

The progressive bee keeper. Vol. 3, No. 8 August 1, 1893

Higginsville, Mo.: Leahy Manufacturing Company, August 1, 1893

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AUGUST 1, 1893.



Entered at the postoffice, Higginsville, Mo., as second class matter.

ADVERTISING RATES. Golden

All advertisements will be inserted at the rate of 15 cents per line, Nonpareil space, each insertion; 12 lines of Nonpareil space make 1 inch, Discounts will be given as follows:

On 10 lines and upwards, 3 times, 5 per cent; 6 times, 15 per cent; 9 times, 25 per cent; 12 times, 35 per cent.

On 20 lines and upwards, 3 times, 10 per cent; 6 times, 20 per cent: 9 times, 30 per cent; 12 times, 40 per cent,

On 30 lines and upwards, 3 times, 20 per cent: 6 times, 30 per cent; 9 times, 40 per cent; 12 times, 50 per cent.

We reserve the right to refuse all advertisements that we consider of a questionable character.

Queens From Texas. My bees can not be surpassed for bus

gentleness. Safe arrival and satisfaction guaranteed. Untested queens - March, April and May *1 each. 50 Tested Queens for early orders, \$1.50 each. Order early, Send for price list. J. D. CIVENS, Bx 3, Lisbon, Tex.



BARNES'

Foot and Hand Power Machinery 003

This cut represents our Combined Circular and Seroll Saw, which is the seroil Saw, which is the best machine made for Bee Kcepers' use in the con-struction of their Hives, Sections, Boxes, &c. -chines sent on trial. For cal-alogue, prices, &c. address

W. F. & JOHN BARNES, 914 Ruby Street, Rockford, Ills Management



UNION FAMILY SCALES.

E HAVE frequent calls for a scale to weigh honey, etc., and we have now made arrangements to supply you with counter scales, with platform and tin scoop, made with steel bearings, brass beam, and nicely finished and ornamented. Will weigh correctly from one half ounce to 240 pounds.

PRICE-Boxed and delivered on cars only \$3.50; with double brass beams, \$4. Weight of above, bexed ready

to ship, about forty pounds. These Scales can be shipped from here, and we can fill orders promptly, as we have a large stock on hand. LEAHY M'F'G., CO,

126 page Catalogue of Apiarian Supplies sent Free on Application.

Our Specialties are QUIGLEY'S GOLDEN ITALIAN BEES.

Are hardy good honey gatherers, gentle and teautiful. The Queens are large and prolific. Safe arrival and satisfaction guaranteed.

PRICES OF QUEENS.

1 W	Varranted	Queen,	May	to Nev.	1 31.00
6		•	"		5.00
12			June		9.0.)
12		÷.	July	to Nev.	1.8.00



Catch Your Queens ALLEY'S DRONE AND QUEEN TRAP. WHEN YOUR BEES SWARM, BY USING ALLEY'S DRONE AND QUEEN TRAP.

LATEST IMPROVED. No swarms run off or go into the tree tops. Made to fit the Dovetailed Hive. Best workmanship and material. Price, each, 50c; 5 for \$1.75; 10 for \$3.00; by mail, 15c each extra. FOUNDATION REDUCED THREE CENTS PER POUND.

E. F. QUIGLEY, Unionville, Mg.

Our Price List is sent Free.

All other Supplies at Bottom Prices. Address.



Please mention this paper.



BEE ESCAPES.

We have just received a large shipment of the Porter, and the Hastings Bee Escapes. In our opinion, these are the best bee "Which escapes manufactured. is the best?" is a question often asked. To this we will say: Of these two kinds we do not know, they are both good; and as there is no difference in the price of the two, you can take your choice.



PORTER BEE ESCAPE. Porter Bee Escape, 20c each; per dozen, \$2.25; with no extra charge when sent by mail; 1 gross, by express or freight, \$17.50.



HASTINGS' LIGHTNING BEE ESCAPE.

Hastings Lightning Bee Escape, 20c each; per dozen, \$2.25; with no extra charge when sent by mail; 1 gross, by express or freight, \$17.50.

We also have about fifty of the old Dibbern Bee E-capes, for which we will take 10c each. These will do good work, and were the leading bee escapes for a number of years.

Board for bee escapes, for S frame Dovetailed Hive, 15c each.

ITALIAN QUEENS.

As we have over 500 colonies of bees at our command, with some of the best queens obtainable to breed from, (some of them costing \$10.00 each), and 110 black bees near our apjacies. we can almost guarantees and our queens to be purely mated

PRICES OF QUEENS. *** One tested queen. \$1.50: 3 tested queens, \$3.50; 6 for \$6.00; 12 for \$11.00 One untested queen, \$0.75; 3 untested queens, \$2.00; 6 for \$3.75; 12 for \$6.50.

CLUBBING LIST.

We will send the Progressive	Bee Keeper with
The Review	
Gleanings	1 00
Canadian Bee Journal	
Apiculturist	
American Bee Keeper	
Bee Keepers' Enterprise	.50 80

25c Send 25c and get a copy of the AMA-TEUR BEE KEEPER, a book es-pecially for beginners. Address, LEAHY MF'G. CO., Higginsville, Mo.

Honey and Beeswax Market.

Chicago, Ills.-We quote fancy new honey at 18c. No. 2, at 16c; amber, 15c. Beeswax, 22(a25c. We have had some shipments of fancy new stock which sold at once. J. A. L.

Kansas City, Mo.-Receipts and stocks very light, demand good. We quote: No. 1 white 1 lbs., 16(@17c; No. 2, 14@15c; No. 1 amber 1-lbs., 15c; No. 2 amber, 10@12c. Extracted, white, 7(@712c; amber, 5(@6. Beeswax, 20(@23c. C-M. C. C.

Cincinnati, O.- New extracted has commenced to arrive lively, and is in fair demand at 5(a) c. There is a slow demand for comb honey, and no choice on our market; prices nominal. Beeswax-Demand good, at 22(@25c for good to choice yellow. Supply good.

C. F. M. & S.

New York, N. Y.-No comb honey on the market. New crop extracted is now arriving freely from California

and the South, and the market is well stocked. Trade is quiet, demand light, and prices have a downward tendency. We quote-Southern, common to fair, 60(@65c per gallon; choice, 70(@72c per gallon. California, 6(@61c per lb. Beeswax, 251(a27c. H. B. & S.

San Francisco, Cal.—Choice extract-ed is scarce at 7(@74c, and demand heavier than supply. Choice comb is not scarce at 10(@12c, according to qual-ity 1 be Decempine according to quality, 1-lbs. Beeswax is neglected at 22 (a23c. S. L. & S.

Albany, N. Y .-- Our honey market is dull at present, There are some re-ceipts of new extracted, but no reliable price established yet. Beeswax is more plenty, at 27(@28c for good color.

H. R. W.

SOME KIND WORDS.

Belleville, Ills, June 4, 1893. Friend Leahy:

Have just received the June number of the PROGRESSIVE BEE KEEPER, and must say that for a "young one," it is "a daisy." I see you will make a suc-cess of it. Hurrah for Missouri and the West. Yours truly,

E. T. Flanagan.

-@-Decatur, Ills., June 19, 1893. Messrs. Leahy & Co.:

I am pleased to see the improvement that you are making in the PROGRESS-IVE BEE KEEPER, and I trust you will keep on till it stands at the head. Your June issue is a model of neatness. Yours truly, F. H. Petts.

THE CHAMPION SMOKER!

The ORIGINAL curved nozzle, steel-lined, Bellows Smoker. The fire-chamber is 3½57 inches, with a corrugated steel lining, which allows a cold current of air to pass between lining and outside shell keeps the outer shell cool, and more than doubles the durability of the Smoker. It has FORCE draft and SPARK-ARRESTING CONE connection between bel-lows and fire-chamber; a base-valve to either keep or extinguish the fire at pleasure; and removable spark arresting GRATE in the curved nozzle. curved nozzle.

Price, by mail, \$1.90; by express, \$1.65. If your supply dealer cannot supply you, write to the manufacturer.

E. Kretchmer, Red Oak, Iowa. Bee-Supply Catalogue of 70 illustrated pages, FREE.

Mention this paper.



Progressive Bee Reeper. The

A Journal Devoted to Bees, Honey and Kindred Industries FIFTY CENTS A YEAR.

Published Monthly by Leahy Manufacturing Company

HIGGINSVILLE, MO, AUGUST I, 1893. VOL. 3. NO. 8

NOTES FROM THE STAR APIARY.

BY S. E. MILLER.

When we wrote the notes for the July number, we had hopes of securing a crop of honey. But, alas! our hopes have about vanished, and so has the white clover and basswood bloom, with not a finished section of comb honey in the whole apiary. Wonder how many bee keepers are in the same boat with us? Too much rain, cool and cloudy weather, for the flowers to secrete nectar, or the bees to gather it.

