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APRIL 1, 1899.

THE PROGRESSIVE BEE-KEEPER
A JOURNAL
DEVOTED TO BEES, HONEY AND
KINDRED INDUSTRIES.

PUBLISHED BY
LEAHY MANUFACTURING CO
HIGGINSVILLE, MISSOURI.

MURRAY-TRISS CLEV.O.

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I have used Ripans Tablets with so much satisfaction that I can cheerfully recommend them. Have been troubled for about three years with what I called bilious attacks coming on regularly once a week. Was told by different physicians that it was caused by bad teeth, of which I had several. I had the teeth extracted, but the attacks continued. I had seen advertisements of Ripans Tablets in all the papers but had no faith in them, but about six weeks since a friend induced me to try them. Have taken but two of the small 5 cent boxes of the Tablets and have had no recurrence of the attacks. Have never given a testimonial for anything before, but the great amount of good which I believe has been done me by Ripans Tablets induces me to add mine to the many testimonials you doubtless have in your possession now.

A. T. DEWITT.

I have been a great sufferer from constipation for over five years. Nothing gave me any relief. My feet and legs and abdomen were bloated so I could not wear shoes on my feet and only a loose dress. I saw Ripans Tablets advertised in our daily paper, bought some and took them as directed. Have taken them about three weeks and there is such a change! I am not constipated any more and I owe it all to Ripans Tablets. I am thirty-seven years old, have no occupation, only my household duties and nursing my sick husband. He has had the dropsy and I am trying Ripans Tablets for him. He feels some better but it will take some time, he has been sick so long. You may use my letter and name as you like.

Mrs. MARY GORMAN CLARKE.

I have been suffering from headaches ever since I was a little girl. I could never ride in a car or go into a crowded place without getting a headache and sick at my stomach. I heard about Ripans Tablets from an aunt of mine who was taking them for catarrh of the stomach. She had found such relief from their use she advised me to take them too, and I have been doing so since last October, and will say they have completely cured my headaches. I am twenty-nine years old. You are welcome to use this testimonial.

Mrs. J. BROOKMYER.

I want to inform you, in words of highest praise, of the benefit I have derived from Ripans Tablets. I am a professional nurse and in this profession a clear head is always needed. Ripans Tablets does it. After one of my cases I found myself completely run down. Acting on the advice of Mr. Geo. Bower, Ph. G., 588 Newark Ave., Jersey City, I took Ripans Tablets with grand results.

Miss BESSIE WIEDMAN.


Mother was troubled with heartburn and sleeplessness, caused by indigestion, for a good many years. One day she saw a testimonial in the paper endorsing Ripans Tablets. She determined to give them a trial, was greatly relieved by their use and now takes the Tablets regularly. She keeps a few cartons Ripans Tablets in the house and says she will not be without them. The heartburn and sleeplessness have disappeared with the indigestion which was formerly so great a burden for her. Our whole family take the Tablets regularly, especially after a hearty meal. My mother is fifty years of age and is enjoying the best of health and spirits; also eats hearty meals, an impossibility before she took Ripans Tablets.

ANTON H. BLAUKEN.

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The modern standard Family Medicine: Cures the common every-day ill of humanity.

ONE GIVES RELIEF.



My seven-year-old boy suffered with pains in his head, constipation and complained of his stomach. He could not eat like children of his age do and what he did eat did not agree with him. He was thin and of a saffron color.

Reading some of the testimonials in favor of Ripans Tablets, I tried them. Ripans Tablets not only relieved but actually cured my youngster, the headaches have disappeared, bowels are in good condition and he never complains of his stomach. He is now a red, chubby-faced boy. This wonderful change I attribute to Ripans Tablets. I am satisfied that they will benefit any one (from the cradle to old age) if taken according to directions.

E. W. PRICE.

A new style packet containing TEN RIPANS TABLETS packed in a paper carton (without glass) is now for sale at some drug stores—FOR FIVE CENTS. This low-priced sort is intended for the poor and the economical. One dozen of the five-cent cartons (120 tablets) can be had by mail by sending forty-eight cents to the RIPANS CHEMICAL COMPANY, No. 10 Spruce Street, New York—or a single carton (TEN TABLETS) will be sent for five cents. RIPANS TABLETS may also be had of some grocers, general storekeepers, news agents and at some liquor stores and barber shops. They banish pain, induce sleep and prolong life. One gives relief.

“Higginsville” Bee Supplies at Kansas City.



Having purchased the good will and business of H. L. Miller, of Supplies, I will be in a position to furnish all Bee-Keepers' Supplies at Higginsville prices.

You will save freight by ordering of me. Write for Catalogue.



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PRICES OF Bingham Perfect Bee-Smokers and Honey Knives,



Smoke Engine	largest smok- er made.	per doz.	each
4 inch stove	3½	\$13.00	Mail, \$1.50
Doctor	3	9.00	1.10
Conqueror	3	6.50	1.00
Large	2½	5.00	.90
Plain	2½	4.75	.70
Little Wonder	2	4.50	.60
Honey Knife	wt 10 oz	6.00	.80

All Bingham Smokers are stamped on the metal, patented 1878-1892—Knives B. & H.

The four larger sizes have extra wide shields and double coiled steel wire handles. These SHIELDS and HANDLES

are an AMAZING COMFORT—always cool and clean. No more sooty nor burnt fingers. The Plain and Little Wonder have narrow shields and wire handles. All Bingham Smokers have all the new improvements, viz.: Direct Draft, Movable Bent Cap, Wire Handles, Inverted Bellows, and are ABSOLUTELY PERFECT.

Fifteen years for a dollar. One-half a cent a month.

Cuba, Kansas, Jan. 27th, 1897.

Dear Sir:—I have used the Conqueror 15 years. I was always well pleased with its workings, but thinking I would need a new one this summer I write for circular. I do not think the four inch “Smoke Engine” too large. Yours,

W. H. EAGERTY.

Corning, Cal., July 14th, 1896.

I have used Bingham Smokers ever since they first came out. Working from three to seven hundred colonies twelve months in the year. I ought to know what is required in a smoker. The Doctor 3½ inch just received fills the bill. Respectfully,

O. W. OSBORN.

Mt. Pleasant, Mich., Aug. 7th, 1896.

Dear Sir—Smokers came O. K. They are the best I have ever seen; sell like hot cakes. Respectfully,

WM. BAMBU.

With a Bingham Smoker that will hold a quart of sound maple wood, the bee-keepers' trials are all over for a long time. Who ever heard of a Bingham Smoker that was too large or did not give perfect satisfaction. The world's most scientific and largest comb honey producers use Bingham Smokers and Knives. The same is true of the world's largest producers of extracted honey. Before buying a smoker or knife hunt up its record and pedigree.

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A Journal Devoted to Bees, Honey, and Kindred Industries

50 Cents a Year.

Published Monthly by Leahy Manufacturing Company.

Vol. IX.

HIGGINSVILLE, MO., APR. 1, 1899.

No. 4.

OUR BOYS.

We are sending our boys to Manila.
Our bravest and strongest and best,
To fight against peoples untutored,
In the islands afar in the west.
Aguinaldo still waxes defiant,
His army retreating each day,
But the merciless dragon expansion
Continues to slash and to slay.

We are sending our boys to Manila.
Their bones on its valleys are white,
And the grasses of jungle and forest
Are red with their blood—is it right?
Our soldiers are fighting undaunted.
The gallantest sons of our land,
Beneath the dear flag of our country,
For a cause that the few understand.

We are sending our boys to Manila.
And many a mother at home,
Is waiting in patience pathetic
A boy who will nevermore come.
Is it worth it, expansionist statesman?
These victories cruel and red
Weigh not with the woe of a mother,
In tears for her sacrificed dead.
—Will Ward Mitchell.

AN EASTER BONNET VICTIM.

She had an Easter bonnet and she wore it
Easter day.
That was Sunday, and on Monday came a
snow, the people say.
The preacher talked about the Christ, new-
risen, deified,
But not a word the people heard, when they
the bonnet spied.

It was a dainty, cute affair, with colors all
aglow.
A flower bed, of green and red, with violets in
blow.
And many maidens envied her, although she
really shivered.
Nor did they hear the preacher dear, "From
pride be wedelivered."

The next day after Monday, Tuesday, was di-
vinely fair,
And everybody went to church—a funeral was
there.
The girls all wore their Easter hats whose
colors brightly glowed.

They planted Bessie Bobbins in the green
across the road.
An Easter bonnet victim—
and
the
next
day
it
snowed.
—Will Ward Mitchell.

WAYSIDE FRAGMENTS.

Somnambulist.

MARCH 27th.—Snowing; and
ground frozen most of the
time. Old winter seems bent
on "wearing out his welcome."
Surely, the perplexities and perversi-
ties arising from the severities of
the winter of '98-'99 will teach the
people many practical lessons; chief
among which, the folly of having
"all the eggs in one basket."

Not many years since this local-
ity was a stock-raising and grazing
country; being naturally adapted to
such pursuits, it followed that it
was equally adapted to the produc-
tion of honey. Cattle were driven
to corn-producing localities to win-
ter, and were returned to our pas-
tures to summer. 'Twas then we
bee-keepers flourished. But a short-
age in the corn crop causing prices
to soar upwards, convinced our far-
mers that the "shortest cut" to
wealth lay through the corn-field,
and straightway the plow was in-
troduced to our grand old pastures,
and all too soon they were convert-
ed into one vast billowy sea of corn.
Apiaries of from 100 to 200 colonies
were of a necessity cut in three, and
even then sometimes failed of being
profitable. As everyone had corn
to sell, the supply greatly exceeded
the demand, and down went prices.
Then the discouraged farmers made

one grand rush in the direction of wheat. However, three successive seasons of partial or total failure have somewhat dampened their ardor. At it they went, in a sort of pell mell fashion, regardless of whether a piece of land was adapted to wheat or not. Everywhere wheat greeted the eye. Results are teaching that some land is not at all suitable; but will the lesson be heeded? more especially where most needed? And this brings me to location, and facing of the apiary. I merely wish to emphasize what has already been advised by Doolittle in a recent PROGRESSIVE. Face the hives SOUTH, giving them the advantage of more frequent cleansing flights during a severe winter, and lengthening not only the season, but the separate days which constitute the season. Place the apiary on a southern exposure, and where the general lay of the whole country is to the south. With the first awakening of nature, bees are on the alert, and an apiary keeps pace with its surroundings. As the southern slopes warm up the sooner, blossoms appear in advance, and these advantages are often quite apparent in the final results. By all means, give the bees the benefit of the natural aids, which cost little but thought. Humane feelings alone, outside of any consideration of profit, should prompt us in these matters. As to excessive summer heat, provide against it by an extra extension cover of some kind. You will be repaid for your trouble and expense, by better work, and, in consequence, more honey, which means more money.

