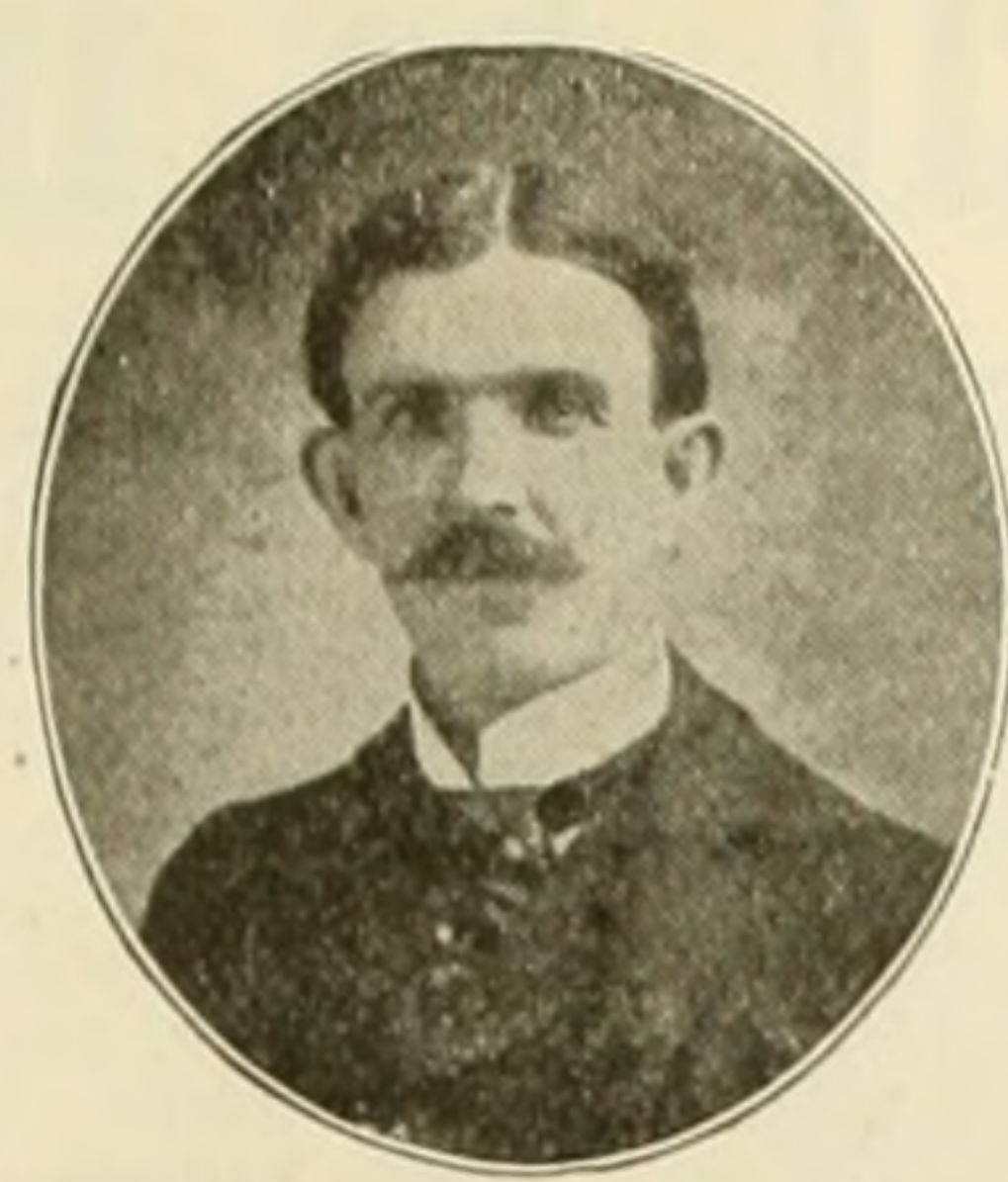
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CHICAGO, Dec. 28.—The demand for honey of all kinds has been slack during December, but we are looking forward to the next two months bringing a demand sufficient to take the surplus now on hand. Fancy grades of comb honey sell quickly at 16c, with the under grades slow at from 10c to 30c per pound less. Extracted is in good demand for clover and basswood, which brings 8c, and the off kinds are from half to a cent less in price. Amber grades are steady at 6½c, with some at 7c. Beeswax in good demand at 32c, if clean and of first quality. R. A. BURNETT & Co.

