



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

Moon's bee world : a guide to bee-keepers. Vol 1, No 11 November, 1873

Rome, Georgia: A. F. Moon and Company, November, 1873

<https://digital.library.wisc.edu/1711.dl/T2TUHT6MSCEUW8j>

<http://rightsstatements.org/vocab/NKC/1.0/>

For information on re-use see:

<http://digital.library.wisc.edu/1711.dl/Copyright>

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.

MOON'S BEE WORLD.

— A GUIDE TO —

BEE-KEEPERS.

VOLUME 1.

OCTOBER 1874.

NUMBER 11.

CORRESPONDENCE.

SKETCHES FROM TENNESSEE.

BY S. D. MC'LEAN.

STANDARD FRAMES.

MR. EDITOR:—As the question of a standard frame is now agitating the minds of bee keepers, permit me to add my mite in their favor. And let it be understood that I speak in reference to a suspension frame, as that form of frame seems to be more generally used than any other; but at the same time I have nothing to say against any other form that bee-keepers may adopt in their apiaries. There appears to be a diversity of opinion among bee-men as to the size of the frames used, some preferring a long shallow frame, and others a narrow deep one, and others still, a frame that is nearly square. Again, some want a large and others a small frame. As we believe that people err more by running to extremes on any subject,

whatever, than otherwise, we try to take a medium ground, as the safest; and consequently we think some make their frames so large and long as to be unwieldy, and the extractors to run the honey from such have to be made proportionately large and cumbersome, while others make them too small, requiring too many frames for a large swarm of bees, and consequently spreading the brood nest over too many combs. The size of suspension frame I use in my own apiary is fourteen and one quarter by nine and one quarter inches, though not the size I prefer. Were I to commence anew I would make my frames fifteen by ten inches, exactly, outside measure, with three fourths of an inch extension at each end of top bars to rest on the rabbets of the hive. I suggest that size to the advocates of a standard frame, as a compromise among the many now in use. The length would be about a medium between the Quinby and the Gallop frames—the longest and the shortest frames made—and the depth

would be amply sufficient for brood combs, and not so deep as to be liable to swing together at the bottom, or have wavy combs in them.

TENNESSEE A BEE LOCALITY.

We wish now to say a word about our own native State as a locality for bees, and especially that part known as the great basin of Middle Tennessee. It is the most productive of any other part of the State, and while it is productive in soil, yielding to the tiller bountiful supplies of cereals, cotton, tubers, &c., giving wealth for his labor, it should not be lost sight of by bee-men, as one among the best localities for the apiarian. Being situated far enough south so that bees never require housing in winter, and being naturally favored with many of the best honey plants, we see no reason why, with proper management in the hands of skillful and scientific bee men, it should not claim a part, at least, of the promise made to old Israel, a "land flowing with milk and honey." At least we think it worthy a place in the minds of those desiring to engage in bee-culture.

BEEES.

Bees are working lustily on golden rod, aster, &c., and building up like spring time, and rearing drones by the thousands.

Culleoka, Maury Co., Tenn.

It is a remarkable fact that an Italian queen, impregnated by a common drone and a common queen impregnated by an Italian drone, do not produce workers of a uniform intermediate cast or hybrids; but some of the workers bred from the eggs of each queen will be purely of the Italian, and others as purely of the common race, only a few of them, indeed, being apparently hybrids.—WAGNER.

SCRAPS FROM ILLINOIS.

BY W. M. KELLOGG.

FRIEND MOON:—I agree with friend Rambo that all correspondence relative to bees, ought to be carried on through the Bee Journals, with a few exceptions. For instance, I said in the WORLD that "I had a lot of empty comb on hand, and friend Nesbit wanting some, wrote me to that effect, but by the time his letter reached me, my comb had all been used in building up nuclei, and I wrote him to that effect." Now what was the harm in his having my address; and of what interest would it have been to the readers of the WORLD to have that question and answer published, where it would have taken two months instead of three or four days to find out?

A stranger wrote to me in regard to an article I had in the American Bee Journal, which has finally settled down to a friendly and instructive correspondence.

I have a little blank book nearly filled with names and addresses of bee keepers, as I find them in the journals; but when a name comes like friend Rambo's, with only the county, I can't put it down. It is all right for our big bee men, those who are so high in the business that every one wants to pester them with questions, to hide their names under a bushel, or "nom de plume," but I guess us little fellows in the trade won't have any more correspondence than we can carry. Now there's friend Connoisseur. I don't know whether he lives in Maine, Oregon, Georgia, or Texas.

REPORTS.

I see a good many are sending in the report for the season, saying "the

honey harvest is over for this season," etc. With us it is different, for we are in the midst of a splendid harvest, bees working hard all day up to five or six o'clock in the evening. Have worked out doors with the extractor all the past week in different parts of town, and no trouble from robbers till the last day, a few came around. Have taken 245 lbs from our seven stocks, this week, 84 lbs from one hive, and about 880 lbs taken altogether this week.

LONG OR SHORT FRAME.

I prefer the square frame, for the following reasons: In handling sixteen or twenty frame hives, if you use a long frame, you have to reach so far over the hive with one hand that it soon becomes very tiresome, whereas, in a short frame, you can stand at the back of the hive, out of the bees flight, and handle most of the frames with one hand and the smoke with the other. Then in extracting, the long frames that I have seen in use, the bees fail to fasten the combs securely at the bottom. I have had a little experience in that respect the past week.

BOX HONEY.

What is the use of our trying to get bees to build in boxes as long as they continue to fill every vacant cell in the hive below, so that the queen is entirely crowded out, scarcely an egg or a grub to be seen, and only a little capped brood? If we should put on boxes and wait for them to be filled, our stocks would soon be worth very little. We have extracted from some of our stocks twice this week to give the queens room, and still there is little brood, the bees fill it up so quick.