Imagine how it must be just underneath a roof of the thickness of one board, and if your imagination be not of the liveliest, just make a practical demonstration of it by going, on some hot day, into the gar-

ret of your house. Whew! Well, you will be forcibly reminded of that department described by Doolittle in a recent talk on bees, before a farmers' institute in his state. I will repeat a portion of it:

"A farmer dreamed he died and went to hell. That place, he discovered, was divided into departments, in which the heat was turned on in proportion to the degree of wickedness formerly indulged in by the occupants. For instance, he found the politicians in one room; the lawyers in another; and the brewers, distillers and saloon-keepers in a third; and also merchants, mechanics, and even some ministers and church deacons, but had noticed no farmers. On inquiring of his guide, if no farmers ever reached there, the reply was, 'Oh, yes, plenty of them. Would you like to see them?' and he was shown a room which was very hot, but in which there was no flame to be seen. To the ceiling of this, hundreds of little turn-tables were fixed, which were slowly revolving around, while to each of the turn-tables was affixed the feet, or heels, of a farmer, so that he hung head downward, slowly revolving in space, in that awful heat. The farmer appealed to the imp to know what it all meant, and was met with the reply that 'the farmers, when they came there, were very green; so much so, that they had to be hung up in this way, and be kiln-dried, before they would burn';" the point Doolittle was then striving to bring to the front being, "the farmers are so green that they would kill their best friends, the bees, by spraying their fruit trees while in blossom." And the bee-keeper who neglects to furnish ventilation, and shelter from a scorching sun, is just as green. Why is it that mankind will spend days, weeks and months struggling to ac-

comply with an object, and when almost within reach will neglect some vital point? Our sins of omission, O, so many, and so suicidal to our best interests!

Prominent among the features of the American Bee Journal of late is "Afterthought," or "the 'Old Reliable' seen through new and unreliable glasses," by "Cogitator." Quite a nice heading, but as to being strictly appropriate—well, one cannot help seeing a clash of arms between that word "unreliable" and the matter found following. Take for example his comments on Query 89: "Query 89 is bad because it has two very different meanings. Suppose all of the respondents had answered with a simple "yes." Then some readers would have understood that a well-qualified individual, in a good location, might go into bee-keeping expecting to make his whole living out of it. Others would have understood that any ordinary person desiring an occupation might safely do so—a very different affair. Saying "anyone," when we mean "everyone", is one of the perversities of the English tongue—yet so common that it cannot be ruled out altogether. As it stands, the respondents are split lengthwise by their opinions, and crosswise by the view of the question which they take. About 15 out of 24 seem ready to encourage a good man in a good place. Apparently NO ONE of the 24 thinks that INDISCRIMINATE plunging into apiculture offers a livelihood. "Putty tollable" reliable to have come from a PROFESSED UN-reliable source.

Again, "More eggs not always mean more bees," and "Average surplus of Colorado in an average season, 12½ pounds—not surprising, seeing how many people keep bees in a way to get (and deserve) nothing." Permit us to congratulate you,

Friend York, on your new department, for all the Journal readers extend to it a most hearty welcome.

At the inter-state convention held at Franklin, Pa., the question arising as to the best method of feeding, it was announced that a greater part of these present used Mason jars with cloths tied over their mouths. One removed the porcelain from the cap, and punched holes around the rim, from the inside out, and used the cap instead of a cloth. Another bee-keeper in the far west solved the problem of watering his bees by "filling a pan level full with coarse gravel, and setting it in the sun where water from a barrel would drip into it fast enough to keep it level full. In a week he had all the bees in the neighborhood coming for water, and no drowned bees." A pretty good hint for those who find their bees annoying other stock at their watering troughs. People who are sufficiently interested can usually, by the exercise of a little ingenuity, invent ways and means of managing their bees, that are peculiarly adapted to their circumstances. It is just as Doolittle has said, February PROGRESSIVE: "Half-hearted people need not expect to meet up with success in any calling. The having the WILL TO DO is the key to all success.

Now that I've reached home again, Mr. Editor, I want to ask some questions first: Why does not that good auntie who sat in the rocking-chair, and told us of the good supper she was going to get for her soldier boy, come to see us any more? And what is the matter with Friend Rouse, that he should say, "There is but little nectar to be obtained when it is so hot"? page 56 February PROGRESSIVE, or am I at fault? One of the best crops of honey I ever had the pleasure of

calling mine, was taken from the hives and extracted when the thermometer daily reached 110 or thereabouts, about 2 p. m., and that for a period of near three weeks. Would he call that cool? He thinks that very little or nothing is gained by two or more entrances, or by large entrances. As heated air has an upward tendency, it would seem that unless arrangements were made for its escape, or for upward ventilation, the entrance would be of small avail as a means of relief. When bees go on a strike (for more comfortable quarters), that is, hang in massive festoons on the outside of the hive and refuse to go to work, just try a little persuasion by way of cooling off the department of the interior, and see what an encouraging effect it will create.

The experience of Alice Harding Crossman and her husband with their first bees, as related in recent PROGRESSIVE'S, was as interesting as it was life-like. Theirs was but the experience of hundreds, and as I read, it seemed as if she must surely have been around when certain stirring events of my bee-keeping career transpired. In the matter of stinging it certainly makes all the difference in the world who is the recipient and who the spectator. Just why the latter should almost invariably discover funny things in connection therewith, while the former completely loses the use of his perceptive faculties in that direction, remains one of the mysteries of bee-keeping.

Naptown, Dreamland.

TEXAS QUEENS.

Golden Italians, Adel or Albino Queens.
 Dr. Gallup of California, writes Oct. 6, 1896: "The queens received of you are decidedly the very best honey gatherers I have in a lot of 30 stocks, and I have received queens from ten different parties this season." Price of Untested Queens, \$1.00.

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The Western Bee-Keeper,

is exclusively devoted to Apiculture in the



of all kinds among bee-keepers; and also gives the main points of what the other bee-papers are saying.

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2341 Fifteenth St., Denver, Colorado.

COMB HONEY.

H. H. HYDE.

AS I promised in my last article, I will now talk about comb honey. As with extracted honey, we must have a good queen and a good hive. The eight-frame hive is perhaps best for most localities, but with me a ten-frame hive is none too large. Give the queen plenty of room, and plenty of honey in the hive. We must also have a good locality. A locality with a fast flow is best, (and in my next I will tell how to work for comb honey in fast flows, and for extracted in slow flows). By far the greatest hindrance to successful comb honey production is swarming. If we could learn to entirely prevent swarming, it would be the greatest benefit to bee-keepers of anything that could possibly occur,

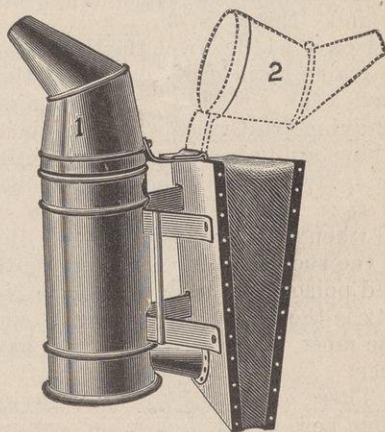
but this has never been accomplished, and never will be entirely. Every once in awhile a bee-keeper claims this distinction, but when the matter is sifted down, it will be found to contain a good deal of theory. Not that the bee-keeper cannot diminish swarming, to a great extent, but he cannot prevent it entirely. I have adopted the golden medium of giving the queens plenty of room, also plenty of room to store honey in when the flow arrives, using full sheets of foundation. When one super is commenced, say one-third done, I slip another under, etc., continuing to give plenty of room, being careful, however, not to have too many unfinished sections on hand. If this should happen, I get them on a few colonies by feeding extracted honey. I also use a free communication separator, partly of my own invention, which greatly helps. At any rate, I advise the use of my own or the fence separator. I also give my bees plenty of air by blocking up or using a deep entrance bottom. The latter I think preferable. After all the above is attended to, the only thing remaining is to go through every four or five days, and tear down queen cells, being sure not to leave any cells. Where the above is done, and they still swarm, I take care of them, for if they swarm after the above directions are followed, they should be allowed their own sweet will, for they are aroused to such an extent that they would sulk and not work to advantage in the supers.

In taking care of new swarms, I always place supers on the swarm, setting it close to parent hive, until at end of a week, I remove old hive in busy time of day, and place swarm on the stand, thus getting the field force of the parent hive again turned to the swarm. I of course allow

no after swarms. I believe the above is much better than caging the queen, etc.

Another thing that will help will be at beginning of flow to place the frames having the most unsealed brood at outside of the hive, and about ten days later to repeat this. This will prevent, or at least help toward keeping the brood chamber from being full of too much honey, giving queen more room, etc. When supers are ready to come off, I wait till most of the sections are finished. I walk up to a hive, give a puff or two at entrance, take off cover, enamel cloth (if any), and to use the words of another, when asked the best way, "Smoke 'em, by grannies," until most of the bees are out of the supers, when I remove them to the bee house, using escapes. I believe the above is better than fussing with bee escapes, for each colony, as work is done at once.

Hutto, Tex.



THE "HIGGINSVILLE SMOKER."

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THE HIGGINSVILLE SMOKER A DANDY.

The "Higginsville" Smoker is a Dandy with a big D.

J. M. MOORE,
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LEAHY MFG. CO., Higginsville, Mo.



BEES WANT 'EM!

Fine land, \$5 per acre, to trade for bees.

HARRY MCCARTER,
DODGE CITY, KAS.

AGAINST THE SPRAYING OF FRUIT WHEN IN BLOOM.