BOSTON, Jan. 1.—Fancy white comb honey at 16½c; No. 1, 15½c. White, extracted, 8½c; light amber, 7½c; amber, 6½c. Beeswax, 30½c. BLAKE, LEE CO.

KANSAS CITY, Mo., Dec. 20.—The demand for both comb and extracted honey is good; the receipts light. We quote: No. 1 white comb, 24 section cases, \$3.50; No. 2 white and amber, \$3.25 per case. White extracted, per pound, 7½c. Beeswax, 25½c. C. C. CLEMONS PRODUCE CO.

CINCINNATI, Dec. 28.—The market on comb honey is exceedingly brisk, and has made an advancement. We quote comb honey, 24 sections to a case, in large lots, \$3.50 per case; by the single case, \$4.00. The market on extracted honey is good. Sage at 8½c per pound; amber in barrels, 6¼c to 6½c. Beeswax is fair at 33c. These are our selling prices, not what we are paying. C. H. W. WEBER & Co.

TOLEDO, Dec. 30.—The demand for honey as practically ceased, as is usual at this time of the year, and as so many producers have held on to their crops there is a tendency to shove it out, which, of course, weakens the market, and prices have somewhat declined. We are quoting fancy white from 15½c to 15¾c; No. 1, 14½c to 15c; very little de-

mand for darker grades. White clover extracted in cans would bring from 7½c to 8½c, and is in fair demand. Very little demand for lower grades. Water-white sage we are quoting at 8½c. Beeswax is quite firm at 28½c. THE GRIGGS BROS. CO.

INDIANAPOLIS, Dec. 28.—There is a good demand for best grades of both comb and extracted honey, but jobbing houses are well supplied. Practically no honey is now being offered by producers, and jobbers are selling No. 1 and fancy white comb at 17½c to 18c. Best extracted, 9½c to 10c, according to quantity taken at one shipment. Poor demand for amber honey and no established prices. Producers are being paid 28½c for good average beeswax. WALTER S. POWDER.

ZANESVILLE, OHIO, Dec. 28.—The local honey market is usually very quiet at the holiday season. For this time of year the demand is about normal. Producers should receive from the jobbing trade 14½c to 15c for No. 1 to fancy white clover or raspberry comb honey, and for best extracted in 5-gallon cans, 8½c, delivered; wholesale prices ruling 2½c higher on comb, and 1½c on extracted. For clean yellow beeswax, producers are offered 28c cash, or 30c in exchange for merchandise. EDMUND W. PEIRCE.

NEW YORK, Dec. 20.—During the past few weeks the demand for comb honey has slackened off somewhat. There is still a fair demand for No. 1 and fancy white, but off grades and dark are rather neglected, and not in much demand. While our stock is not large, it is sufficient to meet the demand, and straggling lots are still coming in. We quote: Fancy white, 15c; No. 1, 14c; off grades, 11½c to 12c; buckwheat and dark, 10½c to 11c, according to quality. Extracted, demand fair, principally for California; prices ruling the same as our last quotation. Beeswax, steady, and in good demand at 30c. HILDRETH & SEGELKEN.

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I have just received my goods, and am more than pleased with them. I had intended to make my hives; but when I received the sample hive and saw the No. 1 pine lumber it was made of, and considered the workmanship, I felt satisfied that I can buy cheaper than I can make them—enough cheaper to save the price of the lumber. O. C. MILLS.

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