THAT HAT

Yes, friend Davis, we'll try and hold on to that hat of ours, which came

down a few days ago, but we feel like hoisting it higher than ever this time, at the way our bees are going in on their muscle. We'll have to throw it this time for buckwheat, and that blessed little honey extractor. We used to think that "Novice" was in fun when he told about using his wife's tubs, pails, etc., and borrowing all of the neighbor's pans and kettles for a mile around; but we had a taste of it ourselves this week, for we filled all our spare jars, and still the honey flowed; no time to go to the store for more, so we made a raid on our neighbor's milk pails and jars, for a thunder shower was coming up and we must get done before Sunday so as to go the rounds again next week. The last stock we opened, extracted, got combs back in hive again, just before the rain began to patter on the leaves, and all done in fifteen minutes. Who can beat that? Nary a sting all day, too. By the way, our buckwheat is raising a "rumpus" in the ranks of the farmers, two more of them having struck their colors, saying, "I'll own up beat, your bees are way ahead of mine, but I'll stick in a patch next year." Good! Wake 'em up to their duty, and next year we are going to try them on rape as well as buckwheat.

BRUSHING BEES AGAIN.

Many say that Italians are not so cross in brushing off the combs as hybrids or blacks, but we don't find it so. We have handled a good many stocks this season of all three kinds, and when you come to extracting give us the hybrids or blacks in preference to the Italians every time. The Italians stick like burs, and are harder to get off, and take more time, while the blacks and hybrids are on the run for dear life, and are easily jerked off and

the few remaining, it is short work to get off, and the worst stinging we have had this summer has been by the pure Italians.

BEES IN AULD LANG SYNE.

While reading the "World of Wonders," I found the following item:

"ANTIQUITY OF BEE-KEEPING.

The earliest Semitic records, the book of Job, the Nedas, Egyptian sculptures and papyri, as well as the poems of Homer, confirm the early cultivation of bees by man for domestic use. Sir Gardner Wilkinson, moreover, makes mention of a representation of a hive, figured upon a very ancient tomb at Thebes, which is evidence of their domestication there at an early period of history."

Oneida, Ill.

EXPERIENCE OF "SIX."

BY DR. RUSH.

I have not had any honey to extract since July, so very dry. White clover disappeared July 4th, and reappeared July 22nd, and continued in bloom until September 1st. was the last. Buckwheat was fine this year, but owing to drouth it only lasted one week. My bees took about 10 lbs. per hive of it. I must answer my friend, Dr. Davis, for when "Drs. disagree &c." Loss by transferring; I transferred mostly, just when ye leaders say, at the beginning of honey season, and it was almost a failure, so they grew weak and moths took many of them and a few starved right in a clover bloom. I transferred, by first cutting out all combs with brood and putting them into movable comb hive and filling up with clean comb. Now, if ye lords had only modified your directions and said in

your directions for transferring, to feed all transferred stocks, no difference how plenty of forage, then you you would have done good by your advice.

The loss by queen raising was caused by moths; even with the comb covered with bees the moth would go for them and destroyed one-half of my nucleiis. Next the robbery, and tenderest of all, in 1873 they were all very strong, had sufficient honey too, and had not been fed, or sweets exposed for three weeks; and on the 2nd day of flight they done the mischief, and when I was at church, took five and two of them of my best too. In 1874, came a wet spell of weather. It rained daily for 20 days, then apples and peaches opened some and I stopped feeding; four days after, the sun shone out and apple blooms were fine. I went to the city, was gone a week, came home and nine of my strongest hives had united with 16 others and taken along their honey, and now mind you they were strong, had honey. clean comb, plenty of brood, and a good queen. So, friend Dr. guess again. The hives were good and the entrance contracted. The dysentary I explained, I can prove my ground. Now as to securing honey, and I will say in advance that I will look for a return contradiction. First my hives are large (American and Rush) and well stocked. On my best hive I put a box, and got no honey, and on next two best put same sized box with a full sized comb in each and they were nearly filled. On two box hives (with a two inch hole in the box), I put boxes well filled with nice comb; they were soon filled, and in half the time the others were being filled. Sixteen lbs. of box honey was the highest I got.

Understand me my bees were ready to swarm May 20th, which is very early for this climate. Rush is going to locate any place between the Alleghanias and Rocky Mountains where there is good bee forage; and I am in receipt of letters daily from different States.

I gave the dark side of my experience in my last, for I was following the direction of the Bee Guides and made many failures. This season I put in my own judgment, experience and what I could get from journals and have not had a loss or made a failure but in two things: the loss of robbing in May (9 hives) and letting four fine Italian queens get killed. I got 8 of Winder's queens and went to introduce them for a man. I got out four and put them in cages. I went to work and as soon as I opened a hive the robbers came after me and I only got one queen put in. I marked the cages and boxes and kept the queens out four hours, then put them back again, and two of them I am positive was put back in same box they came from and the next morning they were all killed. They were in a good condition. These are my losses for '74. This season transferred ten at home and fifteen for neighbors; all done fine except one the moth took. Introduced forty queens and lost four, and lost one by being thrown over. Got 125 lbs. of box honey and 300 extracted. Have raised queens too. The average amount of honey in this section has been for blacks, one swarm and no surplus, or no swarm and 20 lbs. of box honey. Italians done just double that amount.

I have my experience now and am certain of success in a good locality, for I have been educated in misfortunes and a land of scarcity and now give me a land of milk and honey and

I am ready for "ye bad luck." My moth trap is this: a light fitting and well painted hive with only an entrance of $\frac{3}{4}$ inches with a slide close fitting, to expand or contract according to the temperature, and strength of the colony; and in this way I have not had a colony injured this season, even with black. Hives with crevices or cracks make a fine moth harbor.