J. W. ROUSE.

I HAVE received Bulletin No. 142, on the codling moth, which is the best thing I have yet seen on the habits of this moth. The codling moth is injurious to our fruit. The bulletin gives the life history of the moth, and explains some of the reasons of a partial or failure in spraying fruit trees against their ravages, in stating that there may be, and in some localities are, two and sometimes three broods in a season. Anyone at all interested in spraying fruit trees should send and get this bulletin, also get spray calendar issued February, 1895. Address Prof. M. V. Slingerland, Ithaca, N. Y.

I have a letter from the Professor, in which he informs me that they have a law in New York against spraying fruit trees while in bloom. I have a number of other bulletins on spraying, but wherever spoken of as to time they all say not to do so when trees are in bloom, as that is too soon for the codling moth, and poisons the bees. Bulletin No. 142 is the best on the subject, and the most thorough that we have seen.

There has been but little spraying done here as yet, but it is coming into use more and more. Some parties here got a spray machine, and the party they got it of (of Quincy, Ills, so I am informed,) advised to spray when trees were in bloom. I think it would be well for bee-keepers to keep a sharp look-

out for this, and if done to any great extent, we must go after a law to stop it. I am a member of the Missouri State horticultural society, and as far as I know, all its members advise not to spray while trees are in bloom. I had the honor to introduce a resolution at their meeting at Marceline, not to spray while trees are in bloom, which was unanimously adopted. I am sure that no intelligent horticulturist will spray while trees are in bloom. Mexico, Mo.

Italian Queens.

Untested, 70c each; 3 for \$2
TESTED,.....\$1. Each

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COMMENTS.

F. L. THOMPSON.

QUINBY said long ago that 2,000 cubic inches is the proper size for the brood nest." Some such remark, sometimes followed by a reminder that Quinby was one of the best bee-keepers who ever lived, has several times been made in the last few years by different writers, as an argument for the eight-frame L hive, regardless of locality.

On page 60 of his book, "Mysteries of Bee-Keeping," 1865 edition, Quinby says, "From a series of experiments, I am satisfied that

2,000 cubic inches inside, is the best size FOR THIS SECTION." Capitals mine. He does not say precisely of what nature were those experiments, but from pages 59 and 60, it is clear he has in mind ONE consideration, namely, room enough to hold all stores required from one year's flow to the next WITHOUT FEEDING. He might have had additional reasons, but he does not mention them. The only general remarks he makes are on page 59, where he says that when hives are too large, MORE honey will be stored than is required for winter, which honey might have been obtained in boxes; and on page 70, where in speaking of movable frame hives, he says it would be economy for SOME colonies to have full employment in the hive, in constructing comb and storing winter supplies for those that are deficient, and also to get full honey—combs of dark honey to boost along the next season's swarms, so that they will store more white honey in the boxes.

So, after all, Quinby governed himself by LOCALITY in his choice of the size of the hive. By QUINBY'S reasoning, then, I infer that the eight-frame Langstroth hive is too small, "for this section"—Colorado. Even the ten-frame often fails in that respect.

But let us investigate Quinby's advice a little further, and see just what he does say is the best size for his section. On page 58 is a paragraph with the caption, "Common Box Hive;" then at the bottom begins another with the heading, "Proper size of Hive," which continues through pages 59, 60, and a small portion of 61; and the next paragraph is headed, "Directions for making Box Hives." I infer, then, that what comes between the first and third paragraphs is also on box hives. But 2,000 cubic inches

for a box hive, is not the same thing as 2,000 cubic inches in a frame hive; for in the latter the top-bars, bottom-bars, end-bars, and the bee spaces around them all, take up room which would otherwise be occupied by combs.

Then, turning to page 68, I find by calculation that the size of movable comb hive actually recommended by Quinby, is not even 2,000 cubic inches inside the frames, but about 2,250 inches, and the whole space of the hive is 2,925 inches. In other words, the size of hive that Quinby said "long ago" was the best FOR HIS SECTION, is the equivalent of a TEN-frame Langstroth hive; and, still adhering strictly to Quinby's reasoning, the best size of hive for THIS section is something larger yet. The whole space inside a modern eight-frame L hive is nearly 2,000 cubic inches. Inside the frames, as frames are manufactured nowadays, it is about 1670 inches. The whole capacity of a ten-frame hive is about 2,500 inches, and of the same inside the frames is about 2,100 inches. It looks as if some modern writers wanted to improve on Quinby, and yet make him responsible.

Kindness and courtesy are excellent watchwords, but experience proves them incomplete. One may be both kind and courteous, yet unjust; but if just, he is not unkind. A journal which takes justice for a motto, and lives up to it, cannot go wrong. Justice includes everything.

Good resolutions are being taken by some of the journals. This is commendable,—and would be still more edifying if they could refrain from concluding with, "and I intend to be holier than thou."

Discussion seems to be regarded with much disfavor, to judge by the barrenness of suggestive comment

on points in previous issues. It is a pity, for to the interchange and interdependence of thoughts, rather than to their succession in time, is due what vivifying influence they may possess—"it makes red blood," as the advertisements say. I suspect the present situation is as much owing to fashion as anything; and as usual the fashion is set by a few, whom the unthinking crowd follow. I am reminded of a very tiresome young one, who used to be the bane of my earlier days when he came with his folks on a visit. At the slightest provocation, or when anything occurred which could possibly be construed as the exercise of an external independent judgment, he would set up a woful howl—watching out of the corner of one eye, however, to observe the effect. In like manner, it is impossible to resist the conclusion that some are fully aware of the telling effects of sulkiness as a weapon—such cries of "Abuse! Vituperation!" and "Unkind! Unwarranted!" rend the air. What an example this is! Of course disputants now enter the arena with nerves in a state of tension, and that very condition tends to bring about attacks and parryings, thrusts and counter-thrusts, which have no connection with the main trial of strength, to which we may liken the investigation of truth; and, worse yet, like Somnambulist on page 234 of the PROGRESSIVE, many refuse to enter at all, and so the truth languishes for a champion.

Yet men do not usually act so. In a convention, verbal pokings of the ribs are understood, and taken at their true values, as stimulants to the pursuit of truth; and when at rare intervals anything serious does occur, everyone understands it is abnormal, due to causes outside of ordinary discussion, and the latter is resumed without apprehension.

Fashion is to blame, and they who set it have much to answer for. It is a bad sign, even, when one stops to carefully explain that he is thrusting at ideas, not flesh and blood, for that creates the suspicion that the latter may be something to expect. Example is wanted, not precept. Let us continue to be free and frank in comment and criticism, but not talk about it too much, and keep on thrusting at false ideas, until this bad fashion dies out for want of imitation, which is its food.

But, of course, there are things said, once in a great while, that ought not to have been said; for example, such language as this: "After doing this, they have dared to lift up in holy horror their black, foul hands, hands covered with the blasted hopes of bee-keepers, the groans of the oppressed, the cries of the orphans, and the tears of the widow," etc., referring to an honest difference of opinion, and an exaggeration (but nothing worse) on the part of only one writer, not several, for the others did not hint at what they are charged with;—and this: "So-and-so had the gall to hint" etc., referring to another honest difference of opinion. These are discourtesies, to be sure, but, like the rare scenes in conventions, it would not be common sense to take these evidently exceptional and extraordinary expressions as indicating what must be, and is, the ordinary flow of discussion among rational beings.

Perhaps the chief consideration should be not so much "Is it kind?" as "Is it true?" provided, of course, it is worth mentioning. After all, truth is our main aim. If we faithfully try to subordinate everything to truth, we cannot but rate it higher than discourtesy or retaliation; but if we esteem anything higher

than the truth, even though it be kindness and courtesy, there is danger that having committed the sin of untruthfulness, we may find it easier to commit the sin of injustice. Truths worth mentioning cannot but be just in the end.

I recently received a letter complaining that I had "assailed" a position of the writer. The mere utterance of the word "assail" seemed to be enough in his judgment, to condemn the action—a fine illustration of the illogical sulkiness, sometimes paraded as offended dignity. If I had "assailed" by evading arguments, by hunting up irrelevant counter charges, by making untruthful innuendoes and assertions without proof, and by one-sidedness generally, then, indeed, the "assault" would have been very, very wrong. But having done none of these things, as my antagonists admit by not furnishing the proofs, but having "assailed" with experience, facts, and arguments, I propose to calmly keep on doing the same thing, and shall thank others to do the same by me; for

"Truth only is living.
Truth only is whole,
And the love of his giving
Man's polestar and pole."—[Swinburne]

The temptation to continue the discussion on fences is considerable, for much could be said right now that sadly needs to be said. But no doubt space will be saved by taking in everything at one view after another season's work. I want to say, at any rate, that the new fixtures are still on probation. Beginners had better not invest in them. Sad experience has taught me that, all things considered, it is not the best policy to follow the leaders; but to cultivate an independent judgment in the matters which touch the pocket-book. In apiculture especially, the leaders are responsible for many cast-off devices.

President Marks, of the New York State Association, has been giving heavy facts and arguments in favor of united action among beekeepers, according to the American Bee-Keeper. This is good; but I want to whisper the warning, don't depend on business alone, no matter how important, to keep up the interest. I have been a member of a local association for six years. We have done business all along, in the way of getting our supplies cheaper. But the first three years, though the attendance was never very large, the interest was well sustained; the last three years, it was not. Why? Just because at first we met often, and TALKED BEES. The business was a mere incident. Of late years, for various reasons, we drifted into the habit of meeting seldom, just enough for business. We took a fresh start at our last meeting, and the result was an exceedingly profitable discussion. These discussions attract many to whom dull business alone is a bore, but who, once there, cheerfully assent to the useful business propositions.

One conclusion we arrived at was that even in Colorado, where outdoor wintering in single-walled hives is so universally followed, that chaff hives or cellar wintering, if properly managed, might pay well, in saving both bees and honey. But chaff hives should be painted a dark color, not have propolized or sealed cloths between the frames and top packing, not have too thick walls, an inch or two being sufficient between outer and inner walls, and should be examined at the conclusion of cold spells to make sure that the top packing continues dry; if not, it should be aired as soon as the weather is warm enough. One member reported that for three years in succession he had made tests of chaff

hives on a large scale with single-walled hives sitting alongside, and every year found that the colonies in chaff hives had enough more honey to pay for the hives. Another said he always had to remove honey in the spring from his chaff hives, to make room for the brood; and that his cellar-wintered colonies consumed five or six pounds during the winter, while the others averaged twenty. Another said that his thick-walled chaff hives, painted white, with the same quilts they had in summer, and left to themselves in winter, invariably wintered very poorly. For cases of diarrhea in outdoor wintering, an empty super under or over the frames was recommended as a good preventive of serious effects.