We notice in a late number of Gleanings, under editorials, nearly two inches of space given to a free advertisement. The editor says, "Does this look like a 'free ad' again?" Well, let it be such. We always like to commend en-terprise, and if the advertiser has enough 'get up and dust' to attend to a large business and satisfy all his customers, we deem it a privilege to boost him along." Very good, Friend Root, but why are not all of your other advertisers entitled to this same privilege? Do they not all pay alike, according to space, and time the ads run. Is not the money of one as good as the other? This ad, at the rates charged in Glean-ings, would amount to about \$3.25 in Unthe regular advertising columns. Un-der editorials we should think it should he worth double that figure. We notice that in some very good papers each new advertiser is given a notice by the editor. This is very good when all are treated alike, but the case above-mentioned looks somewhat like partiality, though we hope it is not meant that This is not the first of this kind way. We that has appeared in Gleanings. are not chronic kickers, but when there is a cause to kick, we can kick like a young mule. We hope the editor of the PROGRESSIVE BEE KEEPER will not fall into this error. We noticed a similar boost for the same party in the American Bee Journal not long ago.

This season the bees have not taken hold of the Doolittle prepared cell curs as readily as we could wish them to. Last year we had one colony that would keep on and finish up a second lot after the first given them were sealed; but they do not act that way this year. We are now using the plan of removing the larvae from natural cells, and giving choice larvae instead; but even this is not working altogether satisfactorily. If anyone thinks that rearing first class queens from a choice breeding queen is all plain sailing, let him try it once for himself.

In our notes for the July P. B. K., We thought we would have a honey crop, But, oh, how sadly we missed it; Now, we fear we shall have scarcely enough With which to spread our biscuit.

Bluffton, Mo., July 17, 1893.

WAYSIDE FRACMENTS.

BY SOMNAMBULIST.

In the study of the portraits and biographical sketches now being given to the public through the medium of the American Bee Journal, what an expansive, yes, limitless, field, stretches out before the mental vision through which to explore and discover. What grand-er study than human nature? And where could Bro. York have found a more noble specimen with which to begin his series than B. Taylor?

Born in Pennsylvania, in 1830. Se-cured first swarm in 1849. Invented the wire end frame in 1857, Largest crop, 26,000 pounds of comb honey. His home is in a most lovely spot, nesling at the foot of a hill, encompassed massive pines fringe the road. The hillsides are bedecked with hundreds of the Taylor hives, and in and out winds the river, leaping over the stones and through the willows. What wonder love of nature permeates his whole being?

Next is introduced the cultured P. H. Elwood, whose finely cut features could not have been more perfect had they been chiseled from marble. At the age of 23 he was advised by physicians to exchange college life for an out-door occupation. Now tips the scales at 225 pounds. Who says bee keeping is not healthful, if not "wealthful?" (Don't worry yourself looking in the dictionary for that last word—it's counterfeit). Let's see! "Where were we?" Oh, yes! Refused an offer of a desirable position as teacher of natural science in a Michigan high school, to engage in bee keeping. Has 1,000 colonies. Was president of the North American Bee Keepers' Association in 1890.

Next appears the "poet laureate" of apiculture, Hon. Eugene Secor; born in New York; emigrated to Iowa on borrowed money. Went to work at anything he could find to do; learning the mason's trade, plastering and bricklaying in summers, and teaching in winters. He has acceptably filled different official positions since 1364; is a life member of the North Iowa Horticultural Society; has been director, vice-president, and president of the same, and has charge of one of its experimental stations. Was president of the North American Bee Keepers' Association in 1892.

January 26th presents us with a very good likeness of the jolly C. C. Miller, whose wonderful magnetism draws us very near to him. He began facing life at the "mature" age of 12, working three miles from home, receiving the munificent sum of \$2.00 per month for the first year, and actually doubling that sum the second. At 22 he gradua-ted at Union College, Schnectady, New He sustained himself a part of York. the time on 32¹/₂ cents per week, and took in a boarder at 50 cents per week. Said boarder, like most of cheap boarders, wanted to be a little choice, and kicked vigorously when beef suet was served instead of butter. Wonder where he finds himself in these days of oleomargarine? At the age of 25 he graduated at the University of Michigan, Ann Arbor. A fine musician, with a grand voice. Refused a salary of \$2500 and expenses paid, for a position at \$1200, paying his own expenses, in order that he might devote more time to his bees, and gradually work into bee keeping as a sole occupation. Began with bee keeping a runaway swarm, caught by his wife, and hived in a sugar barrel. Number of colonies reached 400. Twice honored with the presidency of the North American Bee Keepers' Association.

First on docket for February is Adam Grimm, whose name belied his character, as we are informed he was a very pleasant man. Financially, might he not be considered king of bee keepers? He made a showing of \$10,000 in a single year, as the result of bee keeping. Established a bank, his bees providing the capital.

Next is James A. Green. Born in Illinois; graduated at the age of 22. A clear, practical writer. Number of colonies reached, 400. Unmarried. (Girls, take notice).

February 14th shows G. M. Doolittle, author of "Scientific Queen Rearing." He claims that around the queen centers all there is to bee keeping. Brood nest full to overflowing at the commencement of the honey flow, is his hobby. From less than fifty colonies, spring count, he cleared over \$1000 for thirteen years, taken as an average. Comb honey and queen rearing furnished these results. A prolific writer weighty in more senses than one (275 pounds).

This brings us to Charles F. Muth, the prince of honey merchants. Ship their product into every state, and draw for their supplies on nearly every state and territory in the union. In time of shortage in America, they import from Cuba. Twenty-three years in the trade. Frequently fill car load orders.

March begins with Moses Quinby, "a prince in the realm of bee culture a quarter of a century ago." Author of "Mysteries of Bee Keeping." It is claimed that it is due to his teachings and influence that "there are so many intelligent bee keepers now in New York. At one time half owner of 1200 colonies. President of the N. A. B. A. in 1871.

Ernest R. Root, junior editor of Gleanings, appears in March 9th. His name is indicative of his character. An earnest, indefatigable worker. What better evidence of success can be offered than that in the five years he has been connected with Gleanings, the subscription list has doubled itself?

March 16th we find G. W. Demaree, one of the oldest and most able contributors to bee literature. It has often been preached to me, "Watch Demaree and follow him; he's safe." Twentyfive years in public office.

The first lady bee keeper presented looks sweetly out from the pages of March 23d. A face that shows energy

and resolution, combined with a "sunny disposition." Truly a most noble type of woman, and, in the language of "Woodchopper" in Gleanings, "if some smart young rambler doesn't come around and transfer her to another hive, just to pay off the Dr. for his licks at the 'batches,' it will be queer, won't it?" The amount of mischief the appearance of that face may create, remains untold. May yet prove an ill wind for the Dr.

The first Canadian presented is found in March 30th. William McEvoy, foul brood inspector of the Province of Ontario. His fame arose from the discovery of the cause and cure of foul brood. Has also been instrumental in getting an act passed by the Ontario legislature to prevent the "senseless and exceedingly injurious practice of spraying trees with poisonous liquids when in bloom." Isn't there room right here for several in our own country to reach eminence? Such a law should be enacted in every state in the union.

Let's see what April brings us. Oh, here is Chas. Dadant, as sunshiny as a bright April morning itself. In the language of the girl of the period, "to see him is to love him." From being a poor stranger in a strange land, whose tongue was, to him, incomprehensible, he has arisen to affluence, and is now at the head of the largest comb foundation business in the world. He tells an amusing story, which must be heard from his own lips, to be truly appreci-ated, of how he became lost, and in-quired of every passer-by for "Ah-mill-ton," (with the accent on the *mill*), but all to no purpose. At last, dishearten-ed, he bethought himself to write Hamton, on paper. The reply was, "Ham-ton? Oh, yes, that is just about a mile over there.

Next is Mrs. L. Harrison, editress of apiarian department of Prairie Farmer and Orange Judd Farmer, likewise a member of the staff of a British apicultural journal. A strong vigorous and advanced thinker, possessing great energy and perseverance with large exccutive ability. What wonder she subjugated the opposing party, her husband, and brought him around in fine style. Reader, art thou a woman? Go thou and do likewise. If a man, 'twould never, never do.

April 20th gives us another sunny face; that of Dr. G. L. Tinker a graduate of the Electric Medical Institute, Cincinnati, O. A most successful physician as well as beekeeper and manufacturer. He has *tinkered* around until he has found the proper gauge for the perforations in queen and drone excluding zinc and invented a hive—the Nonpareil and developed a strain of bees he calls Syrio-Albino, Success to his tinkerings.

In April 27th we are introduced to Joseph E. Pond, a man who keeps bees for the very love of them. Served part of his life in the practice of medicine but has been actively engaged in the profession of law since '69. He is the originator and strong advocate of close spacing.