I save comb by keeping it in the cellar and if anything goes wrong I hang them in the top of my double hives until the combs are cleaned, then put them away. I shall never put bees in a cellar or dark places any more, but leave them on summer stands.

I must see more evidence before I can yield the frame 11x13, with top bar 15, that is the two end bars 11 inches, bottom bar 13 nailed on each and top bar 15; that gives a frame of $10\frac{1}{2}$ x13 inches inside, with 8 frames which requires a hive of 21 square inches. I see my friend Argo agrees with me on the frames.

How to prevent robbing: contract the entrance and if they don't quit get a handful of weeds and wet them and lay them over the entrance; this has not failed with me, and in some bad cases too. Some one asks how to get rid of ants: sprinkle salt all around the hive.

Simpson's Store, Pa.

In swarming, the queen is not always foremost; it is frequently, or rather generally, not till after the departure of a considerable number of workers that she makes her appearance; and when she does come, it is with a timid, irresolute air, as if she were borne along, almost against her will, by the torrent that streams out of the hive—for she often turns on the threshold, as if about to re-enter, and in fact frequently does so, but cannot long resist the opposing crowd.—FEBRUER.

VALUE OF BUCKWHEAT AS A FARM CROP.

BY B. W. STONE.

Statistics for 1868 shows that in that year, 1,113,993 acres was cultivated in buckwheat, and yielded 19,863,700 bushels, worth \$20,814,315. Average per acre 17.8 bushels worth \$18.68 cts.

Maine gave the largest yield per acre, 23 bushels, and Tennessee the smallest, 11.4. Nine States, viz: South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Texas, Arkansas, and Nebraska produced none. The average value of Indian corn, per acre, for same year was \$16.32 cts., wheat, \$17.29 cts., rye, \$17.37 cts., oats, \$14.74 cts., barley, \$31.79 cts.

In this list in point of value and profit as a farm crop, barley ranking highest and buckwheat next, then rye, wheat, corn and oats, in the order they are named. This part of the proposition being fully sustained, we will glance at its value as a

FERTILIZER.

It grows rapidly on almost any soil where other plants would starve, its large spreading top drawing more nourishment from the air than it does from the soil. Producing a dense shade it rapidly smothers and kills out other foul and noxious weeds, and at the same time protects the land from the deleterious effects of the scorching sun. The straw contains considerable quantities of lime, magnesia, potash, soda, phosphoric and sulphuric acid; and when ploughed under, decomposes rapidly and thus forms a good manure. It renders the soil loose and permeable to heat, light and moisture. To attain its full benefits as a manure, it should

be ploughed under when in full bloom. It attains its growth so rapidly that two crops can be grown and ploughed under on the same ground and then seeded to grass or grain the following fall, thus operating at once both as a cleanser and a renovator of the soil.

We understand that considerable quantities are sown annually in France and Germany as a fertilizer.

A French writer says of buckwheat: "We cannot too much recommend, after our old and constant practice, the employment of this precious plant as a manure. A small quantity of seed, costing very little, sows a large surface and gives a great crop; when in flower first roll and plough it in. Its shade while growing destroys all weeds, and itself, when buried, is soon converted into vegetable mould."

William Bacon, of Massachusetts, says:

"Buckwheat is considered a noble warrior for contending with the Canada thistle, which has for years been pushing its conquests in many parts of our Northern States. From its fine effects in cleansing land from weeds by its great shady tops and the pulverizing influence of its roots in the soil, are enough to recommend its culture on many lands if there was no other consideration."

MODE OF CULTURE, &c.

Prepare the soil as for wheat, and if but one crop for the season is desired, sow from middle of June to first of July, and plow in with cultivator. One bushel will seed four acres; when sown thus it will branch much—some recommend one bushel to the acre—I think this a waste of seed,—when ripe, which will be near frost, cut with scythe and cradle, bind and set on end

in bunches till dry, then thresh and fan out clean. Send some to mill, have ground and bolted, when the flour is brought home, have the good lady to take equal parts of the buckwheat and common wheat flour, bake into cakes—commonly called “buckwheat cakes,” and while hot, butter, and roll in honey and eat with milk—have but moderate quantity prepared the first time (unless I shall come to see you just then), for fear that you eat too much.

I am cultivating considerable quantities of buckwheat in this manner. The last time I plow my corn I scatter one bushel of seed on eight acres and plow in with cultivator. It will be in bloom about 1st of August and continue till frost, some two months or more. This affords my bees fine pasturage and bountiful winter stores; keeps down weeds, and after the corn is gathered, turn on hogs to gather the buckwheat. The yield per acre cultivated with corn is not so large as when sown alone—though I consider very remunerative as it costs me nothing but seed and scattering them. Continued drouth operates greatly against production of honey and seed, though not more so than with other honey plants and grain crops.

Farmers and bee-keepers should cultivate buckwheat, and they will certainly do so if they will consult interest and love honey. You need not fear filthy weeds in your fields, if you will cultivate buckwheat.

I hope I have said enough to induce many of my bee-keeping and farming friends that have not already tried it, to commence at once its cultivation. If I have I am well paid the time consumed on this article. It is said of

the man that produces a blade of grass where none grew—that he is a public benefactor. May we have many such.

CROPPED WINGS.

BY SHERENDON.

“Bees, I find are more apt to remove a cropped queen.” Why? Why, they get the swarming fever—the queen being unable to accompany the swarm: after several ineffectual attempts so to do, she is superceded or destroyed by the bees, because she cannot fly, and does not accompany the swarm, and FOR NO OTHER REASON, we think, she is removed.

“More of their queen progeny are hatched with defective wings.”

The next queen, worker, or drone you discover, Mr. A., you will find, if you examine closely the cell from which they emerge, before being cleansed by the bees, a moth worm has passed through the side of the cell next the wings, and destroyed them. We do not yet think, for reasons heretofore discussed in the WORLD, that defective queens are an inherited deformity.

