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# THE CANADIAN BEE JOURNAL

AND POULTRY WEEKLY.

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

Vol. V. No. 17

BEETON, ONT., JULY 17, 1889.

WHOLE No. 225

## THE CANADIAN BEE JOURNAL & POULTRY WEEKLY.

ONE DOLLAR PER ANNUM IN ADVANCE.

### ADVERTISING RATES.

All advertisements will be inserted at the following rates

#### TRANSIENT ADVERTISEMENTS.

10 cents per line for the first insertion, and 5 cents per line for each subsequent insertion.

Space measured by a scale of solid nonpareil of which there are twelve lines to the inch, and about nine words to each line.

#### STANDING ADVERTISEMENTS.

	3 MOS.	6 MOS.	12 MOS.
6 lines and under.....	2.50	4.00	6.00
One inch.....	\$4.00	\$6.00	\$10.00
Two inches.....	5.50	9.00	15.00
Three inches.....	7.00	13.00	19.00
Four inches.....	9.00	15.00	23.00
Six inches.....	12.00	19.00	30.00
Eight inches—1 Col.....	15.00	23.00	40.00
Sixteen inches—1 page....	25.00	40.00	75.00

#### STRICTLY CASH IN ADVANCE

Contract advertisements may be changed to suit the seasons. Transient advertisements inserted till forbid and charged accordingly.

#### BEE, BIRD, EXCHANGE & MART.

Advertisements for this Department will be inserted at the uniform rate of 25 CENTS each insertion—not to exceed five lines—and 5 cents each additional line each insertion. If you desire your advt in this column, be particular to mention the fact, else they will be inserted in our regular advertising column. This column is specially intended for those who have bees, poultry, eggs, or other goods for exchange for something else and for the purpose of advertising bees, honey, poultry, etc., for sale. Cash must accompany advt.

#### BREEDERS' DIRECTORY.

\$1.00, one line; \$1.50, two lines; \$3.00, three lines per annum.

THE D. A. JONES CO., LD., BEETON,

## PUBLISHERS' NOTES.

We will always be glad to forward sample copies to those desiring such.

The CANADIAN BEE JOURNAL will be continued to each address until otherwise ordered, and all arrears paid.

Subscriptions are always acknowledged on the wrapper label as soon as possible after receipt

American Currency, stamps, Post Office orders, and New York and Chicago (par) drafts accepted at par in payment of subscription and advertising accounts.

We can supply Binders for the JOURNAL 55 cents each, post paid, with name printed on the back in Gold letters. Subscription Price, \$1.00 per Annum Postage free for Canada and the United States, to England, Germany, etc 10 cents per year extra; and to all countries not in the postal Union, \$1.00

The number on each wrapper or address-label will show the expiring number of your subscription, and by comparing this with the Whole No. on the JOURNAL you can ascertain your exact standing.

Communications on any subject of interest to the Bee-keeping fraternity are always welcome, and are solicited.

Beginners will find our Query Department of much value. All questions will be answered by thorough practical men. Questions solicited.

When sending in anything intended for the JOURNAL do not mix it up with a business communication. Use different sheets of paper. Both may, however be enclosed in the same envelope.

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

ERRORS. — We make them: so does every one, and we will cheerfully correct them if you write us. Try to write us good naturedly, but if you cannot, then write to us anyway. Do not complain to any one else or let it pass. We want an early opportunity to make right any injustice we may do.

## CLUBBING RATES

THE CANADIAN BEE JOURNAL & POULTRY WEEKLY.

AND "Gleanings," semi-monthly.....	\$1.75
" " "American Bee Journal," weekly.....	1.75
" " "American Apiculturist," monthly.....	1.75
" " "Bee-Keeper's Guide," monthly.....	1.40
" " "The Bee-Hive" .....	1.25
" " "Beekeepers' Review" .....	1.40
" " "Beekeepers' Advances" .....	1.20
" " "Queen-Breeders' Journal" .....	1.35

**EXCHANGE AND MART.**

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

**BEEES**

**1 000** LBS. of Bees for Sale at 75c. per pound. Italian Queens, warranted, \$1 each; \$8 per doz. by return mail. J. A. FOSTER, Tillbury Centre.

**5** and 10 lb. Honey Pails for sale. The same kind of pails that the Dadants use. Prices 80 cts and \$1.00 per doz. EDWARD LUNAU, Buttonville, Ont.

**FOR** Sale.—300 lbs No. 1 Brood Foundation, natural base, at 40 cts per lb. Also 100 8-frame Combination Hives complete for Ext Honey; 25 same as above for Comb Honey with the new reversible honey board and reverses. For prices and further particulars apply to BURTON BROS., Osnabruck Centre, Ont.

**POULTRY**

**FOUND AT LAST**—How to keep eggs fresh the year round for about a cent a dozen; send for circular to DR A B MASON, Auburadale, O., U.S.

**TO** MAKE room for young stock I offer the following, viz.: A handsome trio of Silver-laced Wyandottes in fine breeding condition \$10. A beautiful pair of rose comb White Leghorns \$6. A pen of very handsome light Brahmas, last June hatch, cockerel and 4 pullets \$15. Also six fine large barred Plymouth Rock hens \$10. Six single comb White Leghorn hens for \$6. All the above are in fine breeding condition. W. C. G. PETER, Angus, Ont.

**BIRDS**, Parrots, Dogs, Ferrats, Cats, Monkeys, Rabbits, Bird Eyes, Goldfish, Song Restorer, Trap Cages, Distemper and Mange Cure. Wilson's Big Bird Store, Cleveland, Ohio.

**REDUCTION**

**LAWN MOWERS**

**L**AST season the prices were almost above reach, but they are down again, and we can now furnish them, shipped direct from the factory at the prices which follow:

10 inch cut \$4.75 | 14 inch cut \$5.25  
12 inch cut \$5.00 | 16 inch cut \$5.50

The open cylinder mowers will be sent where no special instructions to the contrary are received. The "Close" cylinder may be had by those who prefer it.

**THE D. A. JONES Co., LTD.**  
BEETON, Ont.

**HOW - TO - MANAGE - BEEES ;  
OR BEE-KEEPING FOR THE "MASSES"**

Every farmer, and all beginners in bee-keeping, as well as those more advanced, should have it, as it is especially adapted to their wants. Fully up to date. Price \$1.00 by mail. In beautiful paper covers. Illustrated. Address

**W. S. VANDRUFF, Waynesburgh, Pa.**

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

Send \$1.00 for 250 Noteheads and 250 Envelopes with your name and address printed on them.

**Salesmen Wanted.**

**SALARY AND EXPENSES PAID**, or liberal commissions, Outfit free. Permanent positions guaranteed. Experience unnecessary. Special advantages to local men who devote part time.

**J. P. THURSTON & Co.**

Empire Nurseries, Rochester, N. Y.

**SMALL  
SECTIONS.**

We have on hand a large lot of Sections which, when filled, can well be sold for 10c. This is a good opportunity for those who think of exhibiting and selling honey at the fall exhibitions. The sizes we have are as follows:

20,000 D.S. 3 1/2 x 4 1/2 x 1 1/2.  
2,000 D.S. 3 1/2 x 4 1/2 x 1 1/4.

These are all put up in boxes holding 500 each, and we will sell them at \$2 per 1000; \$1.25 per 500. We have also on hand

67,000 D.S. 1 1/2 x 1 1/2 x 1 1/2

Which we offer at \$3 per 1000; \$1.75 per 500, to clear.

**THE D. A. JONES CO, LTD.,**  
BEETON, ONT.

**Fanciers' Printing!**

**CIRCULARS & BUSINESS CARDS**  
for Fall Advertising.

**LABELS:—"LIVE FOWLS WITH CARE,"**

For Shipping Coops, 25c per 100.

**SEND FOR SAMPLES AND PRICES.**

**BEEEMEN**

Send 5 cents for Specimens of our Honey Labels.

**THE D. A. JONES CO. LD.**  
BEETON

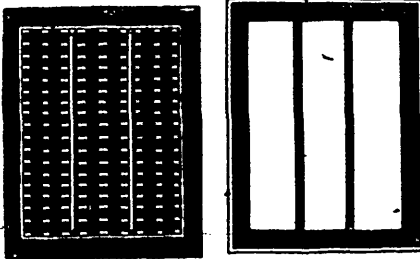


# Super Arrangements.

We have yet to hear of a single complaint in regard to our new

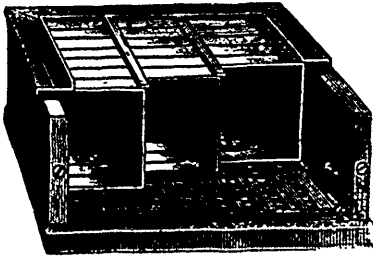
## REVERSIBLE HONEY-BOARD AND SUPER REVERSER,

And thousands of them were in use last season.



SHOWING REVERSIBLE HONEY-BOARD AND REVERSER

We make them to suit a y hive, but keep in stock only the sizes to fit the Jones Single Walled, Combination and Langstroth (13x20 in. outside measure) hives.



IN THIS ENGRAVING THE SECTIONS ARE SHOWN AS FITTING ON THE HONEY-BOARD WITH THE REVERSER COVERING THE JOINTS OF THE SECTIONS.