Denver, Colo.



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EXPERIENCE AND ITS LESSONS.

R. C. Aikin.

(Continued from Mar. PROGRESSIVE.)

CHAPTER XVIII.

OBTAINING THE SURPLUS—CONTINUED.

LAST season I had a few swarms in my home yard. One day 2, and possibly 3, swarms clustered together, and finally the branch of the tree broke down and set them on the wing again. They then moved off some rods and took to a small elm, and this bent to the ground with them, and when I came home from an out apiary, they were on the ground. I brought them back to the apiary, and hived them on, I think it was 6, L frames with one or two of them having comb to make a brood nest, and 2 supers with 56 sections. They filled the brood chamber and 2½ supers.

The next day I got a large swarm on a tree at a neighbor's, hived this on 8 Heddon frames with starters (these frames about 5x18), a queen excluder over this, and 48 sections over the excluder. They filled the brood frames and sections, and just as they got this about completed, I put another section of brood chamber beneath all next the bottom board, to get the tail end of the flow. Many days previous to hiving these VERY large and LARGE swarms, I had hived 3 ordinary swarms on similar sized brood chambers, and although these three had several days' advantage, and of the better part of the flow, they did not give one good super (28 sections) from the whole three. Small swarms worked in similar manner gave no

surplus whatever. See how the big ones get the surplus.

Compare the preceding paragraphs with my line of reasoning in the preceding article. The lesson is, hold your forces together if you want surplus. Better take a few bees from each strong colony, and make nuclei, and ask nothing more of these but to get in winter stores and make colonies for winter, and see that the parent colony gets you surplus.

But how? "Aye there is the rub." You can do it several ways, but I know of no way without intelligent, painstaking labor. Suppose you are using L hives, 8 or 10-frame. You want increase. Get your hives for increase ready early. If you have old or ready-made combs, you might give each strong colony one of the extra chambers under the old—ALWAYS UNDER. If under, you give the colony a chance to spread the most natural way, honey is stored above and around the brood always by preference, and the queen works down to the empty combs beneath, but usually only when not enough empty comb above. Thus your top and original hive is in prime condition, full of brood and honey, if any honey is coming in, or full of brood if no honey coming in.

You can help to pack the top chamber with brood by putting those full of brood to the outer walls and less broody combs to the center. Now when the flow is on, and swarming will come, put your queen and most of the bees in the bottom chamber, and make a new colony of the top one with the brood and a few bees, on a new stand. That is for section honey. For extracted do just the same way, only put an excluder on the top of the lower chamber, and put an extracting super or chamber on this and

the other chamber, heavy with both honey and brood atop of this instead of on a new stand. Whoopee! but business will hum in that hive if there is plenty of honey to be had. You might put sections in the middle instead of an extracting super. Four, 6, 10 or 15 days later take that top hive of brood off, and make your new colony of it, giving a ripe cell, a virgin queen or a laying queen.

But why such variation in the number of days to leave that top hive on? You put it there with the new sections or extracting chamber between, to entice, encourage, yes, almost compel them to start work in the extra, and how quick they do it depends on the strength of the colony and the freeness of the flow. Sometimes 2 days would be as good as 20 under other conditions. See?

You may also let the colony have but one chamber till the flow, then shake out in front of a new hive ON THE OLD STAND, and make a new at once with the brood, or use it as before atop awhile, and then to new stand, but you must hold that queen down in the new with an excluder, and she should have one comb, with at least a LITTLE brood to make her believe that it is her brood nest, and then she won't waste time and excitement of herself and bees trying to pass the zinc to get "back home." This is practically forced swarming.

Again you may just leave the original chamber where it was from the beginning, and unqueen. This has been fully discussed already in this series of articles, so I skip details. You may shorten the work of unqueening by the use of two brood chambers and putting an excluder between them 10 days before unqueening, then take to a new stand the queen and open or unseal-

ed brood, and leaving the SEALED brood and most of bees on the OLD STAND to get the surplus, giving it a cell in a protector, or a few hours later, a cell or a virgin queen.

Some—yes, very many—practice some method of holding the colony strength together in order to obtain good super work. When I speak of good super work, remember that I always include both quantity and quality or finish. The method of hiving swarms on the old stands and taking the old hive to a new stand, also leaving the old near the new for several days, and then removing to a new stand, is a direct recognition of the necessity of strong colonies for surplus. I emphasize these points because so many beginners and those with little experience cannot understand why their colonies do not work in the sections, or if they do work them, why the character of the work done is so unsatisfactory. Neither can they understand why colonies of equal strength in different years, do not do equal work. They fail to note that if this year the flow comes free (rapid), giving a 50 pound gain in 10 days, while the year before gave the same amount in 25 days' flow, all conditions the same save that in the one the daily gain was 5 pounds, and in the other 2 pounds, less satisfactory work is done in the slow flow.

It is a fact that the weaker the flow, the stronger must be the colony to keep up the character of the work both as to quantity and finish, and even then it must be in a diminishing ratio. A very strong colony does have an advantage over a weaker one in both quantity and finish, yet strength of colony does not count when there is no nectar to be had. The great diversity of opinion in regard to the size of hive originates very largely in these

principles I am discussing. The masses of bee-keepers, not understanding the causes and effects, some leaving out of calculations some factors, while others consider these but leave out others, and so, just like the kaledioscope, is ever showing different forms. Could we all see the same factors in detail, we would all come to much the same conclusions. Different fields, different seasons, different times of observing, different readings, etc., etc., lead us to very different conclusions.

Just as hereinbefore described, the variations in localities, seasons, honey flows, and many other factors too numerous to enumerate here, all bear on the manipulation and the kind of hive to be used. These facts are just what lead me to want to use a hive that is very elastic. Knowing that a large hive and abundant stores are a desirable thing in getting strong colonies, I want a large hive. Knowing also that in a weak flow I must have a greater abundance of bees to do good work, I therefore discourage swarming, double swarms or colonies, contract BROOD NEST, do all of these or any combination of them as may seem desirable, considering the ends to be reached, etc.

Suppose one wishes to handle a few colonies and have but little care of them, yet desires the most successful wintering obtainable on summer stands and in all winters and with practically no care, save to put on supers, and in the fall to remove them again. For such, a large hive is the only reasonable one. Suppose there is more room in the brood chamber than is needed for stores and brood in an ordinary year, for one year that much less is received by the owner of the bees, but if it is not used the next year in brood rearing, it is there IN THE COMBS,

and being in the combs, the next new crop cannot go in these combs, so MUST go to super if it goes anywhere. On the other hand, should there come a season that does not supply winter stores, the colony has this old honey to fall back on, thus saving the life of the colony.

Now, brother bee-keepers, I have discussed much about size and shape of hives. If you are going to handle bees on scientific principles involving all the details of management and a thorough knowledge of the science, you want an elastic hive that can be adjusted to suit any and all conditions and circumstances. If, however, your knowledge of the science is limited, and you are not going to perfect it, use any common hive, and of not less than 10 Langstroth frame capacity.

As to the matter of changing your style of hive, I am not advocating any wholesale change. A poor bee-keeper with 50 or 100 colonies cannot afford to throw away his present fixtures to adopt any new hive, whether divisible brood chamber ones, or some other style. I do not consider such change to be wise nor to be recommended, not because new systems and hives are not desirable, but because we cannot afford the change. Doolittle is far beyond me in general knowledge of the science of bee culture, but in the use of divisible brood chamber hives, and hives of extremes in size, I believe I have a larger experience than he. For the best all purpose hive, I do believe the divisible brood chamber hive very desirable.

Loveland, Colo.

(To be continued in our next.)

Recapitulation by G. M. Doolittle.

Drone Comb.—I read the first paragraph to this article of Bro. Aikin's over and over to see if I could not read between the lines something that I

wished to know, but which was left out. Those big swarms and their workings, filling two and three supers, is all right, for I have proven many times over that it pays in a poor season to hive two and three swarms together, if we must have swarms at all. But the point I wished to know was, what was in those other L frames that he hived the two or three swarms on, which did not have comb in them? Bro. A. says one or two of them had comb in, to make a brood nest. But what was in the rest? Foundation, or only starters? If filled with foundation, the combs would be all right when the hive was filled. But if only "starters," as we might infer from the reading of the next paragraph, where he hived a large swarm "on 8 Heddon frames with starters," if in this locality, it would be all wrong, as to the combs built in the frames, for with me where as much as a full frame of empty comb is placed in any hive, where the rest of the frames have *only starters*, more than one-half of the comb built will be of the drone size of cells, which gives combs worse than useless, where they are to stay in the brood chamber year after year. And I touch this point that the readers of PROGRESSIVE may not be misled by that "putting a frame or two of empty comb" into a hive when hiving swarms, to "make a brood nest" for them to commence with. When a prime swarm comes out, the mother queen has prepared for the occasion, by ridding herself of eggs some two days previous to the issuing of the swarm, and does not immediately become prolific in egg laying after the swarm is hived, for in a state of nature the bees must build comb before she has any place in which to deposit eggs, so her ovaries stay comparatively dormant for the first 36 hours after a swarm is hived, during which time comb has been built, and the queen becomes in condition to take up her motherly profession again. Now, in all swarms

which I ever closely observed, more or less of the bees have wax exuding from their wax pockets, thus being prepared beforehand, from honey from the old hive used for this wax secretion, for an immediate start at comb building as soon as they are located in their new home. But when treated as Bro. A. did his double or treble swarm, and they find a start in comb already made, enough for all the queen will, under such circumstances, occupy for the next four days, they seem to conclude that the queen has enough worker comb for their needs, so go to building *store* comb, to hold the honey which the large force of workers are bringing in, and continue at this size of cells, which is always of the drone size, till the queen has filled all of the worker comb with eggs, when they very reluctantly begin to build worker comb, and the queen as reluctantly crosses over the frames of honey to begin laying in another part of the hive from which she first established her brood nest. Under such circumstances, I have known brood chambers to be more than half filled with drone comb, and in one instance, only three combs in a whole 10 frame L hive were of the worker size, the one put in to 'start the brood nest,' and two other. I was called in to see what was the matter with this hive that it did not give any surplus any year, while others in the apiary gave from 50 to 100 pounds. As soon as I opened the hive, I saw the trouble, for the drones reared in the drone comb consumed all the honey the workers could gather till the drones were killed off at the end of the white honey flow, when the colony would manage to secure enough from the fall flow to winter over. And so the thing had been going on for *five* years, when I was called in, and on being questioned, the proprietor told me he always gave his swarms one or two frames of worker comb when hiving them, to help them at "starting housekeeping." And I

have found many other bee-keepers who practice this method, so am admonished by Bro. A.'s hint at the same thing, to give this note of warning.