“Queens get lost in the grass with cropped wings.”

In swarming, the queen soon finds out she cannot fly, and crawls back to the hive. If she is unable to get back the returning bees soon find her whereabouts and she may be discovered by the number of bees attending her. Even if lost, we prefer it to the loss of two or three gallons of bees and the queen.

“I see no advantages over disadvantages in cropping of the queen’s wings.”

None are so blind as those who will

not see. We have practiced clipping for not less than fifteen generations, and the past spring and summer not one per cent. of young queens had defective wings, and as to weak winged workers, we found in a dry time workers over two miles distant from their hives, and they may have gone further.

REMEDY FOR INSECT STINGS.—M. Dauverne says that 30 or 40 grains of quicklime dissolved in water is a thorough remedy for the stings of insects, and far superior to ammonia or any other alkali.

Whatever hesitation may arise in our minds from the fact of Huber's discoveries not being the result of his personal observation, no doubt can reasonably remain as to such of them as have been repeatedly confirmed and verified by subsequent observers. And this has actually taken place, and holds strictly true in regard to the most important of them. His discoveries respecting the impregnation of the queen-bee—the consequences of retarded impregnation—the power possessed by the working-bees of converting a worker-larvæ into a queen,—a fact, though not originally discovered by Huber, yet, until his decisive experiments and illustrations, never entirely known or credited,—the origin of wax, and the manner of its elaboration,—the nature of propolis,—the mode of constructing the combs and cells,—and of ventilating or renovating the vitiated atmosphere of the bee hives,—these, and a variety of other particulars of inferior moment, have almost all been repeatedly verified by succeeding observers.

—JARDINE.

Having worked for you all summer, the bee should be well taken care of the coming winter, in return.

HONEY DEWS.

BY ELDRIDGE KNIGHT.

C. P. Dadant, in the July number of the *WORLD*, page 237, tells us that this subject has been ventilated; that he has examined it, and that the most rational theory is that honey dew is an exudation from the leaves of several different species of trees. That there is such an exudation, called honey dew I do not doubt.

There is also another substance which resembles honey in appearance and taste, that is likewise called honey-dew. It is found in globules, or in patches on the leaves of trees, seldom covering the entire surface, and is greedily gathered by the honey bee.

I have found it most abundant on high land in places sheltered from the wind. It is also more abundant twenty or thirty feet from the ground than near the surface. It is generally found on the upper side of the leaf, but where bushes have been bent over I have found it on the other surface. I have found it on the bark of trees, on moss, and on dead leaves beneath the trunk of a fallen tree, where it could not have fallen from other leaves.

It being on dead leaves, in this sheltered position, shows that it is not an exudation, and it also shows that it is not deposited like common dew.

It is sticky, like honey, but not as sweet. I have never been able to discover any difference of taste arising from the leaf on which it was found. Nor have I been able to find any clear proof that this is deposited by the aphid, and yet, from all the facts in my possession, this seems probable.

If others can throw more light upon

this subject I should be pleased to have them do so; but until this is done, shall we not conclude with Webster, that "Two substances have been called by this name; one secreted from the plants, and the other deposited by a small insect called the aphid or vine fretter."

In conclusion permit me to congratulate you, and your readers, on the rapid improvement of your journal.

Maple Grove, Maine.

CHEAP QUEENS—EXTRACTORS QUERIES & C.

BY CONNOISSEUR.

No one, in the September number, seems to be in favor of cheap queens, because they tend to make the Italian disreputable. We do not see any difference between a one dollar queen and a five dollar queen. If the breeder is dishonest he will not scruple to send a queen that he knows to be impure, although he warranted her beforehand. No honest man will hazard his reputation for one dollar. If we were raising queens for sale we would not only sell them for one dollar, but we would test them before selling them. It only takes a little longer and does not cost any more, and it will pay to sell tested queens at that price. If only a half dozen queens were raised at once we do not think it would pay very much, but when twenty-five or fifty are raised it makes considerable difference. There is less trouble in getting queens fertilized right than a great many think. We Italianized our whole apiary when there were thousands of black drones flying, and only had two fertilized by black drones; in fact we never had but these two hybrid queens. If they are managed

right they do not often fail to be fertilized right.

Dr. Davis wants us to change our name, but we like it very well. Connoisseur means an expert, and if he does not believe we are an expert in bee culture let him ask friend Nesbit, who has the audacity to insinuate that we do not know the difference between pure Italians and hybrids. Once before a writer had the impudence to call us a greenhorn, but we did not pay attention to it till friend N. said what he did. His opinion of us extracts the dilapidated linen from the shrubbery (or takes the rag off the bush).

We thought Mr. Argo was hitting us when he said he did not care to read an article when written over fictitious names, but when he said, "there are hundreds who, after reading an article, would like to write to the author," we concluded he did not mean us, as we do not think anybody wants to write to us, (we give this as an excuse for ourself only).

Mr. Goodlander says, "away with all revolving-can extractors." Now, we do not think a revolving-can extractor is so disgusting an object as to cause such a remark. We have both stationary and revolving, and prefer the latter. In our opinion the former is a very unhandy concern. Mr. G. does not say why he likes the one better than the other.

Can any one tell us how to keep the bees occupied while we are extracting in the latter part of the season, so they will not follow us from hive to hive, and crowd into every one as soon as it is opened? We have a good deal of trouble with them, and we find the Italians more energetic in this than the blacks.

We say to Mr. Kellogg that we do not have to use smoke among our Italians, as we have them so tame they will not sting only when we brush them.

PATENT BEE HIVES, &C.

BY W. D. FLETCHER.