For prices apply for our catalogue.

THE D. A. JONES CO., LTD., Beeton Ont.

## LAND FOR SALE.

25 ACRES of Land for sale in the Township of King County of York, part of lot 15, con. 3, 37 miles from Aurora on the Northern R R and 1 1/2 miles from Eversley P. O. One of the best localities in Ontario for bee keeping or for poultry keeping. The soil is adapted for fruit growing. 1 1/2 acres of apple orchard and other choice fruit trees. Also on the property a cider mill and a powerful screw press, doing a large business every season; good buildings; a never failing stream of pure cold water runs across the lot. The property can be sold with or without the mill and press. Immediate possession can be given. Apply to the owner, JOHN LEIGH, Eversley P.O.

## WHO WANTS BEES.

100 COLONIES for sale or exchange for anything I can use. All kinds of bee supplies for sale also queens for sale in season.

JAMES ARMSTRONG.

CHEAPSIDE, ONT.

## BROTHER BEE-KEEPERS

If you wish any supplies or Edn. made, please drop me a card before you ship, as I am not certain that I can get it out for you. Only brood Edn. made this season. A few Hives, Supers, Brood Frames, and Bees for sale. "Empire State" Potatoes for sale.

WILL ELLIS,  
St. David's, Ont.

# The Teacher.

Who advised her pupils to strengthen their minds by the use of Ayer's Sarsaparilla, appreciated the truth that bodily health is essential to mental vigor. For persons of delicate and feeble constitution, whether young or old, this medicine is remarkably beneficial. Be sure you get Ayer's Sarsaparilla.

"Every spring and fall I take a number of bottles of Ayer's Sarsaparilla, and am greatly benefited." — Mrs. James H. Eastman, Stoneham, Mass.

"I have taken Ayer's Sarsaparilla with great benefit to my general health." — Miss Thirza L. Crerar, Palmyra, Md.

"My daughter, twelve years of age, has suffered for the past year from

## General Debility.

A few weeks since, we began to give her Ayer's Sarsaparilla. Her health has greatly improved." — Mrs. Harriet H. Battles, South Chelmsford, Mass.

"About a year ago I began using Ayer's Sarsaparilla as a remedy for debility and neuralgia resulting from malarial exposure in the army. I was in a very bad condition, but six bottles of the Sarsaparilla, with occasional doses of Ayer's Pills, have greatly improved my health. I am now able to work, and feel that I cannot say too much for your excellent remedies." — F. A. Pinkham, South Moluncus, Me.

"My daughter, sixteen years old, is using Ayer's Sarsaparilla with good effect." — Rev. S. J. Graham, United Brethren Church, Buckhannon, W. Va.

"I suffered from

## Nervous Prostration,

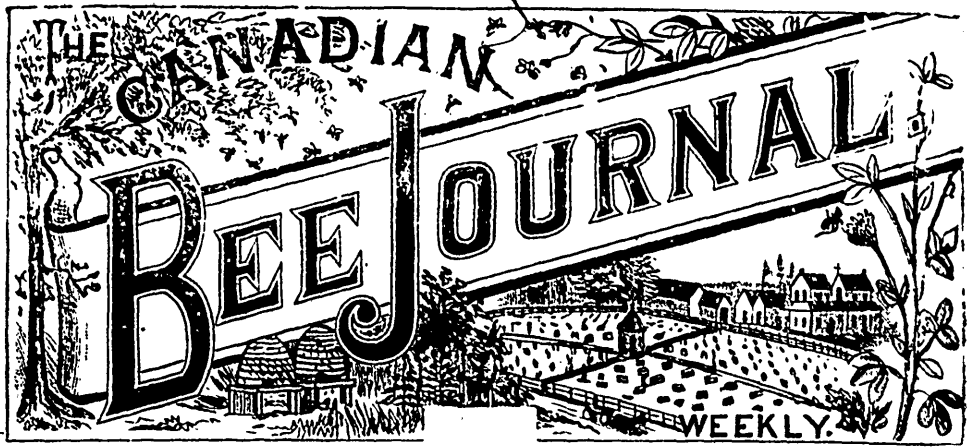
with lame back and headache, and have been much benefited by the use of Ayer's Sarsaparilla. I am now 80 years of age, and am satisfied that my present health and prolonged life are due to the use of Ayer's Sarsaparilla." — Lucy Moffitt, Killingly, Conn.

Mrs. Ann H. Farnsworth, a lady 79 years old, So. Woodstock, Vt., writes: "After several weeks' suffering from nervous prostration, I procured a bottle of Ayer's Sarsaparilla, and before I had taken half of it my usual health returned."

## Ayer's Sarsaparilla,

PREPARED BY

Dr. J. C. Ayer & Co., Lowell, Mass.  
Price \$1; six bottles, \$5. Worth \$5 a bottle.



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

VOL. V. No. 17

BEETON, ONT., JULY 17, 1889.

WHOLE No. 225

## EDITORIAL

WE are now mailing the premium queens to all who are entitled to them in the order in which they are entered in our books. All who should receive them will, therefore, be on the lookout for them.

### OUR OWN APIARY.

THE attendants at two of our outside yards report a steady honey flow from various sources. But they are disappointed at the scarcity of the yield from alsike. By one of the yards is a 25-acre field, and very little honey has been gathered from this source. Why is it? We hope that the reports for Aug. 1st will specially mention the yield from alsike, and note whether the flow has been scarce or not.

Basswood is just coming into bloom and is exceedingly promising, while Canada thistles too are just coming out. Within a half-mile of our home yard is a field of ten or twelve acres, almost solid with Canada thistles, and we expect great results from it. You will wonder if our authorities allow this troublesome thistle to grow right in our midst. Well, no! They have just had a man engaged cutting all down along the streets of the village, but as this field is our own property they cannot go on and clear it themselves, and they are willing to give us the benefit of the

yield, providing we cut them down before they go to seed, which of course we will.

### SWARM BALLING QUEEN.

On the 9th inst., about 5 p.m. a first swarm came out, and flew to a distance of about 200 yards, settling on a grape vine.

The foreman immediately proceeded to hive them, while doing so he noticed that the bees were balling the queen right in the cluster. He freed her and placed her at the entrance of the hive with her head pointing inward. Before she had travelled more than two or three inches she was again being balled. He then began to think that there must be two queens in the cluster and he caged this one in another hive. The swarm went right into the hive prepared for them and were all right until the next morning.

As soon as the foreman went into the yard he at once went to this swarm to see if it was all right, and whether or not they had a second queen, and found that they had not, and that moreover they were making every preparation to swarm out. He then took the queen which they were balling the evening before and placed her at the entrance when she ran in and they accepted her without further trouble.

We mention this case for two purposes: 1st. to ascertain from some of our brethren, if possible, what their opinions are as to why the swarm should ball its own and the only queen

it had; 2nd. To say that though the queen happened to be accepted when she was placed at the entrance of the hive and allowed to run in next morning, yet it is not a wise proceeding. It would have been safer and better to have caged the queen on one of the combs for the first 24 hours when there would have been scarcely any danger of her non-acceptance. In an apiary like our own where we generally have queens to spare it is always well to try experiments, but with the bulk of those who read the JOURNAL the safer plans had better be adopted.

On June 11th a first swarm came out of one of the hives and as soon as they were out they started direct for the woods without alighting. The foreman followed them for a time but they were soon lost to view, and though he searched the woods the same evening no trace of them could be found.

#### QUEEN CELLS IN UPPER STORY.

In examining the upper extracting chamber of a hive on the 11th inst. on which the queen excluding honey-board had been placed three weeks ago and in which the queen had not been at any time, our foreman found three queen cells almost ready to hatch out. When the honey-board was placed on and the second story added he had taken two or three frames containing brood nearly ready to hatch out and had put it in the upper chamber. This brood had hatched out right away afterward and at time of this examination he found nothing in the shape of eggs, larvæ, or hatching brood—nothing but the queen cells mentioned.

Where have these come from? Have the bees carried the eggs up from the lower story? Our Mr. Jones who has charge of "Our own Apiary" being from home at the present moment has not yet heard of this case. He may probably be able to solve the conundrum, but in the meantime we should like to hear from everyone else who has had any experience like this.

By the way, it seems to us that a good many of our friends are forgetting the BEE JOURNAL in the way of furnishing us with the many small items of importance which transpire in their bee yards. We can excuse them to a certain extent, on account of the busy time of year,

yet we should like very much to hear from all, be it only half a dozen lines, if they have anything of interest to relate; any freak to which they would like to call attention or anything new which has come under their notice and which might be explained were it once given to the public.

#### Formic Acid for Foul Brood.

**C**RITICISING the use of formic acid as a remedy for foul brood Mr. R. A. H. Grimshaw, in the current Record remarks that Salicylic acid and phenol solutions administered to infected combs as a spray, and to bees in syrup, have both succeeded and failed, so I think will this last most dangerous remedy of the three—formic acid. I used this stuff years ago in experiments (besides sulphuric, nitric, benzoic acetic and other acids), as to what the bees thought of them; and of all things I had to be most careful with, formic was the worst, for unless much diluted it blisters and hurts the hands or face as badly as any of them, and it had the infelicitous knack of stimulating the bees to curl in their abdomens in the way we all object to when they are in one's hands. If I may offer an opinion I would advise your readers to try common vinegar (dilute acetic acid), exactly as we are recommended to use the other acids, for it is not so much the kind of acid which is inimical to the growth of bacilli in the body of the bee, or the life of the spores in the foul brood itself as it is the question whether the spores and the mature organisms require acids, oxygen, nitrogenous or carbonaceous substances to develop themselves in, or in which their growth and reproduction are retarded or destroyed.