This brings us to A. I. Root, apiarist, publisher and manufacturer, of whom every beekeeper knows something and of whom a considerable sized volume might be written and the half remain untold. Began real life as lecturer and pedagogue in a tough country school where he "licked" and made friends of the threatening "bullies." Being rather under medium height and slight of build, these skirmishes must have called into action about all the muscle he possessed. Oh, wouldn't you've liked to been there to have witnessed one of those performances with Bro. A. I. as ring master?" Only think of it; he himself undoubtedly has seen the time when he thought "heaps" of the "gurls" but let one of those hapless youths pass a love note or choice apple across the aisle and woe be unto him, he was immediately pounced upon, and then and there was war to the teeth. Books.



ROOT "LICKING THE BULLIES."

slates, inkstands and what not filled the air. Perchance fur flew also while the perspiration from A. I. intermingled with the boy's falling blood and tears.

Wonder the girls did not take a hand; been like some I've seen they would not

have been "found wanting." After all I'm rather glad whipping and the whipping post are institutions of the past. Next we find him in the jewelry business, then in beekeeping and on to the publishing of Gleanings and manufacturing of supplies. Carp raising next engaged his attention, and then the raising of vegetables. But the very latest of his hobbies is the bicycle. "This modern age sees every sage, some crying evil strive to mend." Just to think of it we that are not wheelmen or wheelwomen cannot possibly "relish a drink of cool spring water" or "appre-ciate the delicious sense of a restful sleep." Alas! how much has been lost by the countless millions who have passed on before by the tardy invention of the bicycle. And who knows how the bicycle. And who knows how much A. I. himself may be losing by anteceding or living before other inventions.

A "Stray Straw" for April 15, '93, runs thus:

The bicycle, according to an editorial on page 274 is as necessary for an out apiary as an overcoat in winter. Now, honest Injun would you advise an old codger like me to sell my horse and go to monkeying with a bike?"

Also a lady friend of mine "fat and forty" would like to know if he would recommend the wheel to her, inasmuch as she very much regrets having already lost so much valuable comfort through life. It might be interesting to some, if Bro. A. I. would recount the many mishaps one might expect in learning to use the wheel and just the amount that would be required for repairing broken shins, etc., not to speak of broken necks. Bicycle lessons will be next in order will they not? Bro. A. I. declares he is not rooting after dollars but "howsumever" he's amassed quite a lot of them; but you take Gleanings don't you? If not, why not? Some way it has always seemed to me that the Roots were well named.

There's A. I. (that means No. 1 does n't it?) and Ernest—such roots understand their business and go down deep or send out laterals or both to take in all the substance within reach of them. Truly they improve their opportunities; but we could not all be roots there must; needs be some branches, &c.

Right here on the heels of A. I. Root, comes another wheelman, mounted on his wheel. Master Ralph Benton, the last we shall now consider, and least in stature and years, but in ambition—Oh my! the heights of his ambition are dizzying. Ralph is the youngest member of the North American Beekeepers Association, being under nine years of age. Paid his initiation fee out of money he himself had earned in the apiary. Being born in Germany has two mother tongues. Secured his bicycle by getting 100 subscribers for the "Evening News." Washington, D. C. He being the first to respond to the call.



MASTER RALPH BENTON.

He is quite eager to attend the next N. A. B. A and will probably be there. In speaking of it lately his mother made a remark that did not greatly favor his going. Whereupen among other things he said: "Why do you talk so? It is not the world's fair I want to see, but the beekeeper's convention."

And now let's wheel right off from Bro. York's biographical sketches, and take notice of Henry Alley. Did you ever see any one hump himself as he has done this summer? Don't he remind you of a widower locking up a new wife? He has wheeled that vehicle by which he conveys his thoughts to the public, and which he calls the Apiculturist, into line, and brightened it up surprisingly. Therein one's eyes meet "cells, cells, cells," but after all the paper, I'll warrant you, is no sell.

"Which is the most enjoyable—the anticipation of a big crop as the spring begins, or the round up at the close of the harvest?-Stray Straws.

The former by all means Dr., with us this year, for then the honey crop was an unknown quantity with no other sign in sight but x; but now that unknown quantity is preceded by a—sign.

What's the matter with Bro. Hasty any way? (See July Review.) That's not a bike on which Hutchinson is riding, but a new fangled cycle, drawn by

bees, and it "gets there." Isn't that the main point? And how could he get off a joke at the expense of the elderly knight in the face of the fact that old Father Time is rapidly carrying us on toward that state ?

Again, in regard to my comments on Dr. Miller's straw business, he not only is completely bamboozled himself but seeks the bamboozlement of others. Well, well, we can at least credit Friend Hasty with being original, for I really can not think another one saw as he did.

He must wear highly colored glasses for he accuses me of having loftly aspirations. Whew! Wait till I catch my breath: Not used to it. Absolutely the first time I've been so accused, and I don't know exactly how to take it; in small or large doses; with or without sugar. And, oh, what if his dreadful warning would prove prophetie? Who would there be to mourn? Not one.

[•]Observer you should not ask more of others than you yourself are willing to grant. However, many thanks for yours and Bro. Miller's kind notices, but I had almost forgotten there were so many school teachers among the bee keepers; and, lest I get a rap on the head that will wake me up, I desist from further torture,

Naptown, Dreamland.



MICHIGAN, EXPERIMENTAL APIARY, LOCATED AT LAPEER.

WORK AT MICHIGAN'S EXPERI-MENTAL APIARY.

R. L. TAYLOR, APIARIST.

Bee Keepers' Review.

In this first article concerning the work at the Michigan Apicultural Experiment Station, I must confine myself briefly to a statement of some of the items of work already undertaken, and to indicating some of the benefits which it is hoped may be derived from them, only briefly alluding to results so far as they yet appear, without entering into details.

It must be remembered that I have been plunged into the midst of the work of the Station at the most important as well as the busiest season of the year, by an appointment as director only a short time before the opening of

the honey season-an appointment which I had previously not the remotest thought of receiving--and so no doubt many of the methods pursued will prove cruder than they might have done had I had the advantage of time for previous thought directed to the maturing of plans best calculated to secure the clearest results in some of the still unsolved matters that are of special interest to bee keepers; indeed, I already see more than one point where improvement could have been made. It is to be noted also that thus far I have been left to my own resources for the selection of points to be investigated in conducting the work, but it is to be hoped that in the near future direction may be given in this respect by a committee appointed by those who on account of their vocation or avocation are specially interested.

FOUNDATION FOR COMB HONEY.

No intelligent, well informed, practical apiarist can avoid the rising of numerous questions with regard to the comb foundations prepared for use in sections, some of which are: Are those of all makers equally good? Do the bees have a choice and consequently work more readily upon some than upon others? Has the thinner any advantage or disadvantage, as compared with the heavier? Is that long made equally as good as that just out of the machine? Are all kinds in equal danger of a well founded accusation of leaving a "fish bone?"

With the hope of throwing some light upon some of these, I procured a variety of foundations to the number of eight, distinguished from each other by weight, make or age. Each kind for the purposes of the experiment was distinguished by a letter of the alphabet, and the number of feet to the pound of each carefully determined, all of which was made a matter of record. Each was then cut to the same size and fastened into sections. Twenty-eight

sections of each were used for the purpose of the experiment, and each section was plainly marked on the top with the letter used to designate the kind of foundation with which it was filled. These sections were then put into cases without separators, alternately, each case, after the first, beginning with a section marked with a letter immediately succeeding the letter used in marking the final section of the previous base. These cases thus prepared have been adjusted to colonies best fitted by their character and condition to work in all parts of the case equally. What valuable results, if any, can be expected? Worked out under such circumstances, can those least liable to produce the "fish bone" be determined by comparing the combs? Can those most profitable to the apiarist be determined by comparing the weights of the comb honey produced from each? I shall later desire the assistance of a few of the most competent apiarists in making comparison of the septums of comb built from these different kinds of foundation.

IS COMB FOUNDATION PROFITABLE IN THE BRCOD CHAMBER?

This is an old but still unsettled question. To obtain some definite information, if possible, on this matter. I prepared four sets of hives, each hive bcing one section of the new Heddon. Each set consists of three hives-one filled with drawn comb, one with foundation, and one with frames furnished with narrow starters only. The sets are numbered 1, 2, 3 and 4, and those furnished with comb. foundation and starters are designated by the letters, A, B and C respectively. A record is made of the weight of each hive and of the cases adjusted at the time of hiving each swarm, and, also, of the bees in each swarm. Each hive with its case was again weighed upon the morning of the day succeeding the hiving. to determine as far as possible the ex-

tent of change which had taken place in the denizens of the hives by their going from one hive to join another, as they frequently do when there has been any commingling of bees in swarming. It will be seen that at the end of the honey season I can easily determine the increase in weight, both of the brood chamber and of the supers, and so be able, I hope, to draw some solid conclusion with reference to the comparative value of comb, starters and foundation for use in the brood chamber.