MR. EDITOR:—I believe I told the readers of your valuable journal that I would give you my experience with patent bee hives; so, to make my promise good I will now endeavor to do so. Some twelve years have passed away since I first got a patent bee hive. I used the old fashioned, so-called Quinby hive, with holes in the top for surplus honey boxes, and a cap placed over the boxes on top of the hive. Well my bees did very well in those days compared with the attention they received. In the spring of 1862 I ordered two hives, these hives were frame hives. Of course they were the best frame hive in the world. When I purchased them, the inventor advertised very extensively in most all the leading newspapers, and quite an excitement prevailed among the bee-keepers of this and adjoining districts or towns. The inventor of said hives advertised in the county paper that he would be at our county fair, give us one of his bee entertainments, and also exhibit his hives, that received the first premium at our State fair the fall previous, &c. So the time rolled away; I was anxious to see the hive and its inventor. The time arrived at last and we bee-keepers went to the county fair. But as it so happened the inventor was not there himself, but an assistant came. This man took out the bees from a hive he had with him, threw them around among the by-standers,

and remarked, "That is the way to handle bees." He gave us quite a lecture, sold the town right to manufacture the hive, and a lot of books on bee culture, published by the inventor of the hive. After the close of the fair we went home and for three weeks after that we could see, in our imagination, these much-lauded hives, filled with bees, honey, &c. Well, in due time my hives arrived, costing twenty dollars for the hives and fixtures for others, and four dollars for freight, and one dollar to get them from the steamboat landing to my apiary. This made twenty-five dollars—my first outlay. Then for some more hive just like them, I had twenty-five made to order, costing me, all complete, ready for use, three dollars and fifty cents each, making eighty-seven dollars for that lot. The season had now nearly arrived for swarms to issue, and I was all ready and anxious to see them come. One day I was at work in the shop, when I was notified that my bees were swarming. I left all business for the scene of action, and sure enough they had all clustered, and now for hiving. I brought forth the hive, and hived them according to the book of directions which accompanied the hive. I hived, in the space of two weeks, thirteen swarms in these hives. They seemed to work well, and a few seemed to be well filled with bees and honey, so I thought I would put on the surplus boxes. These boxes were very large, made out of siding, and had a round hole in one end with a glass over to see how the bees were doing. Before I proceed further I must tell you that these hives were all provided with what the inventor claimed as comb separators. These separators were for securing straight combs,

and all worker combs at that. Just think of it! Nice, straight worker combs! A hive full of it! I got my book of directions to see about removing these separators. I proceeded 1st, to take out the piece of lath that was placed between the first frame and outside of the inner part of the hive; then move the frame close to the side of the hive and pry loose the separators, then remove them, etc. All this I did with the exception of one thing—that was, to remove the separators. I commenced to remove the first separator, and to my astonishment, found, instead of the combs being built straight, they were built crossways, mostly in strips from one separator to the other. Well, what to do I did not know. These separators must be got out or the hive would be no better than a plain common box hive with no place for boxes. These separators were made of very thin wood and perforated with holes, and were placed between each frame. I tried every way, almost, to see how I could get the separators out without ruining the colonies; but was obliged to give it up, and what do you think I did?—I took the inside case from the outside one, turned it bottom up and drove the bees out and put them in the other old hives I had been using. I put two together, as the honey season was nearly over in this locality. I had but five combs out of the thirteen hives that I could remove; took these and placed in an empty hive of the same pattern, and filled up the space with three empty frames, as the hive held eight frames. This I put one swarm in; the rest of the honey in the other hives I fed to the colonies that I took out of them, as it was not worth very much on account of containing consid-

erable bee bread and young brood, eggs, etc. Finally I got the comb separators and frames out of the hives, after destroying the contents, or ruining the colonies.

In a few days a friend who had some of the same hives in use, came to see me and says, the first thing: "Where are those bees you had in those patent hives?" pointing to the old hives I had just transferred them into. I said, "There they are." "Why, my stars, what are they doing there?" "Working a little," I replied. "How did you happen to put them there, and for what reason?" "Reason," said I.—"Come to the house where I store my hives and I will show you." So we went to the house, and I showed him the frames and pieces of combs and separator. Says he, "If that is the way the hive works, I do not want any more of them or ever see any more of them." I enquired if he had removed the separators from his hives? He replied, "No, not yet." He invited me to call when convenient, and assist him in removing them. I did so, but we had to remove them, frames, bees, and all, the same as I did in those of mine. He had eleven swarms in these hives, and put them in five hives, when we transferred them to the old fashioned box hive again. Didn't we have a good time transferring bees? Mr. Editor, did you ever hear or know of bees being transferred from frame hives to box hives? I have often heard of transferring bees from box hives to movable frame hives, but in this case, it was quite the reverse. Perhaps your readers might want a description of this wonderful hive. If so, I will freely give it to any one upon receipt of a letter from them; also the name of the inventor, etc. My reason for not

giving it in the WORLD, is this: There are some parties who are interested in the sales of this hives and have purchased considerable territory, and to give a general description of the hive and the name of the inventor, etc., might lead to a long, uncalled for discussion through the columns of the WORLD, which might better be devoted to something of more importance. But I will close my communication on hives for the present, as I have not the least doubt, in my mind, that the use of the hive referred to, will be abandoned by all good apiculturists.

Lansingville N. Y.

VARIETY.

BY HARRY GOODLANDER.

Vell, Moon, dey goes for you somewhat about der Chromos. Vell den, venever I bees entitled to der breimum, just send to der "Old Harry" von of der chromos.

On page 312, Sept. No., you say, "the advice of some bee-keepers to beware of patent hives, should be given with some qualification," etc. Why should it? Once again I repeat the warning to beginners, to beware of all patent hives, for if you purchase one, the vender will not teach you the true theory and facts of apiculture, founded on the nature, habits and instinct of the honey bee; but will tell you an apicultural theory suitable for his hive, no matter whether it suits the bee or not. The theories and fancies of apiculture are as numerous as patent hives. No wonder the beginner is led astray, as there is only one true theory, fact and principle in apiculture, and that is founded on the nature of the honey bee, not on some patent hive.