The bacillus found in infected bees is considered as belonging to the pathogenic (disease causing) class, as distinct from the septic (putrefaction or fermentation causing) and that in the healthy organisms of the animal (bee) which resists the attack of disease germs, there is some chemical substance, enabling it to so remain proof, which is either absent or in a minimum quantity in the weak or unhealthy subject waiting ripe for an attack in order to fall a victim. Now as formic acid is secreted by the bee itself, it may be that an abnormally low percentage of this acid in the blood,

or in the poison bag for regular domestic use, just renders the queen fit for infection. The brood may (by its absence in the brood food) also be just in condition to be preyed upon by spores floating about in a diseased hive, whilst the worker-bee, by carrying about infected honey, spreads the infection to young queens fed on royal jelly. Thymol, salicylic acid, phenol, and perchloride of mercury have been found, well diluted, to retard the growth of disease germs, but so far as I can learn, unfortunately such germs have been found to actually develop and multiply rapidly when the supposed poisonous dose has been afterwards increased, even to double its strength. Koch gives us a fine list of antiseptics (thymol, arsenate of potassium, turpentine, clove oil, iodine, permanganate of potash, eucalyptol, camphor, quinine, salicylic acid, benzoic acid, etc., etc.), but gives the palm to perchloride of mercury, "1 in 600,000 solution impeding, and 1 in 300,000 completely checking the germinating power of spores." Yet even this substance (*i. e.*, corrosive sublimate) which is highly poisonous, acted no more upon the life of the germ than weak vinegar would. Ten per cent. of phenol was no better. How, then, can we expect much from fumes of an acid, or a spray which we are bound to use so weak that the skin may not be injured. Besides, we must bear in mind that the presence in the hive of large quantities of carbonic acid would result from the use of much formic acid, and this we know is inimical to animal life.

I am afraid we are not yet within measurable distance of a complete cure for foul brood, one which destroys the spores when used as a spray, and also destroys the bacillus itself when given as food to the live bee. Certain chemicals which will kill a plant will not injure the seed; for the latter, like the spores of bacilli, are provided with marvellously protective skins. To destroy combs, brood and hive, and feed queen and bees upon syrup containing almost any acid in clean combs, fumigating with camphor, phenol, terebentine, thymol, menthol, fir wool oil, or similar hydrocarbon would be my procedure if it were ever my fate to be in such ill luck as to have a visit from what I call "bacillus incognito."

#### NEW FOUNDATION FASTENER.

FROM Mr. J. W. Whealy, of Kinross, we have received a sample of his new machine for fastening foundation in sections. The frame measuring thirteen inches in height, eight in width and nine inches deep, is ingeniously made and held firmly together by dovetailed mitres, no nails, screws or glue being used.

When in use it stands on the edge of a table, a steel plate fastened to the bottom projecting sufficiently to be heated by a lamp. This steel plate has a tongue measuring nearly four inches across, so that it readily slips inside an ordinary sized section.

The section is placed on a small spring table having a piece exactly half the width of section for ensuring the foundation being placed precisely in the centre. Slight pressure with the hand brings the edge of the wax in contact with the warm steel plate; when the pressure is released the foundation is fastened securely in position.

The device is very simple and quite ingenious, and with one or two slight improvements might be made to serve a very good purpose. With it sections can have foundation placed in them very speedily; five or six a minute is a low estimate.

There are a great many new devices for this purpose coming to the fore at the present time, and a serviceable arrangement which would not cost the user more than about \$2 would meet with a ready sale. Doubtless such a machine can be made—we think Friend Whealy's could be produced for that figure—that would meet all the requirements of the bee-keeper.

FOR THE CANADIAN BEE JOURNAL.

Free Trade—Increase and Comb Honey.

MR. Editor, would you please let us have a few leaves of your BEE JOURNAL for about 6 months to discuss free trade on, of course, but it'll do no hurt as I can see to let me and Hamalshire and some others have a little talk on free trade. Of course some readers will kick, and won't like it, but let them lump it. Give us the leaves and let's all I care, I hain't never sed nothin' about free trade nor any other polly-ticks in your journal cos I thought it would be prostituting my common sense too much, and we alers ben a protectioner



at that, but every since your true Britan writers, I mean them as dont never prostitute their names by signing them to their pieces—I mean every since they hav had the habit of sticking free trade under mi nose once in every little while, Ive got kinder used to it, and kinder hanker after it. Thars nothin like getin used to a think I see, and that aint all, I don't believe thade force any lie on me by telling me free trade was good for us when twasent. Now please send me word that I can have the leavs and you be sure the are out, and send me a *nom de plume*, and a law to work by, and Ile see what can be done for free trade.

We have had much cold wet weather here, but if we have strong colonies they are ever ready, to improve each golden moment and such moments do come even in the worst seasons. My bees have been slowly, but surely, laying up honey. Many of my colonies have filled sixty-three one lb sections each already and they are nearly capped over, my first new honey went to market yesterday. Have worked for no increase of colonies this year, and made it a success so far, and the method is very simple. The trouble with many methods of nonswarming is, they are too complicated. They may do for a few colonies, but won't do on a larger scale. I have been studying the principles of nonswarming, and find it a hard matter to prevent swarming when raising comb honey, but, believe I can raise comb honey exclusively and prevent increase of colonies in a way that will not give my bees the sulks or any bad temper. Let us all try some experiment on a small scale looking to this end, and bring in our verdict. According to the success I am meeting with in preventing increase of colonies, and with success of the same kind in the past, and as people are gaining better knowledge of wintering bees, I think that prevention of increase of colonies will be the next important step in bee-keeping.

JOHN P. GATES.

Erie, Ovid, Pa.

### Unfinished Sections.

CONCERNING the use of unfinished sections, I wish to say that, for several years past, I have used all I could get of them.

Not two or three only, just to entice the bees into the supers, but when I have plenty of them I fill some supers full of them; and the bees will fill with honey and cap them several days sooner than where full sheets of foundation are used in the sections, other things being equal even though they may commence just as readily upon the foundation as in the other. Where

foundation is used it requires a large cluster of bees in the super all the time, to carry on comb-building successfully and rapidly, when, if the combs are already built, the most of those bees can go to the field to gather nectar during the day, and evaporate it at night, as friend Doolittle has so clearly shown, and so far as quality or appearances are concerned, I should feel quite safe in offering to give to any man, be he novice or expert, all of such sections that he could detect, judging the honey alone, when they were mixed up with others which had only foundation in them when put in supers. Some of the wood might be a little more soiled, or stained with propolis, or something of that sort, by which an expert might possibly detect them, but not from the appearance of the honey or comb. I never put a section containing old honey, partially capped, into a super to be finished without first removing all cappings, and I never put in one containing any dark honey in time of white honey harvest. And even empty combs that were built in the fall, when the weather was cool, are often thicker and heavier, and sometimes much darker colored than combs built in June and July. Any such dark or heavy combs should not be used for the storage of white honey, for reasons which are too obvious to need explanation.—JOSHUA BULL in Gleanings.

### QUEENS.

RESULTS OF EXPERIMENTS AND OBSERVATIONS.

IN this article I wish to give a bit of my experiences as regards introducing queens, rather than to point out any particular method for so doing.

In a practice of nearly twenty years many things have come under my observation which have been interesting, and have thrown light on an operation which has many times proven, not only to myself, but to multitudes of others, to be not always a successful one.

Heretofore the loss of the queen has been charged mainly to the bees rather than to the queen, parties even being so rash and provoked as to crush a ball of bees enclosing a queen under their feet, when in reality the queen was the one to blame. Many queens would never be molested in the least by the bees if they would behave themselves as they did in the hive they were formerly in; and I venture the prediction, that when we arrive at a plan that will always place the queen with strange bees in the same quiet condition she was in while in the hive in which she was reared, we shall be successful every time. To substantiate this position I will give some of my experience in the matter.

Some years ago I had a queen which began failing during the forepart of the season. Wishing to replace her, I went to a nucleus and took out their queen, which had been laying about a week, then going to the colony having the failing queen, I removed her and placed this young queen on the combs instead of the old one. She immediately commenced to "peep," just as a virgin queen does when there are rivals in the cells in a hive calculating to send out an after-swarm. To this the bees paid no attention, but came to her with the intention of feeding her, to all appearances; but instead of taking food offered by them, she put out her foot and struck at them, or laid hold of their heads with her feet, and continued "peeping." She passed around among the bees, "peeping" at intervals for about five minutes, I should judge (I watching all the while), when she came to a young bee just hatched, all white and fuzzy. She immediately uttered a short "peep" and then clinched the little thing, and stung it so it curled up and died in an instant. At this the bees became exasperated, and showed signs of hostility for the first time, they now beginning to lay hold of the queen for the first time, as far as I had noticed.