Don't Make Nuclei, but Strong Colonies.—Do you note that third paragraph of Bro. A.'s? Now that is all right about keeping the strong colonies from swarming; yes and all right just as it reads, if you want *much* increase, but as most of us do not wish increase, why not take you a big funnel and nucleus box, a *great big* one, big enough to accommodate from 7 to 10 pounds of bees, and go from hive to hive till you get those bees for each nucleus all collected into one colony, when you will give them a queen, and thus form a great big rousing swarm, ready to roll up the honey "mountains high," as I have told about in the other bee papers, whether I have in PROGRESSIVE or not. I cannot give it here now, for if I stop to do it, I cannot 'keep up with Aikin.' If any of the readers desire more than I have here and elsewhere given, let them ask "that other editor" for it and I am at his command, to obey, at any time. I have practiced this plan of making great rousing swarms from several strong colonies, to keep them from swarming, or from two or three weakish colonies which were not strong enough to do anything in sections, a great many times with splendid results as to the nicest kind of sections of gilt edged honey, just such as Danzenbaker and others get from the use of plain sections and fence separators, they thinking that such supplies have more to do with the nice honey that they secure; while my belief is that the condition of the colony storing honey, is the secret of nice finished sections of "honey in the most marketable shape." Bro. Aikin is on the right road in his pressing *rousing* colonies for storing lots of nice honey, no matter if we do slightly disagree on the hive question.

Sections Between Old Brood Combs.—Bro. A. fixes his colony all up for *extracted* honey, with queen below an excluder, a hive of empty comb over this, and the hive of old combs filled with brood and honey over all, and exultantly exclaims. "Whoop-ee! but business will hum in that hive if there is plenty of honey to be had." That is all right. No fault to find here. But he next tells us, "You might put sections in the middle instead of an extracting super." Wonder if Bro. A. ever did such a thing? And if he did, I wonder what kind of looking finished combs he had in his sections when he took them off. In all of the experiments which I ever tried along this line, and they have been many, unless some precaution is taken to close all openings to the sections from above, the bees will work much of the cappings from the emerging brood, and wax from the old combs otherwise, into the new comb structure in the sections, so that while we may have the very whitest of honey in the sections, it will come under *second* quality for market, on account of the dirty appearance of the combs, from this working of old wax into them. And I am not alone in this, for hundreds of others have found the same thing when trying the plan. If the tops of the sections are closed in some way, so that none of the wax, dirt, or worker brood cappings can come down from above into the sections, the plan will work very well; but in any case where sections are being filled immediately over old combs before they are filled and sealed over with either brood or honey, more or less of the old comb is brought up and incorporated with the new combs in the sections, so that they appear "travel-stained," as it is called, and especially about the bottoms near the wood to the sections. To produce the most "snow white" honey in sections, it must be built over *new combs* below, or over combs of *sealed brood or honey* by *very strong* colonies.

The Remainder.—The rest of Bro. A.'s article from this point on, will bear a careful reading more than once, for in it are very many points not often hinted at, which lie at the very *foundation* of our pursuit. Because the seasons are always varying, and no *two years* are ever alike, lends an enchantment to bee-keeping not found in any other pursuit. But with this enchantment comes a *necessity* for a skill more varied than that required in any other pursuit, and from the lack of such a skill as will adapt itself to any season, comes a failure in the pursuit which causes hundreds and thousands to proclaim that "bee-keeping does not pay." But with the proper "stick-to-it-iveness," a skill will be obtained which will overcome all obstacles, and give a success producing a certain joy not found in the more ordinary forms of agriculture. Especially do I recommend the first half of Bro. A.'s last paragraph, to any and all who have been thinking of changing their whole apiary to the adopting of some of the things recommended so "loudly" by many at the present time. Such a change might be like the plowing up of a whole plantation of Wilson, sharpless and Cumberland strawberry plants, that as many plants of two or three much puffed new kinds might take their place at a great cost, as I once knew; while the "proof of the pudding" showed that the kinds plowed up were, on the whole, much the superior of those so greatly praised by those having them for sale. Where a change is contemplated, it is always well to try two or three of the new hives, section supers, frames, queens, or whatever it may be; then if two or three seasons' trial side of those you have been using all your life, prove the new superior in *your hands*, then you can make a complete change if you so desire, with no chances of regret, or any severe failure.

Borodino, N. Y. G. M. DOOLITTLE.

TWO WORLDS.*

—:—
BY MRS. J. M. NULL.

CHAPTER I.

SUNSHINE AND SHADOW.

"I am tired tonight,
So sing me soft and low
Some plaintive little song
Of long ago."

CHILDHOOD recollections carried the members of the Brown family back to one of the neatest of rural homes, and one of the best managed and, financially, most profitable, farms in all the country-side. But the demon of discontent sought and found entrance there, and the prosperous and much envied Mr. Brown found it in his heart to exchange this veritable Eden for filthy lucre, with which to speculate in city real estate. The glamor of glittering gold seemed to have blinded him to all the beauties of his charming home.

Not so easily led astray was the cheery, thrifty little wife. But her gentle protests at having to part with all her numerous pets were, almost inconsiderately, pushed one side. There was old Brindle, who had come with her from the parental home, and the gentle-eyed Jerseys which they had themselves acquired. The poultry yard, with its living attractions; the fowls which she had, personally, reared and cared for, and which were so fearless as to eat out of her hand. The little white village beneath the young apple trees, populated by the golden beauties, which had furnished so many

hours of pleasant and profitable employment to their owners. All were bidden a tender and lingering farewell. As if by magic, the Browns, ere long, found themselves installed in their new and elegant city residence.

George Brown had won notoriety for being shrewd during his life on the farm, but *now*, that faculty seemed to have assumed abnormal dimensions, inasmuch as every transaction responded to his touch and yielded additional wealth. Not forgetting his wife's inordinate love for animals, he purchased and presented to her on one of the anniversaries of their wedding day, a pair of spanking bays, accompanied by a stylish vehicle and silver-mounted harness. Needless to say that cheeks grew red, and bright eyes grew brighter, as she and their two idolized children drank in health during many a drive behind the spirited bays. And the world looked on in amazement, astounded at such unparalleled freaks of fortune. Plain Mr. George Brown, of little influence, had developed into popular Mr. Brown, of weighty influence. Indeed, envious relatives hinted that there had been a time when there were several Mr. Browns, even though only one was now known. However, these unfriendly flings seemed to have but little influence with Mr. B.'s bump of acquisitiveness, it keeping steadily on enlarging, keeping pace with the growth of his possessions. What wonder, he *then* thought, nothing easier than to make money, and he who failed so to do, failed from want of desire?

* Fifty Dollar Prize Story.

"A past so short that the rosy hours
Quite blot from sight the gray,
And the future is only a mass of flowers
Growing from day to day."

But a terrible change came over the face of things. Lowering clouds began to darken the financial sky. The brilliantly bright light, which had rendered all things dazzling, quickly, oh, so quickly, changed to a hazy, dun, color, rapidly assuming a threatening aspect. On came the mighty financial cyclone, and all things whatsoever within reach of its vortex met with certain destruction, if not with complete annihilation.

George and Jessie Brown found themselves in the wake of its ruin. Of all the property once owned by them, that which alone remained was the most unprofitable and altogether the most undesirable, and in consequence unsalable. The fashionable residence with all of its elegant belongings, the stylish turnout, and all, save themselves, were sacrificed to satisfy the insatiable cravings of relentless creditors. Ah, how full of peace, how restful, the dear old farm home, seen through a kaleidoscopic past, seemed to them now! Many and oft repeated were the expressed regrets that they should ever have been tempted to stray from its sheltering fold. The bread and butter question began to be of serious moment. All means of obtaining an honest livelihood were exhausted, and each day grew more gloomy. At last the strain proved too much for George Brown, and just as the sun was sinking out of sight one evening, his unconscious form was borne across his threshold, and laid upon the bed.

Days, weeks and months of weary watching followed, and for all the devotion displayed, the reward could not be more than partial recovery. During all this time the one bright ray that illumined the pathway of duty was the devotion of the children. They not only kept the wolf from the door, but managed to procure many delicacies for the invalid.

For several years contentment seemed to have taken up her permanent abode with them, when suddenly, trouble in a new and unthought of form, once more threatened to crush them.

The day had been an unusually happy one. Each member of the family seemed imbued with renewed courage; for had not Eddie brought the glad tidings of promotion? And did this not mean higher salary and increased opportunities for advancement? With lighter hearts than they had known for many months, all retired.

Alas! how little do we know what a day, a night, or even an hour, may bring forth! Near midnight, the alarm of fire was sounded. Bells were clanging, whistles blowing, fire engines dashing madly through the streets, the populace pushing on toward the immediate scene of the fire, as with increased fury it licked out its long, tongue-like, greedy flames athwart the sky, as if in search of yet more material with which to appease its voracious appetite; and snapped, crackled and devoured, like a demon in delight. The terror-stricken people, as they beheld the accumulations of a lifetime melt away before their eyes, and they utterly powerless to stay the onward sweep of the destroyer, became panic-stricken. As if laughing at the puny resistance offered, on, on, sped the raging elements. Men shout themselves hoarse; women shudder or shriek as wall after wall falls in. At last it reaches the "Grand Central" hotel. The guests have been warned out, and most of them safely quartered for the night in other portions of the city. But the destruction of the costly edifice, which has added grandeur and solidity to the city, thrills the hearts of the spectators with grief and consternation. The swaying, surging, seething crowds of uncontrolled and uncontrollable humanity render the scene hideous.