These sets of hives, it has occurred to me, are well adapted to throw light upon another question which perhaps is not given the consideration it deserves, viz.: Do colonies produce results in proportion to their strength, or is there a golden mean in this respect, and is it true that when that is either exceeded or come short of, there is less relative profit? How the above mentioned sets of hives may help to elucidate this question, will be evident when I mention the fact that swarms put into 1 C, 2 C, 3 C and 4 C, weighed respectively $7\frac{1}{2}$, $10\frac{2}{3}$, 5, and $4\frac{1}{4}$ pounds. Among the swarms hived upon combs, and among those hived upon foundation, there was also a considerable difference in weight, though not to the same extent. I am looking with great interest for the results, insofar as they may have a bearing upon this point, and much care will be taken that the exact facts shall be arrived at.

PRATT'S HIVERS.

Five of these hivers were procured and adjusted to as many hives, and as I must be brief. I shall now only mention results thus far by giving an outline history of No. 2, deferring further mention until another time. To this hive the hiver was adjusted June 17th, upon the issuing and return of aswarm. After this adjustment the queen was of course in the old brood chamber, notwithstanding which, the swarm did not issue again till June 29th, when it was allowed to return. On July 2d it again issued and became mingled with other swarms so that it was necessary in making a division to allot the proper portion, which was returned to the hive. This colony, though furnished with a case of sections filled with well drawn comb, has done comparatively nothing in it.

LANGDON'S NON-SWARMING ATTACH-MENT.

Lack of space will permit but a few words touching this invention, by way of closing this article. Five of the attachments were adjusted to double the number of hives, on the 22d day of June, since which time seventeen swarms have issued from these hives; in each instance thus far the queen was returned to her own hive and the swarm to the sister hive, although it quickly became evident that it was worse than useless to do so.

Full details of this line of work may be looked for in my next article, from which I think any intelligent apiarist may easily determine the reason why the attachment has failed in these cases to honor its first name, and whether it can be made practical anywhere.

Lapeer, Mich., July 4, 1893.

SOME PRACTICAL HINTS.

SEASON TOO POOR FOR MUCH EXPERI-MENTAL WORK. - A SMALL HIVE NOT DESIRABLE, AND SOME REASONS WHY.

BY R. C. AIKIN.

We had hoped to have a good season. Last year was a hard one for this part of Colorado. I had mapped out last year several experiments, and had fully determined to demonstrate some theories, to be not only theory, but practical.

Well, when nature does not provide favorable conditions, it is too expen-

sive for bread and butter winners to do much to improve on nature. Last year was so near a complete failure that our experiments could not be carried out. So far this year it is little better than last. The yield has been so slow we could not get section work done except on the strongest colonies; and to help out the matter we doubled up some, putting, in a few cases, all the workers of two or three colonies into one. All fair to good cells have done a little in extracting chambers.

The advocates of natural swarming claim that the bees in a new swarm will work harder and gather more honey than the same bees if they do not swarm. We will get *some* comb honey, even if the flow stops *now*, (it stopped by this date last year), and it is a fact that ten per cent of our bees would not have swarmed, even though we had not used any means to prevent it. Had they swarmed, we could not have gotten *any* section work, even by using so small a brood chamber as eight frame dovetailed.

I do not believe a swarm works with any great degree of vigor above that of the same colony when it does not swarm, even though *prevented* from swarming. There is an *apparent* greater energy, for two reasons. First, the swarm has no brood; not anything to do but build comb. The second reason is, they get a lot of honey in a short time.

I have not *tested* the matter beyond observing through years of practice, but I have observed that when a colony is deprived of brood, and left in the same condition as the swarm in regard to brood and field bees, they make it count in getting honey. My attention was first called to this fact some twelve or fourteen years ago. I had a colony with a failing queen. They had but few bees when the queen died. They failed to re-queen; and although there was a "queen in sight" the greater part of the time, yet through the flow they had no brood to feed or care for. I was so surprised at their energetic work and the amount of honey I received from them, that ever since I have noted the fact. that a sufficient force of field bees, with little else to do, *always get the honey*, whether they be a natural swarm or not.

So confident am I that I am right, I would not hesitate one minute to undertake to get as much honey, and prevent all swarming, as an equally competent apiarist with an equal number of colonies, etc., could get and practice swarming.

Even should the swarming plan do best one or two seasons, the other will come out ahead in a term of five years, and show a good balance in dollars and cents in favor of the latter.

'I want to say a word about the size of hives. More and more am I convinced that the eight frame hive has been a detriment, rather than a help toward getting large crops.

We do know that a colony in a small hive will swarm more readily than that in the large hive. Take an apiary of 100 colonies—fifty in eight frame hives and fifty in twelve frame hives. Now, if the eight frames have back enough stores so that brooding was unchecked, the eight frame hives will give the earliest, the greatest number of, and the smallest swarms. You object, though, that the twelve frame hive will have from two to four frames not occupied with brood, and will take a lot of your nice honey to fill.

The fact is overlooked that these combs are already full of old honey. Just as much of the new honey will go to the supers with a big hive as with a little one. All you have to do is to get your *big hive full to start with*, and ever after you will have fewer swarms, larger swarms, a little more *original investment* in the extra combs and contents, less labor with swarms, fewer

hives, less feeding, and colonies that will do rousing work in both quantity and quality. Yes, and better wintering.

Thousands upon thousands of these little hives are used by farmers and others, when a two bushel, ten cent box would have given them by far the greater net returns.

The hive of the future for the specialist is a shallow brood chamber, having a large top and bottom, and so arranged as to enlarge or contract by adding to, or taking from, the top or bottom. The farmer's hive will be a closed end frame hive of large proportions, or a big, cheap box.

Loveland, Colo., July 18, 1893.

SWEET CLOVER.

BY E. T. FLANAGAN.

In a recent number of one of our leading bee journals, Friend Muth, of Cincinnati, takes the ground that sweet clover is a nuisance, and advises bee keepers not to sow it.

I must emphatically take issue with him, and only wish I had a thousandfold more of it in my vicinity than I have. I do not believe it is capable of ousting our common white clover, as Friend Muth intimates. Of one thing I am sure, and that is, it gives the bees something to work on in a time when in this vicinity they would have nothing else to gather nectar from. It comes at a time when it is peculiarly needed, to enable the bees to build up strong for the fall flow of honey, (which is our principal one), which begins to come in about the 1st to the 10th of August. I took pains to sow the seed of it along our roads, railroad embankments, creek bottoms, and waste places in range of my bees, and I have been amply repaid for so doing, and would advise all bee keepers to do the same where there is any vacunt land in their vicinity. They will not regret it, take my word for it.

INTRODUCING QUEENS.

Friend Alley, in the July number of the Apiculturist, is down on the method of introducing very valuable queens by means of a set of combs of just hatching brood.

I dislike to disagree with such a veteran in bee-lore, but all the same it is a tip-top method and especially to be recommended to those that have but little experience in introducing queens, and especially to those that have not the dimes to spare to get another queen, should they lose the one they try to introduce.

As all experienced bee keepers know, it is quite an easy matter to introduce queens when honey is coming in freely, but look out when there is a scarcity, and robbers abound. Right here is where this method of introducing is valuable, and I would recommend all interested to try it.

SUGAR HONEY.

July 15th No. of Gleanings gives reports from many sections of the good yield of honey this year. If true, and the same is general, it will knock the "sugar honey" question sky high. For one. I have never believed it would be profitable, even in a year of exceptional scarcity, as the past year was. I have never fed a pound of sugar to make "honey" from, but from all I could learn and observe, I came to the conclusion that it would cost more than it would come to. I only wish it was feasible, as it would be a great thing in "off-years" to help out those that make a specialty of comb honey.

PROSPECTS OF A GOOD FALL YIELD

are not so promising as could be desired. Still, if weather is favorable and the bees are strong at the right time, we will secure a fair crop. At least such are my hopes and expectations.

Belleville, Ills., July 22, 1893.

ADVICE TO BEGINNERS.

SOMETHING IN FAVOR OF THE TEN FRAME HIVES.

BY J. W. ROUSE.

Well, here we are again, with no clover honey. Discouraging, is it not? This makes the third season in this section of the country that we have had no clover honey to speak of. However, let me say, "Do not give up the ship," for reward will surely come at last, if we will only hold on, and keep our bees in good condition. The prospects are very good at present for a fall crop of honey.