With a little smoke I dispersed them and still continued to watch. In about 15 minutes she stung and killed at least a half dozen of these young bees, and was seen each time by the bees, but as I often dispersed them with smoke, at all other times they were ready to feed her and treat her as they did their old queen. Once or twice she took food of them, but as a rule struck at them with her feet when they offered her food. I closed the hive and left them then.

Upon looking the next day I found queen-cells started, and supposed her dead; but in about two weeks, they cast a swarm and lo! there was my queen running around in front of the hive, for her wings were clipped. I opened the hive, but found no eggs or brood (except sealed brood), cut off the queen cells, and returned the bees, upon which she commenced laying, and made a fine queen. I have had several such cases since, yet none quite as persistent as was this queen.

Again I have had queens which the bees treated as they would their own queen, but they would not stay in the hive at all. They would run out at the entrance, often followed by a few anxious bees which would feed them and keep them alive. I had one out thus till I had put in another queen, and she had begun to lay when I found the first under the bottom-board of the hive with a few bees with her.

Thus many facts in my experience go to prove that the queen has more to do with the loss sustained in introducing than the bees. Well, says

one, "If this is so, how can I remedy it?"

The plan I have lately adopted is this: Make a cage out of wire cloth, having about 16 meshes to the inch, large enough so that it will cover some honey and quite a little hatching brood, by cutting little squares out of each corner, and then bending the sides up at right angles, so as to form a bottomless box as it were.

Remove the queen you wish to supersede, shake the bees from the comb and place your queen on it where there is some honey and hatching bees, and then place the cage over it, pressing the edges of the wire-cloth into the comb till the cage does not project beyond the surface of the comb more than half of an inch.

Hang the comb in the hive, leaving three-fourths of an inch between it and its fellows, so that the bees can go all around the cage.

In a few hours, or the next day, open the hive, and if the queen is reconciled to the strange colony she will be quiet, and the bees quiet on the cage. When you find it is generally safe to lift the cage, when she will go quietly among the bees the same as she would have done in her own hive.

The presence of the young bees with her, which have hatched from the brood enclosed within the cage, has much to do in expediting matters and reconciling the bees and queen.

If on the contrary the queen is found running around, and the bees are biting at the cage, do not let the queen out till such conditions cease to exist.

The above are the conclusions which I have arrived at, which may not be entirely correct, still I believe them to be nearly so in the main. I have introduced hundreds of queens as above, and rarely if ever lose one.—G. M. DOOLITTLE, in American Rural Home.

Borodino, N.Y.

### A Non-Swarming Race of Bees.

WOULD THEY BE HONEY-GATHERERS AS WELL AS NON-SWARMERS?

IS it possible, from a practical standpoint, to produce a strain of non-swarming bees? If so, will they not be indifferent honey-gatherers, and lack the vitality necessary to be the bees wanted by the practical apiarist? "Why do bees swarm?" has been fully answered, and we infer that one prime cause is an overabundance of bees with a prolific queen, both in connection with a bountiful honey flow. Very likely by producing queens for several generations from stock of limited laying qualities, we may be able to produce a strain of bees that will not swarm, and for very obvious reasons. We

ave queens in our own apiary that are four years old, and yet they have not swarmed, even under what might be called favorable circumstances. These bees always winter well, and breed up early enough in the spring; but when the honey harvest comes we find they are non-honey gatherers as well as non-swarmer; this leads us to almost conclude that non-swarmer queens are of but little use to anyone, the only reason we can give for this non-swarmer is that they lack the necessary ambition. The queens we like are those that keep their hive overrunning with bees, and when honey comes in they will want to swarm, non-swarmer or not. There is certainly no queen worthy of being kept in a colony if she is not prolific enough to keep the hive overflowing with bees under favorable circumstances, and if such is the case then non-swarmer is more the result of poor layers than a predisposition not to swarm. We don't say there is no such thing as non-swarmer bees, for we have got them in our own yard, and our opinion as before stated, is that the reason for it is a lack of ambition. Perhaps friend Boardman will say the reason for their not swarming is because they are perfectly contented and if he is right, then we want to say we have more contented bees than we want. We look upon non-swarmer bees about as we do on a non-swarmer hive with patent moth-trap attachment, and if we put non-swarmer bees and queens in such a hive, we have the *ultima thule* of worthlessness. If such would not be the result, we will give one of our non-swarmer to know why. Then again, will not a queen be more liable to swarm in one locality than in another, if so, then of what moment is a strain of non-swarmer bees? There is not the least doubt but that a strain of non-swarmer bees would be a bonanza to thousands, providing they were as hardy and prolific as the best strains of Italians, or even hybrids, but in our humble opinion, such a point has not yet been reached, but far be it from us to say that it will not be reached in the future, for it may be possible, but if there are any non-swarmer bees that are as hardy and prolific, and as able to send out the field-force as some of our best Italian colonies, we want to see them, and we want to see them pretty bad. Our experience says there are none; but as we don't know it all, we are willing to be convinced just the same as we are willing to be convinced that there is a better general purpose bee than the pure Italians.

M. W. SHEPPARD in Gleanings.

Rochester, Ohio.

**TO THE DEAF.**—A person cured of Deafness and noises in the head of 23 years standing by a simple remedy, will send a description of it FREE to any Person who applies to NICHOLSON, 30 St. John St., Montreal.

### The Best Kind of Fuel to Use in Bee-Smokers.

ONE of the "cold bast" smokers have draft sufficient to burn sound wood, but almost any kind of material will burn in the direct draft smokers.

While rotten wood is valuable as a quick means of kindling a sound-wood fire in the direct-draft smokers, it is much more trouble to control and keep burning steadily than sound stove-wood. The sound wood also makes a much stronger smoke; i.e., it is not steam and air mixed, but clean, strong, pungent smoke, containing very little creosote, and free from condensation. Especially is this true if the stove-wood is placed in the sunshine, on sunny days, to dry it perfectly. It cannot be too dry, nor dried too often. It does not burn faster for being dry, neither slower. With long, dry sticks, the direct draft-smoker is simply a base-burner—that is, sound wood burns only at the bottom, close to the grate, and this is one of several valuable features peculiar to sound wood.

Here it may be well to specify a weakness or two incident to rotten wood. One of them is, that it does not last long; the reason why it does not is, that it takes fire all over, and so, while yielding a cloud of smoke and steam, puts the operator to the needless trouble of refilling so often.

Of course, if you have a smoker in which only rotten wood and rags can be made to burn, the question of fuel decides itself. On the contrary if your smoker will burn anything combustible, you have a wide field to select from, and convenience in obtaining may be to you the features of all others determining which is best.

T. F. BINGHAM in Am. Bee Journal.

Abronia, Mich.

### Getting Bees Started to Work in Sections.

I HAVE never had any trouble to get bees to work in sections by simply placing in the center of the super a section upon which the bees had previously worked. It does not matter whether the honey has been emptied out or not, only so that previously it has been partly filled with honey. The severest test I ever gave to this plan was last year and the year before. In each super put on, I placed in the middle a section that had been filled or partly filled with honey, and this honey had all been emptied out. Every colony which had any honey to spare from the brood chamber commenced promptly in this section, filled it with honey, and com-

menced putting honey in the adjoining sections. These colonies were very few in number. The others, which had no more honey than was needed in the brood chamber, as well as many which had not enough for the brood chamber, commenced work in the "bait" section, generally filling and sealing it. I had many supers with the "bait" section filled and sealed, and not another section in the super worked on. So I feel pretty safe in saying that, with such a bait section in the super, my bees will work as readily as I want them to, in the supers. The bait sections are likely to be second class, but there need be only one for each colony, not one for each super.

#### SHALL UNFINISHED SECTIONS BE AGAIN USED.

Since writing the above I have read friend Green's article, on page 449. I think the strongest discussion ever had on the matter of using unfinished sections was at the National Convention, at Chicago, and, if I remember correctly, it was a pretty one-sided affair. I believe I gave no opinion, unless it was to say that sections *partly filled* at the time of putting on, were sometimes watery after being filled. But I've asked myself some questions about it since, one of which was this: If bees will commence and finish a section of foundation quicker than one filled with comb, how does it come that so much more extracted honey can be produced than comb, especially by those who allow the honey to be sealed over before extracting? The Dadants, it is well known, do no extracting till the close of the harvest, leaving the combs to be sealed over, and on page 429 of that excellent book, the Revised Langstroth, they say, "If we give to bees empty combs, to store their honey, we shall find, by comparing the products of colonies who have to build their combs, with those of colonies who always have empty combs to fill, that these last produce at least twice as much as the others." Now, if they produce twice as much in the course of the season, can they not produce it more rapidly? However that may be, there seems to be a pretty plain statement that, in the course of the season, twice as many pounds of honey will be stored in ready-built combs, as in foundation. Now, if that be true of full-sized combs—although the Dadants do not use full-sized combs for extracting—why is it not true of combs of any size, even down to  $4\frac{1}{2} \times 4\frac{1}{2}$ ? And if these sections can be sold for only two cents less than the best, they are still very profitable, if even a fourth more honey can be produced in them. I confess that I have been quite puzzled to reconcile these apparently contradictory statements and opinions. Without

being at all sure of my ground, I may be allowed to give a possible explanation. Remember that many, like friend J. A. Green, have held the view that a section used by the bees last year will not be filled as soon as one containing only foundation, and that it is not profitable to use such. One year I used a number of sections partly filled, left over from the previous year. I cannot now tell whether they were filled more or less promptly than the others, but they were filled and stored for some time with the others. Before very long I found these sections, which had been left over from the previous year, becoming watery, the honey oozing through the capping, while the sections built on foundation were all right. Now, in this case is it not probable that the honey left over in these sections was unripe to begin with and, after being kept over the winter, had soured at least a trifle? And is it unreasonable to suppose that the bees would be slower in filling such sections than in filling those furnished with foundation only? I remember, that at that same convention at Chicago great stress was laid upon the importance of having all vessels, used to contain extracted honey, very clean—the least remains of granulated honey being enough to spoil a lot of fresh honey. Now, is it not possible that those who have found unfinished sections so objectionable have used those containing some old honey, at least as much as the extractor would leave in them? The sections I used for bait are treated in this way:

Those containing much honey are extracted the previous fall, and all are cleaned out thoroughly by the bees, a pile of supers being left where the bees can rob them, the entrance, however, being *large enough for only a single bee*. I could not be induced, I think, to dispense with such bait, and I wish friend Green and others would try it and report.