A movable comb hive must of necessity, be a patent hive. How so? I see no necessity why it should be a patent when we have better non-patented than we have that are patented.

Leesburg, Ind.

WOMAN AS A BEE-KEEPER— WHAT IS THOUGHT OF THEM.

BY A. J. MURRAY.

Anna Saunders—I do not know whether she is a Miss or a Mrs.—is the right kind of a woman. I call her a woman—no disrespect meant—for the term, lady, is misapplied at the present day; and I am often confused, when I hear a colored brother and voter say, "I know's dat lady;" and, on enquiry, find out he means a colored sister, who cannot boast of good looks or manners. But so wags the world. Some, with the term gentleman—a rascal in good clothes, manners and education—with a heart as black as any denizen of hades. A perfect gentleman! Call me a man, or a perfect man, and I am satisfied. A fig for your gentlemen of the present day. So, in calling Anna Saunders a woman, I intend honor, for she is one in ten thousand in the South who has departed from the usual routine of household duties and taken to a labor which has been considered as belonging to man, or who does not scream at the sight of a bee. She has boldly taken hold of bees, and is making of them a source of profit. Oh that her conduct would cause ten thousand other women to follow her example, and attend to bees and chickens. There would be less sickly wives, hard pushed husbands, more luxuries on the table, and health-giving food; less hog and hominy, which causes more sickness in the

South than any other food, and at the end of they ear they could say, "I have a hundred or so dollars to put in the family purse."

It was not my intention when I began this to praise her, but it is so seldom, and, in fact, her name is the only one we ever saw from the South in any paper, as devoting her spare time to bee-culture, that I could not help speaking in her praise; but it was about the bad odors proceeding from the hives. I suffer from it every fall; at first it alarmed me, but upon examining my hives I found everything all right and in good, healthy condition. As it only occurs in the fall with me, the only reason I can give is, that it is the fermentation or evaporation of fall-gathered honey. It lasts about two or three weeks with me, and then passes off, leaving the hive as sweet as ever. I would like to hear from others who may suffer from the bad odors.

Memphis, Tenn.

An attempt was made in 1856, by Mr. Wagner, to import the Italian bee; but, unfortunately, the colonies perished on the voyage. The first living Italian bees landed on this continent were imported in the fall of 1859.—
LANGSTROTH.

From the North Carolina Citizen, (Asheville, N. C.) we take the following account of a yield from one swarm of bees: "As an evidence of how the 'little busy bee' can work, Mr. Cheek gathered from one gum, the work of one month, and one swarm, 139½ lbs of the very best honey. At 25 cents a pound, that work will pay. Another swarm made in 5 days, 39½ pounds."

The total honey crop in California this year is variously estimated at from 300,000 to 500,000 pounds.

BEEES IN AUSTRALIA.

We take the following from Wood's History of the Uncivilized Races of the World:

Insect food is much used among the Australians. As might be expected, honey is greatly valued by them, and they display great ingenuity in procuring it. When a native sees a bee about the flowers, and wishes to find the honey, he repairs to the nearest pool, selects a spot where the bank shelves very gradually, lies on his face, fills his mouth with water, and patiently awaits the arrival of a bee. These insects require a considerable amount of moisture, as every one knows who has kept them, and the bee-hunter reckons on this fact to procure him the honey which he desires. After a while a bee is sure to come and drink, and the hunter, hearing the insect approaching him, retains his position and scarcely breathes so fearful is he of alarming it. At last it alights, and instantly the native blows the water from his mouth over it, stunning it for the moment. Before it can recover itself, he siezes it, and by means of a little gum attaches to it a tuft of white down obtained from one of the trees.

As soon as it is released, the insect flies away toward its nest, the white tuft serving the double purpose of making it more conspicuous and retarding its flight. Away goes the hunter after it at full speed, running and leaping along in a wonderful manner, his eyes fixed on the guiding insect, and making light of obstacles. Sometimes a fallen tree will be in his way, and if he can he jumps over it; but at all risks he must get over it without delay, and so he dashes at the

obstacle with reckless activity. Should he surmount it, well and good; but if, as often happens, he should fall, he keeps his eyes fixed, as well as he can, on the bee, and as soon as he regains his feet he resumes the chase. Even if he should lose sight of it for a moment, he dashes on in the same direction, knowing that a bee always flies in a straight line for its home; and when he nears it, the angry hum of the hampered insect soon tells him that he has recovered the lost ground.

The reader will see that this mode of tracking the bee to its home is far inferior to that of the American bee-hunters, and is rather a business of the legs than of the head. The Australian bee-hunter waits until a bee happens to come to the spot where he lies; the American bee-hunter baits an attractive trap, and induces the insect to come to the spot which he selects. Then the Australian bee-hunter only runs after the single bee; whereas the American bee-hunter economizes his strength by employing two bees, and saving his legs.

He puts honey on a flat wooden slab, having drawn a circle of white paint round it. The bee alights on the honey, and, after filling his crop, crawls through the white paint and sets off homeward. The hunter follows the "bee-line" taken by the insect, and marks it by scoring or "blazing" a few trees. He then removes his honeyed trap to a spot at an angle with his former station and repeats the process. There is no need for him to race after the flying bee, and to run considerable risk of damaging himself more or less seriously; he simply follows out the lines which the two bees have taken, and, by fixing on the point at which they meet, walks leisurely up to the

nest.