It is a little discouraging to many to have to go for two or three seasons before getting any returns for time and money spent, but one must remember that it is only by patience and perseverance that one can expect to succeed in anything. Sometimes there will be two or three seasons before we secure a crop of fruit, and no one would think of abandoning fruit culture because of a failure to raise any fruit for a season or two at a time; and yet fruit trees cost very considerable, both in money and time, and patience in waiting for the trees to come in bearing. Besides they also occupy ground that could be used for other crops; but when the fruit does come, it will amply pay for all the money, work, time and patience expended or endured to obtain it. So it is with the bee business. It will certainly pay after awhile if given a chance.

There have been only 3 or 4 new swarms in my immediate neighborhood, as far as I know, and very many have asked me why bees do not swarm. I tell them that bees are more sensible than many people are, as they do not propose to set up housekeeping and no provisions to be obtained. The honey flow has only been just enough to keep the bees moderately engaged, and in some instances, robbing may be easily started.

But honey and wax are not the only benefits to be obtained from keeping bees, as I am sure it would pay to keep a few bees near all fruit orchards, to help the fertilizing of the fruit bloom. Let us not be discouraged then, and give up the business.

I do not believe these words are necessary for the old veterans, because they know by experience of their truth; but this article is intended more for the encouragement and comfort of the novice.

I see by the bee journals that there is an extraordinary flow in some of the eastern states, and I am rejoiced to know of it. While they are having their milk and honey, we are encouraged to believe our time will come after awhile, if we will only patiently endure.

I am often asked which is the best hive, or which are the best fixtures. Well, I will say that I do not know which is the best. I know which of the hives and fixtures now in existence suit me the best; but flatter myself just enough to say that I could take any of the hives or fixtures, and make a success with any of them in a good season, even including the old common box hive or log gum; but to make the best success with the least amount of labor, to obtain the best results, is what we all want to know. While the common box hive or log gum is probably the least labor of any other kind of fixtures used in keeping bees in-more because they are used on the "let-alone" plan-it does not follow that they are the cheapest and best to obtain the best results. There are so many different kinds of hives and fixtures now advertised and recommended that the beginner is many times at a loss, and confused, as to what is best to procure for his use.

While I do not wish to stop the constant improvements that are being made and the experiments that are going on, I would very strongly advise anyone just starting into bee keeping to let the more advanced bee keepers try these new fixtures and do the experimenting. Don't start out to invent the best hive on earth, until you have become a judge of what is best, by practical experience. Too many have already erred in this way. Too much valuable time has been wasted, and. alas! I am sorry to say, disappointment has blighted the fondest hopes of the individual when he finds that his new invention has been tried and condemned vears before.

It is best for beginners to follow in the beaten paths of those that have gone before—at least until they get more experience. I would advise the beginner to always get the standard frame, whatever hive he may adopt, as it is little trouble and small expense to change standard frames and fixtures from one hive to that of another kind, if adapted to the standard frame.

I like a hive with ten Langstroth frames the best, and like the section holders with open top and inset cut in bottom slat, corresponding to the section as is now used in the Dovetailed hive, the best of any I have used. I am partial to the Telescope hive, but as most all my bees are in the ten-frame hives. I am only using a few of the former hives. However, I like the results obtained by their use very well. I suppose there are fifty calls for an eight frame hive, to one call for a ten frame hive; but I think in a great many instances the eight frame hive is called for because it is a little cheaper. An eight frame hive does not hold enough bees to suit my fancy for a good vield of honey, as I feel sure that two ten frame hives of bees will gather more honey than will three colonies in eight frame hives, because the hives

containing ten frames (supposing that there is a good, prolific queen, and if she is not prolific, I would kill her and introduce a prolific queen), will have a much larger force of bees in a body, and can carry on comb building and brood rearing, do the work both inside and outside of the hive, get out earlier and work later, and do more of it while working, because in better working condition, than will bees kept in an eight frame hive—that is, as a usual thing.

I have had some considerable experience with hives and fixtures, but I am not just perfectly satisfied as yet with what we have. I am doing some tall thinking just now, as regards hives, smokers, and other fixtures. I think smokers are selling too high. There are now some good ones, but they cost too much for most people. We will see what the future will bring forth.

Mexico. Mo.

WANTED TO BE A BOY ACAIN.

I'd like to be a boy again, without a woe or care, with freckles on my ugly face, and hayseed in my hair: I'd like to rise at four o'clock and do a hundred chores, and saw the wood, and feed the cows, and lock the stable doors; and herd the hens, and watch the bees, and take the mules to drink, and teach the turkeys how to swim so that they wouldn't sink; and milk about a hun-dred cows, and bring in wood to burn. and stand out in the sun all day, and churn, and churn; and wear my brother.s cast-off clothes, and walk four miles to school, and get a licking every day for breaking some old rule; and then get home again at night, and do the chores once more, and milk the cows. and feed the hogs, and curry mules galore; and then crawl wearily upstairs to seek my little bed, and hear dad say: "That worthless boy! He isn't worth his bread!" I'd like to be a boy again: a boy has so much fun; his life is just a round of mirth, from rise to set of sun: I guess there's nothing pleasanter than closing stable doors, and herding hens. and chasing bees, and doing evening chores.-The Triple Link.

EDWARD KRETCHMER.

If there is any one man with whom our business relation has been exceedingly pleasant, that man is E. Kretchmer, of Red Oak, Iowa. Aside from this, there appears to be a bond of friendship, which we believe is mutual. Last summer we spent a very pleasant day with Friend Kretchmer at his beautiful home, located about one half mile distant from the city of Red Oak. the largest, (if not the largest) west of the Mississippi river. Mr. Kretchmer is one of the pioneers of western apiculture, a man of whom the bee keeping fraternity may be proud, and one who has received many honors, both from those of his calling, and the public at large. Wishing to present him to the readers of the PROGRESSIVE BEE KEEPER, we knew of no one better than his little 12-year old daughter, (who, by the way, is a member of the Iowa



EDWARD KREICHMER.

and were royally entertained by him and his family. If all bee keepers are as warmly welcomed to Friend Kretchmer's home as were we, (and we believe they are), it is no wonder they hold him in kind remembrance, and have assisted him in building up his magnificent supply business, which is one of State Bee Keepers' Association), to furnish us with such information as we needed, and we herewith append it, as written by her:

"Edward Kretchmer, the subject of this sketch, was born on the Atlantic ocean in 1844, on the American merchant vessel, Louisiana; and though of German parentage, is an American by

birth. He was raised in Selicia, Prussia. His father was one of the prominent bee keepers of his time, and the originator of the first rolls that manufactured mid rip, or our earlier forms of comb foundation; which by writers is frequently confounded with that of Mehrings, whose invention presented the edge of a full thickness of comb, or the beginning of a top bar. Hence the German translation, "foundation."

Mr. Kretchmer resided about five miles from Dr. Dzierson, the world renowned author and apiarian, and from whom the subject of our sketch, during a season's stay with him, received the first lessons of advanced bee culture. In 1858 he received a colony of Italian bees as a birthday present, and since that time, with the exception of three years, he has been a breeder of Italian bees.

He came to the United States, and to the state of Iowa, about the year 1859, and in the summer of 1860, purchased the first Italian queen that crossed the Mississippi river. In 1861 he entered the army. During his absence, his father sold the original colony to W. H. Furman, of Cedar Rapids, Iowa, the owner of the Langstroth patent for that state.

After his discharge from the army, he again engaged in bee culture, and whilst a visitor at the Iowa state fair, an incident occurred which brought him to public notice as a well informed bee keeper. The incident referred to was this: An oddly dressed man, with bees in his hat, was selling little vials of scented water as a "bee charm," taking dollars right and left, stating that with it bees were rendered peaceable enough to open a hive without being stung. Mr. Kretchmer remarked that he could do that without the drug. The drug vender promptly challenged the youthful looking German, no doubt expecting him to back down from his statement, but on the contrary, Mr K. secured a little smoke, and promptly opened the colony of bees of another exhibitor, quickly found the queen, and exhibited the combs, covered with bees, to a multitude of spectators. without a sting. He was, in conse-quence thereof, requested by several to communicate his method through some of the-journals, and he soon became a noted writer-writing both in the German and English language. In the older files of the American Bee Journal his name may be found to numerous articles. He also issued "Winke Fiir Bienen Ziichter," "Intimation, to Bee Keepers," "The Amateur Bee Keeper's Guide," written in 1866, and "The Bee Keeper's Guide Book," the latter, a neat volume of 256 pages, issued in 1872.

In 1867 he removed from Eastern Iowa to Coburg, Iowa, where Mr. Kretchmer was postmaster for eight years; mayor of the town; and for two terms chairman of the Board of Supervisors for Montgomery county; declined a re-election; also the nomination for state senator.

The demand for better shipping facilities induced him to remove his entire factory to Red Oak, Iowa, in 1890, which is his present residence.

He is a prominent Odd Fellow, and an enthusiastic Mason; being a member of the Blue Lodge, Chapter and Commandery, as well as of the Degree of Rebecca, and the Eastern Star, of both of which he is now the presiding officer.