Let me suggest how to settle pretty conclusively whether unfinished sections or foundation will be finished first. Take such bait sections as I have described, the last vestige of honey cleaned out of them by the bees—mind you, this must be done at a time when bees will rob, or they are not likely to clean the sections thoroughly—and put one in the middle of each super. Now, don't wait till the whole super is finished, but watch from time to time and see what is the first section finished. Another good way is this:

Fill a super alternately with sections of comb and foundation, then keep close watch and find the time when *all* the sections of one kind are finished, but not the others, and see which kind it is. Better not consider the outside row on each side, as local causes may affect them.—C. C. MILLER in Gleanings.

### Feeding in Spring.

QUERY No. 240.—How do you usually feed in spring? I don't like feeding at entrance, and want a better plan.

G. M. DOOLITTLE, BORODINO, N. Y.—I do my feeding in fall.

DR. C. C. MILLER, MARENGO, ILL.—I put combs of honey in the hive or else put a feeder on top.

J. K. DABLING, ALMONTE, ONT.—By filling one or more combs and placing behind the division board

JACOB ALFAUGH, ST. THOMAS, ONT.—Give combs of honey if I have it if I haven't got that I lift a comb or two out of their hive and fill them with syrup and return them again.

EUGENE SECOR, FOREST CITY, IOWA.—I do so little feeding that I have no plan. The better plan is—if possible to carry it out—to have a frame of last year's honey to give the colony

PROF. A. J. COOK, LANSING, MICH.—Nor do I. I like the White feeder the best of all. It is described in my book and I think it meets all the requirements of a feeder.

R. MCKNIGHT, OWEN SOUND.—Use the Canadian feeder. It is the best in use. They are placed on top of the brood frames, filled and covered up, and that is the end of the trouble. I use no other spring or fall.

MARTIN EMIGH, HOLBROOK, ONT.—If I feed syrup I do it on top under the cushion. I have a small flat feeder on purpose for spring feeding, but I would prefer a good full comb of honey in the hive.

J. F. DENN, RIDGEWAY, ONT.—When I have it I lay a comb of honey over the cluster, when I do not have the honey I use Good candy. Gently raise the cover of hive, lift the cushion and place feed over the brood frames.

WM. McEVoy, WOODBURN, ONT.—About sundown I move back the division board and put in a comb of sealed honey if they need any feeding. I always save over sealed combs for that purpose.

JAS. HEDDON, DOWAGLAC, MICH.—I advise against stimulative feeding at any time of year. To feed for any and all other purposes I use my own special feeder which covers the whole top of the hive. I never liked entrance feeding, and believe I was the first to make and use a top feeder to cover the whole hive.

A. B. MASON, AUBURNDALE, OHIO.—I have hives with tight bottom boards and raise the front end and pour the feed in at the entrance in the evening, unless I have extra combs with honey in. I think the next best method is to use the Cutting entrance feeder. No bees can get at the feed except those in the hive

G. W. DEMARRE CHRISTIANBURG, KY.—I feed with any suitable feeder on top of the frames protected by an upper story. A common fruit jar with a thin cloth tied over its mouth, after being filled with liquid honey or syrup, and inverted over the cluster is as good feeder as any.

G. A. DEADMAN, BRUSSELS, ONT.—I use a hive having double walls at the sides with a space of one inch. I have a feeder arranged in the upper part of this space and that portion not occupied as a feeder is filled with chaff. The feed is supplied through an opening in the outside wall and the bees reach it by an entrance from the inside. With this you can feed about 150 colonies per hour with little labor.

H. D. CUTTING, CLINTON, MICH.—If you want to stimulate in spring feeding at the entrance is all right, but if short of stands and the weather such that bees cannot fly then feed on top of frames, use candy or very thick syrup. I prefer to feed thin syrup at the entrance if bees can fly with safety.

J. E. POND, NORTH ATTLEBORO, VT.—I don't feed in spring at all unless there is lack of stores, and I would not advise others to do so. Stimulative I think a humbug, but when I used to believe in it I fed on top of frames. By so doing the chance for robbing is greatly lessened. If I fed at entrance I should only do so at night.

ALLEN PRINGLE, SELBY, ONT.—With all fast bottom hives which are tight and painted behind inside I pour the feed down in the back part of the hive on the bottom-board at night, tipping the hive up a little in front to prevent liquid running out at the entrance. With loose bottoms I feed on top of frames with some sort of feeder, but never feed at entrance. A good way is to fill empty frames of comb with the syrup and insert them when needed.

LADIA SWANSTON.—Am always glad to get the JOURNAL. Last season had three colonies, got about 60 lbs of honey and three swarms, two of which I lost and the other did not do much good. Have three colonies this season, all of which are doing well. Have no swarms so far but have upper stories on. Do you consider honey ripe when capped over? I have in my garden a flower which we call the Corn Flower. The bees work a great deal about it. I send a flower.

CORNELIUS SMITH.—Put into winter quarters fourteen packed in chaff. Lost one from starvation, two from robbing, remaining eleven were in A1 order. Fruit trees bloomed early and the weather being fine swarms came off May 16th and two following days. Cold and wet with frosts shut off swarming for two weeks but now it is finer and the bees have the fever again. Have had eight swarms and am looking for more every day. White clover bloomed about May 15th, was cut off by frosts but is coming on again. Alsike is in very good bloom and bees are storing rapidly. I think I will have to extract this week. We look for a large yield this summer. Bees wintered well around here as far as I know. I have a large number of cherry trees planted around the fences for the sake of the bloom.

# POULTRY ♥ WEEKLY

W. C. G. PETER,

EDITOR.

*All communications intended for publication must be sent to W. C. G. Peter, Angus. All advertisements, subscriptions and business letters to be addressed to the Publishers, Beeton.*

## LIBERTY.

THE season is now over for saving the eggs for hatching, and as soon as possible now let the hens be separated from their mates. All the hens could be kept in one flock and allowed out as much as possible to get good range and pick up a great part of their living outside. This will help the males to get a little extra flesh and be in better condition to go through their moult. The hens too will moult easier and quicker for the separation. The more liberty you can let them indulge the more eggs you will get, and they will enter winter quarters in fine condition, well over their moult and ready to go to laying when prices are good.

Any of the stock that is not intended for keeping over might as well be marketed now before prices decline too much. Choose a cool spell of weather in which to market, and in warm weather draw the birds, having first kept them for a few days off the grass to prevent the flesh of the abdomen from turning color too quickly. Especially should this be done if the birds are not to be drawn before marketing them, as they look so unsightly, as if the flesh were putrid.

Nothing is saved by keeping the hens now, for the sake of the few eggs they will lay before and during moulting; if intended for market the extra price obtained now will about equalize the loss of the eggs, as the feed and care are

saved also, and must count in as part saved. All young chicks as soon as found unfit for show or sale through any bad defect in plumage or form may as well share the same fate and go to the block, making room for the rest of the flock to do better, and get the benefit of extra room.

If you have any surplus pens, or rather runs, that will not be needed for a couple of weeks or so, be sure to take advantage of the time to get the runs spaded up and seeded down with Hungarian or millet to make a green pasture for the time when you wish to separate young stock, or enclose any specimens to prepare for exhibition. Besides the cheery appearance the green makes a most desirable contrast by which to show the beauty of the flock to the best advantage. If you see a pen of fine Light Brahmans on a nice green sward, and another equally good in a pen with the ground quite destitute of verdure, the impression on your mind would be that the last named were a far inferior lot of birds. Next to white on the green I think the beautiful colors of the Brown Leghorn males show most gloriously; they are so dainty too, almost seeming the earth they tread so proudly, the pretty, demure, light-footed pullets; vaunting as gracefully as a columbine upon every available spray, and enjoying the swing of the twig that seems almost too frail to support them. We must not begin in this strain however, or we could find no chance to finish, for all are beautiful, from the majestic Brahma to the tiny Bantam, pets above all, they seem to be, and vain! Yes! but that is only an added charm.