But above all the uproar of the multitude, there is heard a distinct shout

of despair. There, yes, there at a fifth story window, appears the form of a little girl. Clad in her night raiment, she looks the angel she soon must be. The little hands beckon wildly for help. Must she appeal in vain? Smoke and flame command all ordinary avenues of approach. Shall she die? But see! the firemen are already placing their sky-scraping ladders in position, and a slender youth is ascending to their giddy heights. As with bated breath, his every move is marked, God only knows how many prayers are offered for his success. Oh, will he ever reach her? Ah, yes! he has her in his arms,—and a cheering shout goes up from the masses below. And now the slow and perilous descent is begun. The fire escape trembles beneath its precious burden. Lower and lower the two forms descend, until so close the little arms are distinctly seen clasped around the neck of her brave rescuer, and almost can be heard the encouraging tones of the intrepid youth, as he assures her, "Almost down, little one," when with a sudden turn or twist of the wire support, both are hurled into space, but fortunately land within the canvass outstretched to receive them in such an event. The little one, safe and unharmed, is borne away in the arms of rejoicing friends, while the limp form of the hero of the hour is carried away to that humble home where once before in its history, the unconscious form of one of its loved ones had crossed its portals.

CHAPTER II.

A MOVE—FAREWELL TO CITY LIFE.

"The bravest battle that ever was fought—
Shall I tell you where and when?
On the maps of the world you will find it not—
It was fought by the mothers of men.

Nay, not with cannon or battle shot,
With sword or mightier pen;
Nay, not with wonderful word or thought
From the lips of eloquent men.

But deep in some patient mother's heart,
A woman who would not yield,
But bravely, cheerfully bears her part—
Aye, there is the battlefield.

No marshalled troops, no bivouac song,
No banners to flaunt and wave;
But oh, these battles! they last so long—
From the cradle to the grave."—Joaquin Miller

THAT brave mother! 'Twere almost sacrilege to speak of her or her sufferings, except having drank from the same cup, we know somewhat of the bitterness of its dregs.

The surgeons assure her, "'Tis but a dislocation," and once more within her bosom is hope resurrected.

Again long weeks of endurance, alike for the pale patient and the untiring, devoted mother, form themselves into months, and months almost into years. The dislocation has been pronounced several other things than a dislocation, but no matter what name it is given, its stubborn, unyielding nature is not in the least mollified, and results of treatment are anything but gratifying. With two invalids on hands, the courageous mother's and tireless daughter's close management was put to severe tests. And close confinement lends a helping hand towards breaking the mother's health. The good old family doctor shakes his head in a wise manner, and observes:

"It's simply suicidal. You *must* go to the country, where you can have in abundance fresh air and water. This prescription three of you at least should follow, and I don't know but that I should include the fourth," smilingly nodding towards Essie, who stoutly avers she at least must "stand to the wheel."

Whenever reference is made to living on the farm, George Brown brightens up and declares "he knows he could be of use *there*, if only to watch the hens from the garden or the hawks from the chickens." "To be useful! O, to be of any use!" has been for years his pitiful, wailing cry. But how bring about the much-

desired change? Essie's slender salary, aided by the little brought in by the sewing machine, was their only capital. But the good doctor, having made his decision, was not slow to act thereon. Former friends were called upon; then, too, there were those who felt themselves indebted for favors received during the palmier days of the Brown family. "No job at all, I assure you," he said, as he laid before the grateful family the means to make the move.

"O, Doctor! have we come to this, that we are forced to accept charity?" sobbed the mother.

"Charity? No charity about it; slight remembrance only. No need of taking it so deeply to heart, my dear madame. This community owes it to you. The inspiration received from the noble lives you have led, is priceless. Your influence will outlive you, and shed abroad a beautiful light which will permeate and modify lives of which you little dream. 'Bustle, hustle', are the words now, for we must get you out of this, and into the new home."

The nervous little mother gathered her scattered forces together for one last charge.

"Doctor, if I must, for the sake of the dear ones, accept it, so be it; but not as a gift—only as a loan. I must know the names of those to whom I am indebted, also the amount. I do not promise to pay them, but as there is a kind Father in heaven, perhaps He will lead me in the way I should go to enable me to return it; and if He should not permit me to do it, O, I know He Himself, through some worthier servant, will cancel this debt."

Dr. Murray had gone so far as to himself select the place and advance six months' rent. So there was naught to do but permit themselves to be led. Nor was money all he gave. His warmly expressed sympathies, his friendly counsel, all were freely proffered. "To give is noble, but to commiserate is more noble. How truly is money ex-

ternal to a man's self, but compassion is of the soul."

Greenton, whither we must follow our little family, was a comparatively deserted hamlet. Time was when she had commanded respect; but railroads, and the booming, busy city a few miles distant, had robbed her of all her former greatness. It lay nestled on the sloping side of a rocky declivity, as though land owners had rated real estate high and evidently thought to utilize this otherwise useless land, by planting thereon the country store and postoffice, the blacksmith shop and village inn, and the few other straggling houses that go towards the make-up of the country village. Evidently Greenton's greatest recreation was solving the problem of obtaining an existence.

Shortly after their arrival, the rain fell in torrents, and continued so to fall for days. With cheek pressed against the pane, Essie mused: "If we could only forget the past; if we could only let bygones fade utterly away out of our minds," she sobbed. The wild roar of the wind and the sobbing of the storm were fit companions for her just then. She was thinking of her past, a past that had been very sweet and bright once, but over which disappointment, and weary waiting, and sorrow, had darkened, as the clouds were darkening the sky.

Seeing her depression, Eddie seized his beloved mandolin and began playing sweet, soothing strains. For how well he loved the dear, self-sacrificing sister! Keenest regard for her feelings governed all his actions. Gradually the strains grew louder and less tremulous, and were accompanied by his well trained voice, and the dear past was forgotten in the living present.

"If afflicted, crippled Eddie can be brave, why should I, having the best of health, lack courage? Farewell, idle tears! farewell, delusive past! The present and future are left to me; any-

way, I am sure of the present." A new train of reasoning had been awakened in her mind. From her paralytic father and lame brother, her mind reverted to the many blind people and mutes she had encountered cheerily making their way through this world; and secretly she firmly resolved never again to despond; not she, while she possessed her five senses, health and strength; and she joined in with her brother, singing that old song:

"Many a bright, good-hearted fellow;
Many a noble-minded man,
Finds himself in waters shallow;
Then assist him if you can.

Some succeed at every turning;
Fortune favors every scheme;
Others, too, though more discerning,
Have to pull against the stream.

Do your best for one another,
Making life a pleasant dream;
Help a worn and weary brother,
Pulling hard against the stream."

With the ushering in of the sun, the clinging, vapory garment which had so long enwrapped mother earth, was gently uplifted and dispelled, and, with its vanishing, fled all the misgivings which had tormented the Browns.

CHAPTER III.

BUZZING, BUSY BEES.

THE neighbors in Greenton and vicinity were very kind. Little else was to have been expected, as the Browns observed the rule of always taking with them a good neighbor. These new friends insisted on their company at services held in the little white chapel, which, by the way, was a beauty of modern build, encompassed by guardian-like, ancient shade and evergreen trees; and near by, the city of the dead, all occupying a most lovely southern slope.

One fine, bright morning, Eddie made the discovery that a swarm of bees had

their domicile between the siding and inside wall of the church, and that a very small knot-hole served them for a door. He was seized with a desire to own those bees.

"Father, could we possibly get them, do you think?"

"Yes, with permission of the committee, son, we might undertake the job."

The permission was not only readily granted, but the board expressed itself as being highly gratified at the prospect of their removal. They proffered aid in shape of ladders and strong young men to assist. Eddie was almost wild with delight. Father and mother were incessantly plied with questions. Old papers, journals and books were sought and sounded. All the other members of the family absorbed some of the youth's enthusiasm, but the father would say:

"Beeology, my son, is a science. It's altogether likely, instead of our mastering it, the tables will turn, and we shall suffer defeat. But there's nothing like trying. I greatly fear you will be slow in getting help. Who, for instance, will go up after them? You can not, like David of old, bring them down with a sling-shot. They have to be handled at short range."

"I expect to go up after them myself. Ma, you must have a big mosquito-bar veil ready. Patsy Doolan will help with the ladder. The boys are expecting some rare old fun. How would it do, father, to select some cold day when they could not fly at you?"

"You could not make a greater mistake. Bees are very easily injured by being disturbed in any way during cold weather. On being roused into activity, they will immediately gorge themselves with honey, and should the weather remain cold, so as to confine them any length of time thereafter, they will frequently become affected with dysentery, and only a timely flight will relieve them. Then there is no

knowing the condition of those bees, and should they be short of stores, any undue consumption now might prove disastrous later on. Be patient. Do not undertake it before fruit bloom, and then only on a warm day, for by that time they should have brood rearing progressing in all stages; and chilled brood means dead brood; just, as the nestful of eggs is doomed should broody Biddy, some chilly day, be tempted to prolong her outing. Patience is *one* quality you must cultivate in the care of bees. In any undertaking, you may as well begin at the beginning; so we will, while we wait, take up the study of insects. We want to become acquainted with all the inhabitants of 'these parts,' as the natives express it, and no doubt the knowledge so gleaned will in the end be of great utility. At all events, it is a subject of engrossing interest."

And so it was. The early garden had been made, and mother and sister boasted of several hundred downy, fluffy pets, which went to prove that the gossiping fever had had no great run among the hens during the incubating season, nor yet among the caretakers during hatching season.

Still silent and tenantless stood the home-made receptacle intended to serve as a hive. One fine May morning in apple blossom time, a curious crowd might have been seen wending its way slowly toward the church. Mr. B. had several times been wheeled to church, but now he was wheeling along on a very different errand. The aforesaid hive, a ladder, hatchet and saw, several rolls of gunny sacking, pieces of mosquito bar, old carpet, boards padded and covered with oil cloth, basket and pails, etc., were part and parcel of that queer procession.

Arrived at the scene of action, the ladder was very gently placed in position. Eddie resolutely mounted it and began work, which necessarily progressed quite slowly. However, to-

wards noon the stubborn nails had been drawn, the portions of board removed, and there were the combs exposed to view. The outside combs, being heavy with honey, were placed in the pails. A large wet cloth hung close to the operator, which served as basin and towel. A rope being fastened to a basket, was taken up and passed over an upper rung, and thus the basket was held in position by Essie at the foot of the ladder. For smoker, Eddie used the long rolls of gunny sacking, which had been previously prepared by soaking in a solution of saltpetre, and then dried, rolled in form, and tied to hold in shape. In the bottom of the basket lay one of the padded boards; comb containing brood was carefully laid upon it, and gently lowered. The wheeled chair and its occupant had found their way into the lobby of the church. Here the carpet had been spread to catch any leaking honey. And seated with a board on his lap, Mr. Brown gave a practical lesson in transferring to any who were brave enough, or eager enough, to see the operation. Mr. B. also kept one of the smoking rolls within convenient reach. Some of the company proposed the use of tobacco smoke.