On the recommendation of the presiident of the Iowa Bee Keepers' Association, he was appointed by the Iowa Columbian Commission to take charge of the Iowa honey exhibit at the World's Fair. This appointment he very reluctantly accepted about the middle of last January, since which time he has labored for the success of that exhibit, without the hope of fee or reward, although a very unfavorable honey season has made such an undertaking a difficult task. In addition to which, he is now conducting various experiments with new implements in bee culture.

VALENCIA KRETCHMER.

OUR LETTER BOX.

LONGMONT, COLO., July 13, 1893.

BRO. LEAHY—The last PROGRESS-IVE BEE KEEPER was a dandy. It's a good thing to have an editor once in awhile with backbone enough to hit the nail four times in succession.

The 13th of July and I have only heard of two new swarms of bees in Colorado. The past week there have been considerable stores broughtin. A few of the supers for comb honey are ready to raise and add a second one.

Last September I had 222 stands of bees; 210 are in good working order now. (How is this, Dr. Miller?) I have about 7,000 sections on the hives at this date, and if the weather is favorable, and nectar secretes, I will commence to take off surplus in a few days.

I am trying to give the H. P. Langdon non-swarming device, and the Aikin Bros. and Knight non-swarming operator, a fair test, and to see if there is any virtue in them. At this date, I think there is *in one*, perhaps both.

The comment of the members of the Colorado Northern Bee Keepers' Association, after the receipt of bill of goods sent for to the Leahy M'f'g. Co., was "cheaper and better than ever dealt with before." We wish to thank you for correcting the small error so readily. More anon. D. L. TRACY.

LOVELAND, COLO., July 14, 1893. Honey flow slow here. Prospects not good, either for crop or experiments.

R. C. AIKIN.

MILLARD, NEB., July 15th, 1893.

Owing to sickness, I have been unable to prepare any contribution this . month. Hope to be able to do better next month.

Goods ordered came to hand in good shape and time. Thanks for your promptness. Yours very truly,

MRS. A. L. HALLENBECK.

WATSONVILLE, CAL., July 11, 1893.

Kindly bear with me while I offer a suggestion or two:

The July number of the PROGRESS-IVE is to hand—but 'twas ''as much as a bargain'' that I received it. The wrapper was soft printing paper, which goes all to tatters in the rough, transcontinental trip; the address was in faint pencil. May I suggest the use of *a stouter wrapper*, and an address in good *black ink*? The PROGRESSIVE is worth such attentions as I mention and far more.

I commenced studying bees at a friend's apiary about six months ago, and am deeply interested in all that pertains to them. I shall have my first colonies (purchased) in a few days. They are quite "ornary," but my purpose is to give them good queens, and "breed up." I mention these facts to correct your impression (as shown by your kindly quoting from my letter), that I am an old hand at the business. What I wrote is true, and no one will ever suffer harm from reading or heeding it. But the thoughts were suggested more by what I have been lately reading than by practical work in the apiary. I am delighted with this "bee business," as who, indeed, could help being?--and my wife shares my delight, and will share both the work and the profit. Thanking you for your courtesy in quoting my thoughts, and with best wishes for the grand success of the PROGRESSIVE, I am.

> Faithfully yours, JAMES STIMSON.

WAGSTAFF, KAS., July 21, 1893.

Bees have done fine here, but the colonies were very short of bees in the spring, so I haven't much honey. Hurrah for the Langdon non-swarmer. More honey and no swarms, but I have trouble when I try to re-queen my coloonies. Yours respectfully,

ours respectfully,

C. S. NEVINS.

RED OAK, IOWA, July 24, 1893.

I am surprised at the reported honey flow, as given in Gleanings. No honey worth naming here; none in Central Nebraska, nor northwest from here. The northeastern part of Iowa has some honey, and we have some promised for the World's Fair.

E. KRETCHMER.

BELLEVILLE, ILLS., July 5, 1893.

FRIEND LEAHY—I have just examined the Langdon non-swarmer, as improved by you and though I have not yet had an opportunity of testing either, I think you have made a

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great improvement on it. I now wish I had none of the old style as it is quite a job to bore holes in a hive holding a strong colony of bees. You should illustrate and describe your improvement in the PROGRESSIVE BEE KEEPER, and strike Langdon for something worth while for your improvement, if it is original with you. Yours truly,

E. T. FLANAGAN.

Friend F.--The improvement in the Langdon non-swarming device is original with us. Expect to illustrate it in the future.

DUKEDOM, TENN., July 22, 1893.

Honey crop in this section has been very scarce, and of inferior quality. I think we will likely have a good fall crop from golden rod, Spanish needle, pea vine, etc. Bees are very strong, and ready to gather it whenever it may come. Enclosed find three subscriptions. J. B. Foy.

Thanks, Friend F.

DOUGHERTY, I. T., July 22, 1893.

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Spring opened with a fine prospect for a good honey crop. Bees built up rapidly, and began to swarm on the 12th of April, but the drought came on and cut the blossom short; and up to the present time there has been no surplus. We have had fine rain lately, and the prospect is good for a good fall erop from cotton and golden rod.

A. L. BEDFORD.

SWEIGERT, IND., July 24, '93.

Bees are doing well in this part of Hoosierdom. I have taken an average of 30 lbs per colony from 60 stands, spring count. My bees are wintered on the summer stands. With an average loss of 10 per cent for the last five years. My loss last winter and spring was 6 out of 66. I now have 96 stands at my home yard and am expecting a good fall flow from smart weed and other fall bloom. Enclosed find three subscriptions from this part of Hoosierdom.

E. W. MOORE.

Thanks, again.

THE K. D. NON-SWARMING, RE-VERSIBLE HIVE.

AN ILLUSTRATION OF ITS CONSTRUC-TION,—SOME OF THE ADVANTAGES CLAIMED FOR IT BY ITS MANUFACTURERS.

In compliance with our promise, (page 119), we herewith give a description and illustration of the K. D. nonswarming, reversible hive, as manufactured by Aikin Bros. and Knight, of Loveland, Colo., but with such a poor honey season as this, and the short time in which we have had to make a practical test of this hive, we are not able to give such information as we would like to. We herewith give the description and construction of the hive, which we clip from Aikin Bros. and Knight's catalogue, which sets forth each "compartment" (for this is a combination of compartments), illustrating it so well that we use it entire.



No. 1 is a reversible bottom board aud feeder. Dec p side up for winter and feeding. No. 2 is the brood chamber. It takes a closed-end standing frame 9x17. The bee spaces are in the bottom board and honey board. Both sides and ends are compressed upon the frames by the nuts and rods. When released for manipulation, the frames rest upon the bottom board rim ends. The chamber is reversible.

The alighting board (5) is a part of and at tached to the honey board (4) while the en

trances (8 and 9) lead respectively under and above the honey board. The queen trap (6) covers the brood chamber entrance. No. 10 is the super held together by the rods-neither super nor brood chamber are nailed at the corners-and both sides and ends compressed upon the sections. By compression and spurs, the super sides and separators support the sections perfectly, without T's slats, followers or wedges. The 8 and 10 frame hive supers take respectively 2 and 3 separators and 24 and 32, 1% wide sections. They may be full separatored by adding plain wood or tin separators, or by spur separators. For extracting the super takes 8, 1% inch thich frames in place of the sections, Nos. 12 and 13 are the inner and outer covers.

The two-colony, non-swarming, combination brood chambers (B and C cut No. 2) each contain a colony of bees. K is the separating board dividing the colonies. J is the alternator that passes the bees out from the lower hive and returns them to the upper, thus working two colonies in one set of supers. To prevent swarming both colonies are reversed EN MASSE once a weeklin the swarming season. The hives are clamped together by the appliance M, elevated by the hoister (L) and revolved as a wheel on its axis. Thus, once a is so great that we could spend hours each day manipulating and changing this hive into its various forms, rushing the bees into first one compartment and then another, at our pleasure, for is it not gratifying to control? With this hive we consider that one can do most anything with bees except make them make honey; and of a good season they will do this anyway, for nature has endowed them with this instinct.

The side and end compression of the super is a feature that has often been practiced before, by bee keepers who would have sections square and true but the devices that heretofore have been put on the market, were expensive or complicated. But the super of this hive overcomes both of these objections in the very simple way set forth in the description given above, and furnishes a powerful clamp which will hold the sections true and in their



week the queen cells are upset and the bees alternate.

How far this hive will prove to be a hive for the masses, we are unable to say, but we do predict for it a large sale among the bee keepers who keep bees for pleasure and profit, for it is a pleasure to handle bees on this controlling plan. With us the temptation place, under ordinary circumstances, but where there is extreme variations in climate it might be necessary to have the spurs on the separators, (which are of tin), a little longer than are now used.