Do not keep ducks in the same house with chickens, nor in the cabbage and lettuce garden.

### The Number of Eggs a Hen will Lay per Year.

HERE is occasionally seen an old time account of an investigation made, covering an unlimited time, to discover the pro ratio of eggs a hen will give in the first four years of her life, and what she can accomplish after that period. Some celebrated naturalist made the discovery (?) that a hen will lay 20 eggs the first year, 120 the second, 135 the third and 144 the fourth, and after that decrease; but we are not informed as to the backward gradation. In mercy perhaps it was withheld from us. Now we are always pleased when a great man condescends to graft his powers on the hen-tree, but we are afraid that in this instance they did not co mingle satisfactorily, the tree was too much for the graft we expect. There may be cases where a hen will lay a given number as stated. But any experienced breeders can "floor" him as to it being a general thing. Thanks to increased poultry interest and higher culture we can get 144 eggs per year long before the four years are due, as stated by the specialist, and we can keep up to 144 per year till after that period too; tho' not too often we admit, as we do not often keep the hens long enough to prove their powers after the four years. Some twelve years ago we were given as a legacy a three year old Black Hamburg hen, that had been a pet bird, we kept her four years after that, and even to the last day of her life she was a splendid layer. She didn't die she was killed by accident, as Pat would say, or she would never have been killed then for her decrease in laying powers. We have now an old Plymouth Rock pet bird that is seven years old this spring and an everlasting layer; as good as ever at present; besides others that have come under our personal observation. There is no certainty as to what any hen will do in the matter of egg production, and certainly there is no decided number for her to lay predestinately, in the first, or any other year of her age. It is largely theory that presents to us these facts (?) and only a practical knowledge of what is possible can avail anyone in refuting them. An early hatched Leghorn, Wyandotte, or Plymouth Rock pullet will lay more likely 50 eggs the first year than 20. We

are not disposed to regard excessive egg producing stories with too much confidence either; the experienced poultryman will know where to draw the line between truth and the stricture that is applied to it in cases of egg and fish stories. Still unreasonable accounts of anything relating to the powers of poultry stock, do much harm to the cause. We are now reaping the reward of several extravagant booms that have been taking place the last three years, but it will find its level and the business will rest on a more solid foundation. Booms in the poultry business, which have a tendency to and do create false estimates of its profit, and character generally do much harm to this industry, as false and fictitious values in land act to the detriment of a country till the excitement is over and a business like life takes its place.

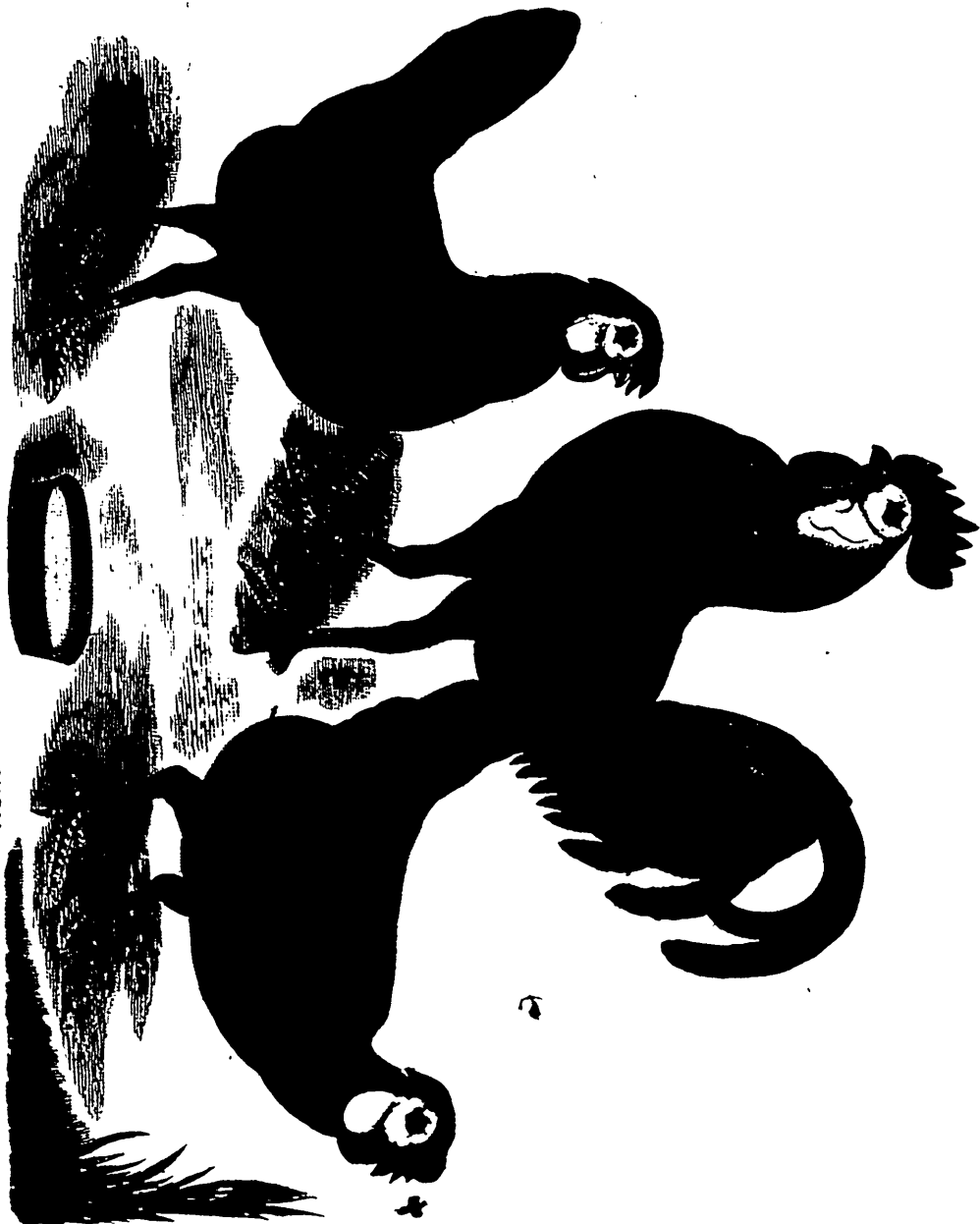
### White Faced Black Spanish.

OUR illustration represents an old-time favorite variety. As the name implies, the plumage is black throughout. Any foreign colored feathers found in a specimen disqualifies the bird, that is, rule it out of competition in the show pen.

It is within our memory that the Black Spanish fowls were a hardy, vigorous breed. But a great deal of value in late years has been placed on the white face, in fact so much, as to greatly destroy the vigor and fecundity of the race. For, to obtain this white face, inbreeding to a destructive degree has been resorted to. The consequence is, that public opinion is against them, because of the lack of hardihood that has become their heritage.

This variety lays the largest white egg of any breed, and used to be noted for good laying power, and still where common sense guides the breeder we can find large stocks of hardy, handsome birds, but they are not typical show birds at this date. Personally we fail to see any added beauty in the extension of the white face to such extremes as it is now seen. Of late there has been a falling off even in show stock as to numbers; but these showy birds still have their admirers, and no doubt when some of the new booms are over we shall find one or two old fanciers

WHITE FACED BLACK SPANISH.





turning their attention to the old love again—a new span of life with brighter hopes will dawn on this once highly popular variety.

The Standard now demands that the face all over, even above the eyes and extending deep down into the wattles be a "pure opaque white." This being in strong contrast to their rich red combs makes them very attractive. In fact a fine group of carefully bred Black Spanish fowls are sure to command and attract the attention of the most careless beholder. We trust it is not destined to keep such a poor place among the poultry of to-day. It only takes judicious breeding to bring about a change in its favor. The eggs are among the very best for flavor and unequalled for size.

#### Going Into the Chicken Business.

*Continued.*

FOR we are likely to find the man who tells his brother fancier that "the only way to be a successful breeder of high scoring birds, is to breed and give all his attention to one variety." Of course we used naturally to turn to the advs. to see what breed had made fame for the writer of this gratuitous advice; but the advertising page affords no proof of the idea entertained by the writer of "one breed being the sure road to success," it looks more like the reverse. For here are at least six or seven kinds all being bred by the advocate of "one breed." Still for the beginner one is enough; as an old friend remarked to us, he "only tried one variety and that possessed enough cussedness to put any man in an asylum." There is yet another source of trouble the amateur makes for himself. Being proud of his new hobby, he is anxious that the birds shall have a pretty house to dwell and raise their high-born families in. Especially if he has a little genius for artistic work, he desires it shall possess some specimens of his own handiwork. The result being that what was intended for an ornament to the building becomes a dwelling place for the enemy—lice. The fixings are just the very place where these pests can lie in ambush undetected and even unsuspected.