Having found his bee nest, the Australian loses no time in ascending to the spot, whether it be a cleft in a rock, or, as is usually the case, a hole in a tree. This latter spot is much favored by the bees, as well as by many of the arboreal mammals, of which there are so many in Australia. The sudden and violent tempests which rage in that part of the world tear off the branches of trees and hurl them to the ground. During succeeding rainy seasons, the wet lodges in the broken branch, and by degrees rots away the broken wood, which is instantly filled with the larvæ of beetles, moths, flies, and other insects that feed upon decaying wood. Thus, in a few years, the hollow extends itself until it burrows into the tree itself, and sometimes descends nearly from the top to the bottom, thus forming an admirable locality for the bees.

Taking with him a hatchet, a basket, and a quantity of dry grass or leaves, the native ascends, lights the grass, and under cover of the smoke chops away the wood until he can get at the combs, which he places in the basket, with which he descends. Should he be too poor to possess even a basket, he extemporizes one by cutting away the bark of the tree; and should the nest be a very large one, he is supplied by his friends from below with a number of vessels, and passes them down as fast as they are filled.

A speculative Scotch gentleman, wanting to dispose of some bees, to attract purchasers, printed the following placard: "Extensive sale of live stock, comprising not less than one hundred and four thousand head, with an unlimited right of pasturage."

SHOULD THE INTRODUCTION OF FERTILE QUEENS BE CONSIDERED A "BUG- BEAR?"

BY FRANK BENTON.

The following plan for the safe introduction of queens, we have practiced for several years, without losing a single queen, and those to whom it has been given, have been uniformly successful in introducing it. We have finally concluded that the success all around is due more to the "method" than to "luck," and so present it to the readers of the *WORLD* with the hope that it may prevent some queenly beauty from being most foully murdered, when she is given the task of gaining a rule over dusky and disloyal subjects.

Remove the black queen, and immediately place the wire-cloth cage containing the Italian queen, with two or three of her workers between the tops of the central combs, and against sealed honey, if possible, so the queen can help herself, if not supplied with food by her future subjects, as they present their respects (?) to her through the bars of her temporary prison. By the way, the cage should be made of wire-cloth, which has meshes one-eighth of an inch square; a piece three by four inches folded or rolled up, and having the ends stopped with sponges or bits of wood, answers the purpose very well. Just before dark, the next day after caging the queen, open the hive, using a very little smoke to quiet the bees, and drizzle honey in a fine stream between the combs and on the tops of the frames, and allow the Italian queen to crawl down between the combs, completely daubing her with honey as she leaves the cage. Close the hive

at once, contract the entrance, and let them alone "most severely" till the second day after, when you may be almost sure, on examining the interior of the hive to find the new sovereign engaged in her queenly duties and surrounded by a body guard of her willing subjects.

Success in introducing seems to depend upon but three simple principles, viz: 1st. The colony must be queenless long enough to make every bee aware of the fact, and yet not long enough for them to get queen cells well under way. The twenty-four or thirty-six hours intervening between the removal of the black queen and the release of the Italian, afford the bees ample opportunity to become aware of their condition, and a colony from which a laying queen has just been removed never does very much within the first forty-eight hours toward building queen cells. 2d. The new queen must have the peculiar scent of the hive to which she is to be introduced. The caging twenty-four hours or more, will give her this, at least to a certain extent, and the daubing of the queen and bees with honey makes their odor still more similar. 3d. The bees must be in a good natured mood. They are easily put in this shape by the daubing process described, and as this is done just before dark and the hive closed at once and the entrance made very small, they are all "slicked" or licked up before robbers get a chance.

It seems to us that if these facts, above stated, were more generally known, or more often borne in mind, introducing queens would soon cease to be such a "bug-bear" as it now is to many who are continually losing newly purchased queens and dare not attempt to change a choice queen from one colony to another.

Edgefield Junction Tenn.

DOLLAR QUEENS.

BY R. M. ARGO.

MR. EDITOR:—I see that Friend Nesbit, on page 305, Sept. number of BEE WORLD, is in favor of cheap queens. I cannot exactly agree with him. I think there is but one chance in ten to get a pure queen in this way, and I think that about eight out of ten who send for such queens are NOVICES, and after the first ever-sticking, anti-brushing, mad-after-a-brushing, such novices will conclude that their pet friends from Italy are intolerable, and unbearably severe. I agree, however, with Friend Nesbit, that the hybrids are superior as honey gatherers to the black, or common bee. But, for easy management, and convenient handling, without being bothered with gloves, or blinded with a bee-veil, and the everlasting lighting of rotten wood, for smoke, &c., it is far preferable to keep the simon-pure Italians. It is true that some pure Italians will object to being opened without smoke; but I have many a stand that I can open without the least protection, or the use of smoke, almost the year around. Such novices, not being judges of the pure stock, will take it for granted that they have the pure stock if they see a yellow stripe on each worker, and finding their pets so unreasonably cross will report that, "What is said of the mild temper of the pure Italian bee is simply a lie, gotten up by those who have axes to grind." For this very reason, more than any other, I have refused to ship untested queens, only in such cases as the parties contracted especially for hybrids.

In some localities where a apiary of pure Italians is kept, and where there are no black, or hybrid bees, within

four or five miles around, a person could afford to sell pure queens for about \$2.00 each, but where there are black and hybrid bees within a mile no breeder can afford to sell purely tested queens at less than five dollars and very little, if any thing, is made at that. A pure queen in April is richly worth ten. I think that if I could sell every dollar queen I could raise, I would prefer selling such queens to tested ones at five each, as I could make more profit that way.

Friend Nesbit says he cannot get more than one out of every twenty purely fertilized. This is quite different in my location, I can get in May about 18 and June about 15 and on the whole an average of about 14 out of twenty purely fertilized. There has been times when in a lot of about a dozen queens every one were purely fertilized, at other times only three or four purely fertilized. This is owing to the prevalence of pure and impure drones at the time. Those who persist in buying dollar queens had better be particularly careful who they buy of; buy from such breeders as have had a good reputation for pure queens, and in whose apiary there has been no foul brood.