The true novelty of this hive is set forth in two little devices, one of which is called by the inventor an alternator, and the other an equalizer. The alter-

nator is used in combination with their honey board, and its mission is to shift the field force af bees from one brood chamber to another, at will, and is effective in the extreme; while the equalizer, will let a few bees continue to work in the original brood chamber. This we consider a good idea, as by this means there will be a sufficient force of bees to supply the depleted colony with water and ample stores for the maintainance of brood rearing. We are now using one of these equalizers and honey boards on two colonies in Dovetailed hives, and are more than pleased with the result; but we would be much better satisfied if we had a good honey flow in which to put these devices to a more practical test. We do not keep these hivers or devices for sale, and to those wishing to try them, we would refer them to Aikin Bros. and Knight, Loveland, Colo.

FALL WORK.

AUGUST IS THE TIME TO DO IT.

BY E. F. QUIGLEY.

The successful bee keeper must plan his work ahead for all his prospects are in the future.

The time to commence is now, by seeing that every colony has a good young queen. If a queen has done you good service for two years, I would replace her with a young one as she is liable to fail next spring, and you will lose the work of that colony, at a time that it should be gathering white honey for vou. It does not matter what kind of bees you have, if I kept blacks I would save the cells at swarming time and requeen every colony in the yard. A colony with a young queen is less inclined to swarm and always make a better honey record. After your queens begin to lay, see that they have plenty of room, as the eggs layed the last part of August hatch the bees to winter over. Sometimes the brood combs are too full of honey, so that you will have to un-cap them. The bees will then remove some of the honey, giving the queen room. I would not uncap more than two frames at a time. After you are sure of plenty of bees, the winter stores are the next to be looked after. If they require feeding, do it early as possible.

SELLING FALL HONEY.

If there is any reader of this journal just beginning to work up a honey trade in this locality—don't make so much difference in the price between clover and the fall honey. There is no reason why a first class article of Spanish needle honey should not bring the price of white clover or basswood. I find many customers like it just as well, and many prefer it. I get a better price for extracted honey than farmers do for their best box honey. There is lots in the way you start out. Ask your customers which they prefer, but don't try to sell them something they don't want. Make your comb honey attractive, by cleaning sections, etc. Have extracted thoroughly ripened.

PLEASE DON'T.

Now, Mr. Editor, Friend Miller has told you how to run a bee journal. I will say my piece about that question department. Don't think you need it. If you cannot fill the space, donate it to some charitable institution, advertise your town, or anything to fill up. Have all articles seasonable and of some practical use to your readers.

I suppose the breeders of five banded bees are about out of business now, since you and "Mr. Observer" gave them such a black eye. That reminds me that in your catalogue you say. "Our bees are of the bright yellow strain, some showing four tands." Of course the other bees have to support these fine fellows. I notice "Observer" (I have him located) is pleased with the Golden Carniolans. I have them on trial now, and shall report at the end of the season. I have some of my own strain of golden bees by the side of these, so you see I am going to know which are the best rustlers.

Unionville, Mo.

A COOD WORD FOR TELESCOPE AND CHAFF MIVES

WEEPING WATER, NEB., July 18, '93. EDITOR PROGRESSIVE BEE KEEPER:

Not seeing any reports from this locality in the PROGRESSIVE, I give you the following in regard to the season so far. Bees in single wall hives fared very badly here last winter. Think I may say a majority of them died, while those in your chaff or telescope hives came through comparatively well. The early honey plants were very good, but about swarming time everything shut

This makes a gain of $34\frac{1}{2}$ fbs in two weeks. Bees are working slowly now, and we hope for a good fall crop to make up for the white clover crop that never came back. A. B. CAMPBELL.

Die schwarze und die italienische Biene.

Ich nenne mit Bedacht bie schwarze Biene zuerst. Sie ift die Biene, welche zuerft in diefem Lande gehalten wurde. Sie wird auch deutsche oder europäische Biene genannt. Wie schon ihr Name anzeigt, erkennt man fie bar= an, daß sie schwarz ist. Die italieni= sche Biene wurde in diesem Lande aus Italien eingeführt. Sie unterscheidet fich von der schwarzen durch drei gold= gelbe Ringe auf dem Hinterleib. Beide Arten sind Bienen und liefern uns Honig. Es ift aber ein großer Unter= schied zwischen ihnen. 3ch will hier Die schwarze Biene ber italienischen ge= genüber stellen. Ein Jeder kann dann felbst urtheilen, welche die bessere ift. Die schwarze Biene vermehrt sich im Frühjahr nicht so schnell wie die ita= Die italienische — und das lienische. ift ein großer Vorzug - vermehrt sich jehr rasch. Ein italienischer Stock, der im Winter viel schwächer war als ein schwarzer, wird zu Anfang der Honigtracht bedeutend stärker fein. Er brauchte im Winter nicht fo viel Fut= ter wie der schwarze und ist zur Zeit der Honigtracht doch zahlreicher, um mehr Honig zu fammeln. Die schwar= ze Biene ist ferner nicht so arbeitsam und fleißig wie bie italienische. 2Ber ichwarze und italienische Bienen hält, kann sich von dieser Wahrheit selbst

überzeugen. Es ist auffallend, wie die scharzen vor dem Stock umherflie= gen, während die italienische fleißig aus= und einfliegt. Besonders fpringt dies in die Augen, wenn die Blumen felten geworden sind. Die italienische Biene wird bei einer geringen Honig= tracht mehr fammeln als die schwarze. Die italienische wird in diesem Punkt stets die Palme davon tragen. schwarze Biene ist ferner bösartiger, während die italienische fanfter Natur ift. Aus diefer Eigenschaft folgt dar= um auch, daß man mit italienischen besser hantiren kann, ohne der Gefahr ausgesetzt zu sein mit einem Dutend Stiche und dickem Gesicht nach Hause zu kommen. Die italienische ift auch weit muthiger, um ihren Stock gegen Räuber zu schützen und zu vertheidi= Selten wird es vorfommen, daß gen. ein italienischer Stock mit einer Röni= gin von einem schwarzen beraubt und geplündert wird. Rurz, vergleicht man man die schwarze Biene mit ber italie= nischen, so trägt die Lettere die Sie= gespalme davon. Daher kommt es denn auch, daß die italienische Biene die Biene in diesem Lande geworden ist. Sie ist fruchtbarer, arbeitsamer, ausdauernder, jantter und muthiger als die schwarze. Es entsteht da na= türlich das Verlangen, anstatt der schwarzen, italienische Bienen zu hal= ten. Darüber wollen wir in nächster Nummer fprechen.

C. W. GIESE, Little Rock, Saline Co., Mo. The Progressive Bee Keeper. PUBLISHED MONTHLY BY LEAHY MANUFAGTURING GOMPANY. R. B. LEAHY, :-: :-: EDITOR.

Terms-50 cents a year in advance. Two copies, 80 cents; 5, \$1.75; 10, \$3.00.

HIGGINSVILLE, MO., AUGUST 1, 1893.

Buckwheat sown in August will be a great help to the bees. Try it and see.

A. I. Root is the first one to get a dose of the effect of the sugar (?) honey discussion.

Hope is the bee keeper's bank ac-count, says Eugene Secor. Yes, it is often overdrawn, too.

S. F. Trego, Swedonia, Ill., is a be-liever in the liberal use of printer's ink. His ads. are quite catchy.

Some reports of the Langdon nonswarming device are not favorable. They say those big colonies swarm.

The American Bee Journal has had a part of its front cover re-engraved. It gives it a much better appearance.

Dr. T. J Conry, of Florence, Kas., made us a pleasant call on the 14th. The Dr. reports a fair honey crop in his locality.

Bee keepers will support a good paper, but with the present supply, few of them will subscribe just to see it live, expecting it to grow better as it grows older.

The prospects for a honey crop west of the Mississippi river this year, van-ish as time rolls on. However, there are a few encouraging reports, but they are "few, and far between."

A subscriber asks: "Is it as safe to introduce a clipped queen-one that has had her wings clipped—as it is an unclipped one?" To this we will say, yes. We do not consider that an unclipped queen has any advantages in this respect.

B. Taylor, Forestville, Minn., thinks he can increase his white honey crop fifty per cent by the use of the comb leveller and unfinished sections of comb. We have seen full supers of partly drawn combs finished, while the sections with foundation were untouched.

A. G. Hill, of smoker fame, and publisher of the Bee Keeper's Guide, has failed in health, and the Guide, after floating for sixteen years, goes down to rise no more. The unexpired subscriptions will be filled by the Bee Keeper's Review. Thus far there is one birth and one death in bee journals in the year of 1893.