Then again the pen was built to accommodate perhaps ten birds, and

these had abundance of room to be sure, but the next season the surprising fact comes home to him that he had forgot about a place to put the sitters, and the chicks too. Well, he thinks over it and then asks neighbor Brown what he shall do. "Why, you have lots of room here, just put a partition across the corners, and let your hens sit there." Well, now, he thinks Brown pretty smart for thinking of that; it is so very simple too. And there if his sitters are "old regulars," they may, in spite of the distraction of the other birds who are not sitting, get off a decent hatch for him. So far so good, and why not let Bidly stop there for a week or two, while the coops are building. After the chicks are a few days old he misses two or three, and finally finds one dead and mangled corpse in the pen, and vows vengeance on the whole feline race forthwith. Cats! Of course it was cats. But going in one morning early he finds that the other birds object to the presence of crying babies, just as old maids and bachelors object to the crying human specimen. He gets in just a second too late to save one he has taken much pride in, from being disembowelled by an unnatural old hen that may possibly be its own mother. Now he longs to wring her neck. He may possibly try to catch her, just to try what a little gentle suasion will do, but after he has trod on two or three more chicks, and broken a window and the drinking fountain, he gives it up. He thinks he will "let her go this time," as he sees he can't catch her unless he becomes a hen himself, with equal chances to hers. Brown's idea does not seem so good now, but who would think the hens would be so spiteful, he can't get over that thought. And so our novice becomes gradually acquainted with the ins and out of keeping chickens. If he has been so foolish as to buy out old Jones' stock he will likely be tired before the end of the season, but if he has invested in a few good birds it is a source of delight to watch their growth, till they begin to show symptoms of looking like their parents; or, nearly matured he can trace the very character of "Prince" who is so great a favorite with his master that even that name seems hardly good enough for him.

### Management of Poultry on a Prize Farm.

IN the report in the Journal of Royal Agricultural Society of England on the first-prize farm at Nottingham, occupied by Mr. S. C. Machin, of Papplewick, Nottingham, it is said, "Fowls are a most important item of the live stock of the Forest Farm. The return from them last year was £67, but probably next year it will be much more, because of the great success of a new incubator by Hearson and Christy, which has replaced a very inferior one previously used. This very capital artificial mother had hatched off 500 chickens in early July as fast as it could act, and without a check of any kind, and all of them were the very pictures of health and thrift. The temperature is regulated by a most ingenious self-acting arrangement, which shuts off the heat when a proper degree of it is reached, and thus obviates the great danger which besets most incubators. The young chickens are generally fed with wheat, dari and oats, and those of early spring are sold for 5s. 6d. to 6s. 6d. a pair. In autumn and winter they make 7d. a pound to private customers in Nottingham, and the breed is so good that 16 pounds is not an uncommon weight for a couple of them. The eggs are supplied from seven fowl-houses on wheels, which have been made at home from old carts or vans, and boarded in and properly fitted for the laying of hens. Each contains when desired, a separate breed, or a cross between them, of fifty or so in number, and the houses are drawn from field to field about the farm, to secure the healthiness of a new run, and to give the fowls an opportunity of living principally upon the worms or insects which are useless or injurious to the farmer. As the fields are cleared after harvest, of course they are taken to pick up the leavings there. The eggs are gathered by the younger sons before and after school. A favorite cross is Plymouth Rock with Langshan or Dorking. The pigeons yield £19 a year besides seven loads of manure from them and the fowls, which is also carefully treasured for the roost."—Fanciers' Gazette, London.

The above is very interesting as showing the ease with which these portable houses can be managed. They possess a double advantage, in that they can be utilized to prevent any part of the ground becoming too freely drenched with the manure from the birds, and that would be no small item to recommend their use on farms large enough

to permit of their transportation. The portable house plan is not at all new to Americans though, for it has been freely practised in the States for many years.

Another element of success in the above item is the limited number of birds under each roof. It is too common to see them over-crowded, which militates against their profits always.

### The Top Crosses, or Breeding up to a Higher Standard.

DO not all at least place the importance they should upon the sires that head their breeding pens. It often happens by neglect that good flocks are allowed to run down in size, and fall off in color through neglect. Thoroughbreds suffer much from neglect. The breeding of them late, and poor care in winter, injudicious food and confinement in summer all have a tendency to crowd them into second class. The birds are pure in blood, and their owners wonder why they are not as nice as the trio they purchased two seasons before from which they sprang. Let me tell you how you can find out all about it.

You purchase a prize sire and mate these females; then hatch the chickens when nature intended they should be hatched, from March 30th to May 30th; give them a cool shade in summer, comfortable quarters in winter, and proper food. Next year you breed back to this new sire the best and largest females of his get, keeping up this generous care, and, in the same time you saw them run down, you will see them back to their old time excellence. The secret of the matter is here: Thoroughbreds are more susceptible to fine care, give you greater returns for generous outlays, and feel the neglect double that a scrub does.

Many farmers will not take pains to rear thoroughbreds, but are well pleased if their general flock lay them a generous supply of eggs. It is a fact worth remembering that pullets from thoroughbred sires and mongrel dams always increase their prolificness, and that the progeny lay larger and a greater number of eggs than the original mongrel stocks. Three top crosses will obliterate all traces of the scrub origin of the great-great-grandams this grading up process was commenced with. While on the other hand a scrub male will deteriorate the strain, and his pullets from thoroughbred dams will lay smaller and a less number of eggs than the original dams. Neglect, poor breeding and poor care, you see, never pay.

The shortest road to success then is, to purchase prize stock to start with; but, if necessity

prevents, then buy a prize and thoroughbred male, breed back to him the females that have type and color of his race and breed. The third year buy another prize male and repeat the process, when the progeny bring fifteen-sixteenths the blood of the top crosses, the blood of the original dam being but an element of foreign blood that may have proved one of the best crosses that could have been used.

Such a course is far wiser than to buy scrubs from thoroughbred flocks at a cheap price. To illustrate, suppose you buy a pair of Brahmas at five dollars, and in two years you buy for a cross another pair of five dollar Brahmas; at the same time a neighbor buys a male worth 10 dollars and crosses his flock the second year; he breeds the pullets back to him, and in two years he buys a cockerel and repeats. He will have a flock of fowls that will be far better, and yet he will have one-sixteenth of foreign blood, but he will have four years' breeding from a sire that was strictly first class, and at the end of four years will be infinitely ahead of the buyer of scrub thoroughbreds.

One may indulge in two-dollar-and-a-half and three dollar females in thoroughbreds, if he will buy with them a prize and judiciously mated sire, for he can kill half the flock; the balance which favor the sire in the breeding will be good, the poorer half being killed for practical purposes and to keep the factory running, will leave a lot of prize females to breed back to this first-class sire, when in two years they are restored to excellence.

This is the difference between prize and poor sires. The sire begets to a greater degree the type and color, the grand characteristics of his race. The hen is an auxiliary: the germ that grows, feeding upon the egg until it breaks the shell into independent life, is imparted by the male, and is altered by the quality of the food eaten. Thus we see each generation growing better until the maternal ancestor is swallowed up by the blood of the sire and its type obliterated. To top cross with thoroughbred males is to advance; to use mongrels or poor thoroughbred sires is to retrograde and lose in reputation as a breeder and flatten your pocket-book.

Do not construe my article as advice to buy none but males, but take it as I give it. No matter what your flock, buy a thoroughbred male if meat and eggs for culinary purposes are your wishes, for you will get a greater number and larger eggs. If your thoroughbreds are dropping off, buy a prize male, and give them better care and quarters, and restore their excellence.

If you are unknown, you have got to rely on

the practical part of your business till you can make a reputation as a breeder of thoroughbreds. If you have but fifteen dollars to expend, put nine of it into a male, three dollars each for two females. If you have twenty-five dollars, pay ten dollars for a male, and buy four or five females for the other fifteen dollars, for you will hardly be able to sell all you raise as breeding stock the first year, nor would it be to your advantage to do so. Kill thirty-three per cent. and sell for poultry. In after purchases of males, never pay less than ten to twenty-five dollars, and get your money's worth. A cockerel worth fifteen dollars, and three females at ten dollars; making the four birds twenty-five dollars, is a far more judicious purchase than four birds worth six dollars and twenty-five cents each, for you have purchased no lifting power in the male. Remember the male is one-half the breeding pen, no matter if there be but one female or eighteen. If that half of your breeding pen is a grand bird, he will do you good. This is the difference in points.

Male scoring 94 and female scoring 90 points, the breeding average is 94 plus 90 equals 184, divided by 2 equals 92 points, with the chances of many as fine as the sire or better than 94.

Even if you buy a sire at 92 points, with hens at 92 points; you have the same breeding average, 92, with no better chance in the sire to lift half your birds to a higher plane of breeding.

It is a safe thing to do, when spending any amount from twelve to fifty dollars, to put one-half the amount in a sire for the pen, and buy the females more modest in their score; but it is not wisdom to purchase under 90 points, unless your business is to be largely poultry and eggs, in which case, let the modest merit be for want of color rather than size, for weight in dam is all important. I have written enough to show you a grand sire means success.

I. K. FELCH in Poultry Monthly.

For the Poultry Weekly.