"Eddie, you should have been the cigarette fiend we imagined you before you came, and you would have come in to good play for this business." To which Mr. Brown replied:

"Have you ever thought that the cigarette habit makes wormy fruit out of boys? They drop long before they ripen. They never make failures in after life, because they have no after life. To them, success or failure are equivalent, because they never enter real life. About the time they should be taking hold of the world's work, they are concerned alone with the sexton and undertaker." While thus commenting, he laid across the board in his lap several cotton strings, and as the basket was brought in, he tenderly lifted therefrom the brood comb, and laid

it down, with the strings beneath. Now a frame was laid upon the comb as a guide, and the comb cut so as to tightly fit within the frame. Then the strings were brought up and tied with the knots along the top-bar, and the frame was gently hung in the hive. So was each comb handled. The queen was found, clipped, and placed on the combs. The quiet manner in which he handled the bees gave them small room for resentment. And that little crowd of "sight-see-ers" was struck dumb with awe at the result, but two stings having been suffered, and those by persons who had invited battle by slapping at the bees. The hive was left in the churchyard, that the bees might more securely fasten the combs in the frames, and that the field bees might be gathered to their new home. Although the anticipated "rare old fun" failed to materialize, the day was long remembered with pleasure by all who were at the "outing," as the Browns named it. Being fearful of losing part of the working force by removal. Eddie secured permission to leave them in the churchyard until fall. Of all the places in the world for a bee yard, probably this was the most peculiar. The singular location, however, did not prevent Eddie from having many happy days with his pets, and when they swarmed he hived them on the original stand, and carried hive No. 1 home.

"Want to get them here by degrees, Mother. You see my family is growing so numerous, it might frighten you were it all to arrive at once." Yes, there they stood—seven little white cottages, and two more yet to come.

The story of the churchyard swarm had been, with unguarded zeal and many added embellishments, oft repeated at the country store. With superstitious awe, some asserted that the Browns charmed the bees! And so strong was this sentiment, that had it been in the days of Salem witchcraft, serious results might have ensued. Others ex-

pressed themselves as unbelievers, not to be fooled by any such "yarns."

"Seein's b'leevin'!" said one.

"Yes, an' nawthin' short of it will convince this un!" said another.

"Whew! you're sum'at like the Dutchman that 'ouldn't be conwinshed 'cept by his own conwinshun'," came from another corner.

"Tell you what, boys, there's that old hollow sycamore down on the creek. It's boom'in' full of bees; and I'll be blest if I wouldn't be one of the chaps to help cut it down, jest to see the fun, if we could get Ed in the notion of hivin' 'em fellers. 'They're black, that's a fac',' as the song goes, an' I've hearn tell the black ones has the grit."

"You're right, sir; I've a slight acquaintance with those very 'burrids'. Count on me for a second, for I'd be happy to see the man with enough 'sand in his crop' to tackle 'em. 'Bout the time they get to bilin' over, you'll see me makin' myself 'sace' anyhow."

"I'll wager they'll whip him out."

So with much ado and in great glee, an excursion to the sycamore was arranged. Needless to tell, Eddie came off victor on this and several similar occasions; and the colonies thus obtained became the nucleus of the Brown Apiaries, which afterward grew to be famous.

(To be continued in our next.)

1899.



I am now ready to receive orders for May delivery, 1899. Full colonies of three-banded Italian bees in 8-frame dovetailed hives, \$5. Strong three-frame nucleus, with tested queen, \$2.75. Untested Italian queens, each, 75c; per doz., \$7.00. Tested Italian queens, each, \$1.00; per doz., \$10.00. Best breeding queens, each, \$2.00, \$2.50.

I know what good queens mean to the producer, as well as how to rear them. Safe delivery and satisfaction guaranteed. No disease.

E. W. Moore,

Box 103.

GRAYVILLE, ILLS.

WHAT SHALL THE HARVEST BE?

JAMES CORMAC.

WHAT will the harvest be? can best be answered after the season's close, and the proceeds are counted in cash as to honey, and colonies as to bees. But this question, to be properly answered, imposes responsibility of no light order upon the apiarist. Nature may favor a rich yield, and the bees will gather the same, compensating us for all our care, if our care is rightly bestowed. That there are divers ways of manipulating hives and bees, we learn through the journals, and although we may differ as to methods, we all agree upon one fact—that is, strong colonies at the time of honey flow. The province of the bee-keeper is to post himself as to date of flow, from whatever he depends upon for his crop, secure a knowledge of the lifetime of workers, and the age at which the young bees go afield to gather nectar, then manage to secure an overflow of workers of the right age, at the right time, to suit his locality, with supers on hand well filled with sections having a size starter, or, better, a full sheet of foundation, with bait sections in each super, giving close attention to the time of putting on the supers and taking off the filled sections, and supplying others while the flow lasts, and as it draws to a close, taking those nearly filled, and massing them in the supers with an additional super above with sections, a few at a time, partly filled. Thus furnish honey to complete those partly capped, removing all sections as soon as completed, to save them from what is called travel stain, and your harvest will be profitable in proportion to timely care, whatever hive you may use. The sim-

pler the hive the better, only that it is furnished with movable combs. After trial, I have adopted the 8-frame dovetail hive for comb honey, securing as much honey with the least expense, as with more complicated ones, and with less loss of time. Many are often deceived by these complicated fixings, because of trial under more favorable flow with a colony of good workers. The neighboring hives appearing in as favorable conditions as the patent hive, does not give us quite so good a yield, and we credit the hive, when if colonies were exchanged, the simpler hive would be found equal to the more expensive, with a saving of time in care. There is only one addition made in my hives, and that is in the super, which is $\frac{3}{8}$ of an inch deeper than the ordinary dovetail hive super. This $\frac{3}{8}$ is taken up by section holders placed on the top of sections, same as the sections rest on. A $\frac{3}{8}$ strip across the brood frames keeps the holders from settling in the center. One on the top of section holders, laid crosswise, holds these in place, and super above. Your sections are free from propolis, except a line where the edge of section and separator meet. All sections ought to be removed as soon as filled.

In a good flow and fine days, the bees, will complete a super except a few which can be benched with others in like condition, and again put on the hive. The freer from propolis the sections are, the readier they sell and the less scraping is required. If left on after being capped, the bees varnish the cappings with propolis, as we call the gummy stuff they stick all things together with. This is gathered from weeds which, at the season, commence to excrete this gum. Some kinds are dark brown, some reddish, and the

propolis is spread over the cappings to exclude moisture from contact with the honey. All who have noticed honey sweating in a damp time or place, if they have noticed closely, have seen that the whitest honey sweats the most, the most travel-stained, less. Why? The cappings are porous, the unions of scabs of wax not being perfect so as to prevent the contact of moisture with the honey the bees varnish, and the longer the honey remains on the hive, the more varnishing will proceed, and the later the season, the more gum is excreted from weeds, and spread on the combs.

Color of sections, as to selling, may be injured two or three cents per pound, and make our harvest many dollars less, where several hundred pounds are varnished much. The idea is to ripen the honey. How so? By the warmth of the air in the hive. You say, can't the warmth be provided elsewhere and the honey ripened equally, by keeping in a warm room well aired? Having tried both ways, my harvest is enhanced by the latter method, taking the sections out of the supers, and shelving them, or placing the supers in piles outdoor with screen wire bottom, and top of the pile set on stakes driven to support the corners of the sections, and the cover raised to allow free circulation.

We all have to give more or less attention to the hive entrance during the summer, for many reasons, and contrivances, called entrance blocks, of different patterns, are used. To be valuable and handy, they ought to be attached to the hive. Mine are frequently lost, and in moving the hive, slip and let the bees out. Heavy winds blow them away, and when bees were found robbing, a search of some minutes was taken to find a guard; also at

various times a smaller entrance is desirable; then in a few days, as large as $1\frac{1}{4}$ inch is needed. Cudgeling my noddle to accomodate all requirements, a plan was dreamed out, which is found to be as handy as a pocket in a shirt. Made thus: A strip of galvanized iron $\frac{3}{2}$ of an inch thick, $14\frac{1}{2}$ inches long, $18\frac{1}{4}$ wide, one end bent $\frac{1}{4}$ inch to square angle. Three inches from each end a $\frac{3}{4}$ inch wide strip of same, $2\frac{1}{2}$ inches in length, is riveted to the long strip, loose enough to move easily on rivet. A hole for a lath nail is drilled in the short strip $\frac{3}{4}$ inches from the end, through which a nail is driven into the hive. Raise your hive in front the height of long strips' width, face the hive entrance, place the left hand end of long strip even with the sides of hive, and edge on the bottom board. Nail short strips to the hive. You then have an adjustable entrance guard. By moving strip to right, opens entrance to width of strip or less. Have a notch cut in the lower edge to allow one or two bees to pass, when closed. The cost will be about 2 cents, you doing the riveting. This gives the greatest satisfaction, for the outlay, of anything ever tried as an entrance guard.

Des Moines, Iowa.

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If you want two dozen or more, write NOW. Satisfaction guaranteed. My '99 circular free.

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Lone Star Apiary,

will sell fine \$2.00 Italian Queens after April 1st. at 50c each. One-frame nuclei at \$1.25, queens included; or will exchange queens or nuclei for supplies. All queens reared in 1898, from imported mothers. Nuclei, strong, full of bees and brood, will make good colonies if given comb or foundation. 400 colonies to dequeen in April to prevent swarming.

G. F. DAVIDSON & SONS, Fairview, Tex.

"Doolittle on Queen Rearing,"

a dollar book, and the weekly AMERICAN BEE JOURNAL one year, both for only \$1.60 to a new subscriber to the American Bee Journal. A sample copy of the Journal free. Address,

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R. B. LEAHY, }
G. M. DOOLITTLE, } - - - Editors

OUR readers should not fail to read the opening chapters of our \$50.00 prize story, "Two Worlds."