On page 133 will be found an illustration of the Michigan Experimental Apiary, which is located at Lapeer, Mich., with Hon. R. L. Taylor as apia-

The location of the apiary is well rist. selected, it being situated on an eastern slope, amid the shade of lovely trees. Bro. Taylor, in this, his first, article, maps out a course of experiments to be conducted in the near future. No doubt the results will be interesting and beneficial to bee keepers. The cut we borrowed from Friend Hutchinson,

We clip the following from the Beeton World Extra, (Ontario, Canada); in regard to their recent burn-out, they

say: "So far as the Beeton World, the Canadian Bee Journal, and the Canadian Poultry Jour-nal are concerned, we have to bow to the in-evitable, and throw ourselves upon the kind consideration of the extensive clienteles of these journals, in the hope that they will ex-cuse their regular appearance until we can make arrangements for resuming their re-publication, which we trust will not be more publication, which we trust will not be more than a week or two."

Bros. Aikin and Rouse advocate larger hives than the eight frame dove-Some of the most successful beetail. keepers have held these ideas all along, and have put them into practice with good results. We also notice that some of the ablest writers on apiculture are recommending box hives or dry goods boxes, nail kegs, etc., for the average farmer. This looks strange, doesn't it, after all these years of the hue and cry about educating the farmer, teaching him to get his honey in marketable shape, Italianize his bees, and breed them up to a high standard, (as he would other stock), which surely could not be done in a box hive or a nail keg. All this goes to show that a reaction is about to set in. Will it be for the best? We will wait and see.

We have just received the following from The W. T. Falconer Company. It substantiates the reports in Gleanings and in the American Bee Journal, that the Eastern and Middle States are having a genuine honey shower:

JAMESTOWN, N. Y., July 29, 1893.

We are indeed having an old fashioned honey flow in this locality, and from all our reports received, it seems to be quite general throughout the Eastern and Middle States. Coming as it does after so many disappoint-ing seasons, it is highly appreciated. Most of the apiaries in this part of the country were considerably depleted the past winter and spring, so that most of the bee keepers did not have the usual number of strong col-onies to take advantage of the onies to take advantage of the unusuall large flow. THE W. T. FALCONER M'F'G. CO. unusually large flow.

Who knows, but our turn may come next? Let us be patient, then, just a little longer.

Tonight (August 1) we shut down for a week, in order that our employes may attend the county fair, which is held here.

We are pleased to note the stand that Gleanings and the American Bee Journal are taking against the evils of intemperance. A stand for temperance is a stand for right; a stand for our country; a stand for God and humanity. Never before did we feel like adding our mite to crush this demon, drink, which is "streaming down the ages, blighting all that is noble in man, plucking the bloom from the cheeks of the wives and daughters of our country, breeding and disseminating vice on every hand, carrying fathers, bands and sons down to early, untimely graves, and casting their souls into an everlasting hell. This only partially portrays the evils of intemperance and the curse of the common saloon to our fair land. Only a few weeks since, a man was killed in our city by a railroad train. He was a ghastly sight. The head was almost severed from the body. By a pool of blood at the side of the disfigured corpse, was a bottle-and the meaning is clear-the unfortunate man, as was proven at the inquest, was intoxicated; and in one moment, with no time for preparation, was ushered into the presence of his Maker, with the taint of whiskey upon his breath. He left a wife and several small children. This brings to us the question: Are we not all, in a measure, responsible for not all, in a measure, responsible for those that fall by the wayside? Has not God placed us here, as intelligent beings, with keen perceptive faculties? Have not we the weapon at hand with which to slay the monster? Here in this country, where man has all the advantages requisite to the ennobling of his race, can we not rise in our manhood, and face the deadly, hydra-headed demon? For, as Luther Benson, once said, in speaking of the freedom of intellect and will in this country:

of intellect and will in this country: "If there be a place on earth where the hu-man mind, unfettered by tyrannical institu-tions, may rise to the summit of intellectual grandeur, it is here. If there be a country where the human heart, in public and in pri-vate, may burst forth in unrestrained adula-tion to the God that made it, it is here, where the immortal heroes and patriots of more than one hundred years ago succeeded in es-tablishing these United States, as the 'land of the free and the home of the brave.' Here, then, human excellence must attain to the summit of its glory. Mind constitutes the majesty of man; virtue, his true nobility. The tide of improvement which is now flowing like another Niagara through the land, is des-tined to flow on down to the latest posterity, tined to flow on down to the latest posterity, and it will bear on its mighty bosom, our virand it will bear on its mighty bosom, our vir-tues, or our vices; our glory, or our shame; or whatever else we may transmit as an inheri-tance. Thus it depends upon ourselves whether the moth of immortality and the vampire of luxury shall prove the overthrow of this country, or whether knowledge and virtue, like pillars, shall support her against the whirlwinds of war, ambition, corruption and the remorseless tooth of time."

Let every one add his mite of strength to slay this monster. Let every citizen who has the welfare of his country and humanity at heart, move fearlessly and resolutely to the conflict with this de-mon, Intemperance, and break its hold upon the people of the land, and drive it forth into everlasting darkness and oblivion, from which it shall never be resurrected. Oh, rise in your might, and face the terrible demon, for not until this octopus-like serpent is met and vanquished, will our people be secure from the greatest curse that ever fell upon a country or its people.



We have a large stock of the above smokers on hand, and as we don't want to carry them over for next year's trade, we will sell them at a big discount, as follows: \$1.25 each, or by mail, postpaid, \$1.50. We also have half a million snow white sec-tions, for which we will take \$2.50 per thous-and as long as they last. This low price is given to chose out the above stock. Address

given to close out the above stock. Address,

LEAHY M'F'G. CO., HIGGINSVILLE, MO.

WANTED-To purchase apiary, or half interest in large apiary, or to take large apiary on shares, in Western Arkansas or In-dian Territory. Address G., care of box 126, Cameron, Texas. 3-8,

TESTIMONIALS.

Council Grove, Kas., June 17, 1893. Please send enclosed order as soon as possible. The queen received on the 17th is a treasure. Her brood is hatch-H. C. Finney. ing.

Penrose, Ills., May 29, 1893. Gentlemen:

Queens came to hand today without a dead bee. They are beauties. Thanks for promptness. Yours truly, B. Frank Hoover.

B. Frank Hoover.

Mt. Vernon, Ind., July 2, 1893. Dear Sirs:

My order of June 18th came to hand all right. Thanks for prompt shipment. The traps I had to make shorter. I have put two slides in back of one, to return the queen to new hive, with trap in same position as when she went in. I think it is an improvement.

Truly yours,

Alfred E. Smith.

Bluffton, Mo., May 15, 1893. Leahy M'f'g. Co.:

Goods received O. K. We like the Higginsville cover.

Miller Bros.

Council Grove, Kas., May 18, 1893. Gentlemen:

Queen at hand. She is a beauty. Thanks for favors. Respectfully,

H. C. Finney.

Rockville, Mo., May 12, 1893. Gentlemen:

The queens I got of you would deserve a premium at any fair. I am more than pleased with them. Thanks for past favors and fair dealing.

W. A. McGee.

Gales Creek, Oregon, July 20, 1893. Friend Leahy:

The queen arrived in good condition. Not a dead bee was in the cage. She looks like she is capable of doing the finest of business. If she proves to be as good as two other queens bought of you, I would not take \$10 for her.

> Yours respectfully, J. H. Berry.

Edgerton, Kas., June 12, 1893. Leahy M'f'g. Co., Higginsville, Mo.:

Please find postoffice order for \$13.96. Goods to hand all O. K. Too darn many sticks to count; presume they're all O K. Those Higginsville covers are daisies, and don't you forget it.

B. F. DeTar.

Millard, Neb., June 7, 1893. The foundation ordered last month came promptly. It is very nice. Thanks. Mrs. A. L. Hallenbeck.

Martinsville, Mo., July 17, 1893. Leahy M'f'g. Co.:

The queen you sent me in May is a good layer, and her bees are very industrious, uniform in color, large, and well marked. They are also gentle and quiet when being handled.

David E. Keech:

BINGHAM HONEY KNIVES

Are the best. The best is the cheapest. Price, with other goods by freight or express, \$1.00. By mail, \$1.15. Address,

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Complete. A large font of rubber type, type holder, indelible ink, ink pad and tweezers. Best linen marker and label printer, all for 20 cents. All kinds of rubber type and stamps. Catalogue free.

O. H. HYATT, Shenandoah, Iowa.

JUST SPLENDID!

MR. H. ALLEY:-

The Queen I got from you last fall is just splendid. She is the best queen in apiary of 450 stands. I would not take \$10 for her.

JOHN A. PEASE,

Morovia, Cal.

Price of such Queens, \$1 each. HENRY ALLEY, WENHAM, MASS. Please mention this paper.

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Price of Amateur Bee Keeper, postpaid, 25c; "Progressive Bee Keeper," monthly, one year, 50c. We will club both for 60c. If it not convenient to get a money order, you can send one and two cent stamps. Address orders to

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Burton L. Sage, New Haven, Conn.

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