#### BROODERS FOR CHICKS.

**I**AST winter wife and I decided to raise poultry in connection with our 100 colonies of bees and had begun to stock up small houses over our 25 acre farm when to our agreeable surprise the C.B.J. comes to us as a poultry journal, as well as continuing our beloved bee department, hence the JOURNAL has doubled its value to us. We purchased a trio each of Langshans and Brown Leghorns. The Leghorns are our favorites for eggs and hardiness of chicks. We have put off about 600 chicks of half breeds by natural incubation but fully 50% have died, we attributed our loss to a

want of knowledge in caring for them properly. Our ardor is not abated however and we are now preparing to raise chicks in brooders without their mothers. We are much interested in what is said of incubators and desire to know more of them before we purchase. We have never seen one and will have to purchase on a recommendation as soon as we know which is best and think we can manipulate it.

W. H. LAWS,

Lavaca, Arkansas, July 2, '89

We were pleased to receive Friend Law's letter as above, but cannot understand the loss of so many chicks; it is too late now to profit by advice in caring for them. You will acknowledge the brooder is ahead of hens, Bro. L., but there must be no crowding; also remember you must have a brooder-house, as any brooder that we have yet seen or handled will not allow enough freedom for exercise after the chicks are a month old, and the board floors tend to produce leg-weakness. The brooder-house must have an earth floor for the chicks to do their best in thriving. You can procure from W. H. Rudd & Son, 10 Merchants' Row, Boston, Mass., a book containing complete instructions for making home-made brooders and much valuable information besides. They furnish them to their patrons free, or any one can purchase one by payment of one dollar, which may be deducted from amount of any purchase during the year. But the directions are well worth the dollar, as their brooders are practical and good, at least we have high authority for saying so, we have not had any experience with them personally. The book is illustrated to make it plain for those who desire to make up the brooders. Incubators are getting more perfect every year. The "Monarch" is very successfully used on your side the line, as well as many others. Here the first success we have had is with the "Gerred." We shall in all probability try one of "Hearson's Champions," an English machine that has been highly recommended to us. We think you will find less trouble to hatch than to raise the first chicks. If you have not previously had some experience with hand raising of chicks we would advise beginning in a rather small way to gain knowledge. The difficulty is, that brooder chicks grow too fast, and care must be taken not to allow

them too much highly concentrated food or force them too much. And never mind what theorists say, but give them a supply of sharp gravel and prepared ground or granulated bone. If ground, put a small quantity in the soft feed, say a teaspoonful to twelve chicks two or three times per week. You will find most incubators easy to manipulate and all makers send directions in full. Let us hear from you again, we will gladly furnish any information in our power.

#### The Gobbler's Wail.

Here on one foot upon the gray rail-pest  
I stand and look my old eye-glasses through,  
Knowing full soon I must give up the ghost  
To make a holiday feast, without ado.  
And, O, Bismillah, I am feeling blue—  
For in a morning paper I have found  
That first-class turkeys now bring eighteen cents  
per pound!

What though the landscape bright about me  
lies?

What though the sun its golden nectar spills?  
What though the crow in sombre beauty flies  
Into the purple glory of the hills?

My old anatomy has got the chills,  
I know that soon I'll be stuffed full of sage,  
And that is why my tears bedew the printed  
page.

My wattles soon will light the old ash-heap  
My pinions soon will make a kitchen brush.  
A subtle sadness sets me all a-creep.  
Here in the bosom of the twilight hush  
I see the beauteous maid in crimson plush  
Laugh at the feast in most exultant tone.  
While with Young Thingumbobs she snaps my  
frail wishbone.

Pack

#### COMING SHOWS.

Industrial Exhibition at Toronto, Sept. 9 to 21. H. J. Hill, Secretary.

Central at Ottawa, Sept. 9 to 14. C. R. W. MacCuaig, Secretary, Ottawa.

Great Central Fair at Hamilton, Sept. 23 to 27. C. R. Smith, Secretary, Hamilton.

Great Northern Exhibition at Collingwood, Sept. 25 to 27. T. J. Crawford, Secretary, Collingwood.

Dunnville, Dec. 3, 4, and 5. R. H. Marshall Sec'y.

OHIO.

Central Ohio, at Mt. Gilead, Ohio, January 7th to 11, 1890. J. Y. Bickdell, Judge, W. F. Bruce, Secretary.

Cleveland, January 14th to 19th, 1890. C. C. Schellentrager, Sec., Glenville.

Fayette Association, at Washington C. H., January 14th to 10th, 1890. J. B. Collier, Sec.

Union, at Cardington, Dec. 17 to 21, 1889, G. S. Singer, Secretary.

NEW YORK.

International, Buffalo, N. Y., December 11th to 18th, 1889. H. M. Fales, Sec., La Salle, N. Y.

# A Grand Trial Trip.

We want every poultry fancier or breeder in the country on our list of subscribers, and to them we make the following liberal offer:

There are none of you but either have something for "sale or exchange" or some "want," and we offer to all who send us \$1.00, subscription to the CANADIAN BEE JOURNAL AND POULTRY WEEKLY for one year, a

## Free Trial Advertisement

in the "Exchange and Mart" column of the C. B. J. & P. W. Upon receipt of One Dollar we will credit you one year ahead on our subscription list, and will insert at any time during the next six months a FIVE-LINE advertisement as above, for two consecutive weeks.

Cash must accompany the order.

If you do not need the advertisement at once we will, on receipt of your remittance, send you a coupon, which will be good at any time during the continuance of this offer.

It applies to anybody and everybody who desires to take advantage of it, and who conforms to the conditions, viz - pays one full year in advance.

Our regular price for such advertisements as this is 25c. per week, per insertion, and should you wish the advertisement longer than two weeks, it will be charged at the above rates or five times for \$1.00.

Do not delay in taking hold of this grand opportunity.

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TO READERS.—There is one way in which you can materially aid us, whether you are a subscriber or not, and that is in mentioning this WEEKLY when answering advertisements.

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—FOR THE—

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Burnham's New Poultry Book.....	1 50
Cooper's Game Fowls.....	5 00
Felch's Poultry Culture.....	1 50
Johnson's Practical Poultry Keeper	50
Poultry: Breeding, Rearing, Feeding,	
etc..... Boards...	50
Profits in Poultry and their Profitable	
Management.....	1 00
A Year Among the Bees, by Dr. C. C.	
Miller.....	75
A.B.C. in Bee Culture by A. I. Root.	
cloth, \$1.25, paper.....	1 00
Quinby's New Bee-Keeping, by L. C.	
Root, Price in cloth.....	1 50
Bee-keepers' Handy Book, by Henry	
Alley. Price in cloth.....	1 50
Production of Comb Honey, by W. Z.	
Hutchinson. Paper.....	25
The Hive and Honey Bee, by Rev. L.	
L. Langstroth. Price, in cloth...	2 00
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Rev. W.F. Clarke.....	25
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Cook's Bee-keepers' Guide in cloth...	1 25
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by D. A. Jones. price by mail.....	11
A. B. C. in Carp Culture, by A. I.	
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Wintering, And Preparations Therefor	15
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Eggs \$3.00 per 13. Hamburgs \$2.00 per 13. No stock for sale until the fall.

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Will hereafter communicate with me. I will also receive orders for hives and have the same promptly shipped from their factory in Beeton. This hive is now, after three years' public use, the most popular hive in the world among leading honey producers, and has the most and best testimonials from such men as Langstroth, Cook, Hutchinson, Taylor, Siles, Baldrige and many others, ever spoken or written of any bee hive. For this testimony, full description with illustrations and prices, address

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This hive, which we now make in two sizes, to hold eight and nine frames, is the best and cheapest in the market to-day. The inside dimensions are: Length Width Depth  
 Nine frame.... 12 1/2 in. 13 3/4 in. 12 1/2 in.  
 Eight frame... 10 1/2 " 13 1/4 " 12 1/4 "  
 The frame measures 12 1/2 " 10 1/4 "

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Price each in lots of	1	5	10	20	50
No. 33—For extracted honey—Brood chamber, cover, 9 brood frames, second story and 9 extracting frames (same size as brood frames) made up....	1 50	1 40	1 35	1 30	1 20
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No. 38—No. 37 in flat	87	83	80	77	75
No. 41—Brood chamber, including frames and cover, made up	75	83	80	78	75
No. 42—No. 41 in flat	65	62	60	57	55
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No. 44—No. 43 in flat	55	52	50	45	45

### EIGHT FRAME HIVES

No. 15—Same as No. 33, but holding only 8 frames, made up	1 35	1 25	1 20	1 10	1 00
No. 46—No. 45 in flat	1 00	95	90	80	80
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.....	75	70	65	63	63
No. 48—No. 47 in flat	75	70	65	63	63
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No. 50—No. 49 in flat	75	70	65	63	63
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The prices for these are the same for either eight or nine frame hives.

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No. 55—Without perforated metal, made up.....	25	24	23	22	20
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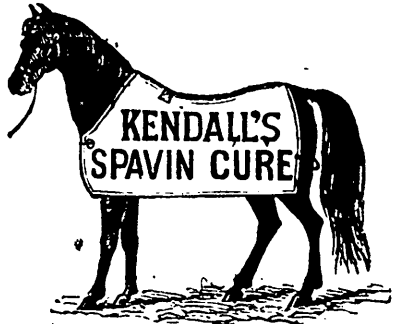
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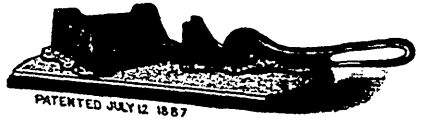
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