MATERIALS for manufacturing bee supplies (except beeswax), have been steadily advancing all winter. We were fortunate, however, in having laid in a large stock of lumber, tin, zinc and nails, which has proved a great benefit to us financially.

RELATIVE to footnote to "Rambler's" letter, page 95, March PROGRESSIVE, I wish to make this statement, that in dictating the said footnote, I think I was misunderstood. What I had meant to say was that *we* had been insisting on Bro. Aikin contributing regularly for the PROGRESSIVE. At last Bro. Aikin consented, and suggested that he would write up a series of articles under the caption, "Experience and its Lessons." These articles have been one of the principal features of the PROGRESSIVE for the last eighteen months.

OVER 800 "books for beginners" is pretty good for one month, yet this is the record made by the Amateur Bee-keeper for the month of March. One order of 500, and another of 100, of these, were for export, one lot going by way of the Atlantic and the other by way of the Pacific, but both en route to far-away Australia. Then we sold an

hundred each to two other large dealers in apiarian supplies, and we believe we retailed nearly a hundred more. Every dealer in bee-keeper's supplies, whether small or large, should have a stock of these books on hand with which to supply the demand of beginners, for whom this book was especially written. This is the first year that we have exported any goods to Australia, and though the amount is not large, (only \$300 worth), we feel quite happy about it.

BUSINESS to this date (April 5), is holding up extremely well. We are making twelve hours a day in all departments. We have sold about twenty-five cars, and consigned 2. This is much better than we did last year to this date, though we started up our plant last fall a month later than usual. If we wished to consign goods, and had the capacity to make them, we could have consigned about 25 cars more—but our supplies are firstclass in every respect and demand the cash. Our branch house at Omaha, under the management of Mr. Oliver Rouse, has doubled its sales of last year, and our East St. Louis house, which is under the management of our friend, Dr. Miller, is far exceeding our expectations. We have nothing to complain of but the weather, and it will be all right soon we hope.

THE contestants for the prize stories were many. I think there were seventeen in all. I am sorry to say that two-thirds of them were written with a lead pencil, and almost illegible. Then there were seven that were well written, and sent in, a style and grace about them which showed the writers were after the prizes. From these seven, were selected the following:

1st: "Two Worlds," (which begins in this number), by Mrs. J. M. Null, Miami, Mo.

2d: "A Summer Idyl," by Ellen Brainard Peck, Clinton, Conn.

3rd: "Simon Buzz," by R. C. Aikin, Loveland, Colo.

There are four stories highly complimented by the judges, but they were compelled to lay them aside on account of minor defects, such as repetitions, extremely bad spelling, grammatical "slips," etc.

WE have had made for us a number of canvas gloves for bee-keepers. These are to be used in lieu of rubber gloves. When oiled with linseed oil, these canvas gloves are a protection against bee stings; are lighter and cool-

er to wear, and cost only about one-third as much as rubber gloves, which we believe they will outlast many times over. There are only two sizes; one small, for ladies; the other large, for gentlemen; and in both cases they are intended to be enough too large for the wearer, to be comfortably cool in hot weather. Mr. N. D. West, a large bee-keeper of New York, inventor of the spiral queen cell protector, has this to say about these canvas gloves:

"I have used these gloves for five years. They are bee proof and water proof. I prefer these large size canvas gloves, with gauntlet wrists, so the hand is slipped in the glove in an instant, and off again in an instant, when desired. They are more convenient, and will not cause the hand to sweat as much as a tight-fitting rubber glove."

We are prepared to furnish these gloves at 50c per pair, or 60c by mail. In ordering, please state whether you wish gentlemen's or ladies' size.

PHILADELPHIA, PA., SEPT. 5, 6 and 7.

The following notice is sent us by Dr. A. B. Mason, the Secretary of the United States Bee-Keepers' Association:

TOLEDO, O., Feb. 27, 1899.

The Executive Committee of the United States Bee-Keepers' Association has complied with the request of the members as expressed at the Omaha convention, and decided to hold the next convention of the association at Philadelphia, Pa., commencing Tuesday evening, Sept. 5, holding three sessions on Wednesday, and three on Thursday, the last being on Thursday evening.

The program is being prepared, and arrangements are being made for the entertainment of those in attendance on the meetings. Notice of exact place of meeting, railroad and other arrangements will be given in due time.

The Philadelphia Bee-Keepers' Association, with only one exception I believe, is composed of amateurs, who are keeping bees for pleasure, and not profit in dollars and cents, and its members are showing quite an amount of interest in the coming convention; and in a recent letter from its secretary, in speaking of securing rates, and places for delegates, he says: "I can assure you that we will do everything we undertake to do in a thorough manner." So we shall have a cordial reception, and an interest taken in our comfort.

A. B. MASON, Sec.

We hope that just as many of our readers as possible will begin to make

their arrangements to be present at the National Convention in September—during the Grand Army meeting, when railroad rates will be low.

Keep the Bees Warm.—As early spring is the most trying time for our pets, the bees, and a time when brood rearing must go on as rapidly as possible, if we are to have the laborers for the early harvest in sufficient numbers to reap the best results, it becomes the prudent bee-keeper to look after the tops of the hives to see that all the animal heat generated by the bees is retained in the hive, and not allowed to pass off through any cracks or "openness" about the top, as is often the case where care is not used. To this end, see that the quilts, cushions or honey boards, are all snug and secure, and if a packing of chaff, cork dust, sawdust, or several thicknesses of old woolen carpet or blankets can be used above the top covering to the hives, it will be of enough benefit in securing early laborers to more than pay for time and trouble.

See that All Have Stores.—Then every bee-keeper should *know* that each colony has an abundance of stores to last them till they can secure honey or nectar from the flowers, for unless they do have plenty they will economize in brood rearing to save stores, and thus the results we are anxious for will not be accomplished. But I hear someone ask, "How much is an abundance of stores for spring use?" My rule has been to know that each colony had at least ten pounds at the first examination in spring, which is as soon as suitable warm weather comes for opening hives. Having ascertained that each colony has this much stores and a good queen, the colony is now left alone during the next three weeks, when the prospect for nectar from the flowers is now only about a week or so off; when they are looked after again, and if all have five or more pounds at this second examination, they are called good enough. Then if the flowers yield honey, all is well. If not, feeding must be resorted to. For feeding, I prefer combs of sealed honey first; next combs filled with feed, and in either case, the filled comb set in the center of the brood nest, as the removing of the honey from this place to that surrounding the brood, (as the bees will always have it), causes a rise in the temperature of the brood nest, great stimulation of

the queen to extra egg-laying, and a place provided for her eggs in the warmest place of the hive, and just where the bees desire the youngest brood. Many prefer to feed from a feeder each night. With such I have no quarrel, but after trying both plans for years, it seems to me that the feeder plan causes much more labor, without a corresponding result.

Divisible Shallow Framed Hives.

—I see by the last or March number of PROGRESSIVE that Doolittle has to take it from all sides, and that Friends Gathright and "Rambler" are disposed to feel that Doolittle has not been hardly fair with Bro. Aikin, nor fully understands what he is talking about when he opposes Bro. A.'s "double up and tumble down" hive. Well, I wish to say that I may have seemed too severe on Bro. A. and his hive, but I have not intended to wound him nor anyone else. Of late, when things which were of a different pattern from those in general use have been spoken of to the public, their merits have been set forth in such glowing, *ne plus ultra* terms, that it is almost made to appear that all anyone had to do was to get one of these "*new-fangled traps*," or some old trap put forth in a *new light*, to immediately reap a *rich harvest*, by securing two or three times the amount of honey, or else in being able to sell the amount obtained at from *two to four* cents per pound higher than that obtained previously, or both. And because of this, I felt that it was someone's duty to take an *equally strong stand* on the other side, in order that the rank and file should not be led to go to extremes in spending their money after this will-o'-the-wisp chase, which apparently is having an epidemic just at the present time. Hear "Rambler" proclaim a "great increase in the amount of honey obtained per colony," by using the divisible Heddon hive. Well, if that is so, Doolittle should have been enabled to have increased his average of upwards of 80 pounds of comb honey per colony for the past 30 years, to say 100 pounds, and his 309 pounds from a single colony to say 400 pounds. Did he do it? Well, a *faithful* trial of the Heddon divisible system, with from 15 to 20 colonies in such hives, for four or five years, gave a result of less than two-thirds as much each year, on an average from these hives, as that secured on an average from the rest of the apiary, so I gave the divisible brood chamber up,

for reasons I have given when referring to the Aikin articles, and others which I have not yet given, but may do so later on. And yet "Rambler" is uncharitable enough to throw out that I had never fully tested this matter. If after a person has tested the two systems side by side, they find that the divisible is the superior, *I am glad* to have them use it; but it is better when putting these things before the public to give the *proof*, than mere assertions or theory. I especially endorse Bro. Gathright's closing paragraph, and could I do so, I would have them set up in *great large type* and put over the *honey house door* belonging to *every individual bee-keeper* in the land. Reader, turn back to that paragraph on page 91, March PROGRESSIVE, and read it till the words are fairly *burned* into your mind. Then Doolittle will be satisfied that *you* will not go far astray.

Borodino, N. Y. G. M. DOOLITTLE.

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The pages opposite the pictures are devoted to an enumeration of the characteristics of the Review; each page taking up and explaining a single characteristic. Here are the headings that appear at the tops of the pages: How Pictures add to the Usefulness and Beauty of a Journal; The Review a Home-Made Journal; The Editor of the Review; The Review's Correspondents; Good Things from Other Journals; Notes from Foreign Bee Journals; The Department of Criticism; Extracted Department; How the Review is Regarded by its Rivals; The Review has No Supply Trade; Typographical Neatness.





This little booklet is printed in two colors, from large, clear, beautiful type, upon heavy, enameled book paper, and would be an ornament even upon a parlor table. Its perusal will give a clearer idea of the real character of the Review than can be obtained in any other way except that of reading several copies of the Review; and I shall be glad to send it free to anyone sufficiently interested to ask for it. Simply write on a postal, "Send me your little souvenir," and it will come.



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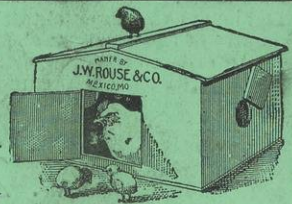
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