BRUSHING AND SHAKING BEES.

Friend Nesbit's article under the above caption would have been new to me had I not accidently discovered the very method last July while operating with a very strong and extra cross hybrid stand. This was after the drought had cut off all flowers and bees had nothing to do but to depend on their stores. I wanted to remove that queen and introduce a pure one, but the bees refused to be subdued by smoke and as fast as I could wash off the scent of a sting I would receive fresh ones.

The hive being extra full of bees, and impure drones, made her harder to find. After being unable to find her on the frames, for the crossness of the bees, I tried shaking them off on a sheet, but this only maddened them ten times worse. I then gave up, determined to find her the next day, and then kill every drone in the hive. Next day I removed the live and set a new one in its place, with the entrance so fixed that only the workers could enter. In opening the hive, the bees showed the same hostility as before, but on raising out the first frame, with the piece of rotten wood smoker in one hand, I noticed that the bees ran from the smoke to the other end of the comb. So I drove them all to one end of both sides of the comb, then shook them off on the sheet, and to my surprise they were subdued, and would stand the brushing off—all that did not shake off—and before putting the frames in the new hive I destroyed every bit of drone brood. I would just raise a frame out easily, hold it with one hand, and with the other hold the smoke in a position to blow on both sides until the bees started to run, when I would shake off on the sheet with as much ease as if they were pure blood Italians. Thus I had made a good discovery and did not know that it was already known, until I read the above by Friend Nesbit. The queen was soon found, and the drones starved at the entrance in five or six days.

You rightly say that the advice of bee-keepers to "beware of patent hives," should be given with some modifications. I did not mean exactly what I said on that subject. I generally write too fast to be clearly understood. My aim was to say to all novices, that

as they have the Langstroth patent free, they had better beware of traveling patent venders. I consider it no use buying a patent hive and farm right as long as they have the Langstroth hive and frame and also a few others free. In my opinion only one out of every ten such patent hives are fit to put bees in. Also those traveling patent right venders swindle so many novices as to be a great hindrance to the success of bee-keeping in the South. I would advise no person in this country to keep bees without a frame hive of some sort, but I do advise them to beware of patent hive venders. Take the BEE WORLD, or any such good journal on bees and it will defend or protect you from being swindled by sharks. No one keeping a few stands of bees can afford to do without a good journal on bees.

Lowell, Ky., Sept. 23 1874.

HONEY DEWS—C. P. DADANT REVIEWED.

BY A. H. R. BRYANT.

DEAR EDITOR.—I take issue with C. P. Dadant upon his statement in BEE WORLD, page 237, that honey dew was not produced by aphides. His argument that honey dew was found on top of the leaves, while the aphides were on the under side, is of little weight, and not altogether correct, for the aphid is found in greater numbers on the young, tender shoots and stems of leaves than under the leaves. And, again, it is easy to account for the absence of the aphid on the same leaves that have dews on them, simply from the fact that the dew drips from the uppermost leaves on to those below. Now for the facts in the case:

I take the position that aphides pro-

duce a great portion of what is denominated honey dew, but not all of it. Where is the casual—not to say close—observer, that has not noticed the great variety in the family of aphides? How few trees and plants there are that have not their peculiar aphid, or plant louse, varying in color and shape; and especially should we expect the bee men and orchardists to have noticed their bees swarming around their grape vines and fruit trees in the spring and early summer, and when they make a close inspection for the cause, they have found the tender shoots of the vines and trees covered with plant lice, (aphis) and, on a closer examination, they will find that the insect (aphis) secretes a substance similar to honey, which it throws off through two tubes on top of the abdomen, which substance the bees, wasps, flies and ants gather greedily.

Some two years since I was attracted, by the hum of bees, to a box elder that stood in my yard, and when I looked for the cause, I found not only the leaves of the tree covered with honey dew, but the limbs, and also the weeds and grass underneath, liberally covered with honey dew. On my first examination I did not find the aphid, and came to the conclusion that it was, sure enough, honey dew from the atmosphere; but, on a closer inspection, I found the young, tender twigs—which are very green—literally covered with a very green aphid, (plant louse), hence the abundance of the so-called honey dew, that was literally dripping from the tree to the weeds and grass below.

Kaufman, Texas.

Subscribe for the BEE WORLD. It will be better than ever for 1875.

ON WHAT GROUNDS DO PARTIES CLAIM A PATENT; AND WHAT IS PATENTED IN OUR PRESENT HIVES?

BY P. L. V.

MR EDITOR:—As you are a person of large experience, and well acquainted with most, if not all, the patent hives, I would be highly pleased to have you, or some one equally well posted on the subject, to answer the above questions.

My reasons for asking the questions are that nearly all the hives I have seen, or used, are constructed on the same general principles, differing only in the size of the frames, which are placed in some lengthwise, and in others crosswise, and many of them are patented.

A few days since, while perusing some old work on apiculture I found to my surprise that Dzierzon, though the first to renovate or rather employ rationally the movable comb hive, the same being afterwards modified by Von Berlepsch into a movable frame hive, the credit of inventing this hive is not due to either of the above apiarians, as is commonly supposed, but to Huber who flourished long before their time; though Huber raised his frames with screws attached to the end of the frames. Having made this hive for his observations, nevertheless this was the movable frame hive.

I also learned from the same source that the hive known as Adair's New Idea Hive is another old invention, (and a very good one) slightly modified, having been well known nearly a century ago as Huber's Book Leaf Hive, from the fact the hive could be opened and shut whenever desired, like a book, and each section, or frame

taken out and empty ones inserted; and the same hive was modified in frame in 1830 by J. Rodman. The modification consisted in making each section to contain two combs, and the top of the frames, instead of being flat were made in the shape of the roof of a house, &c.

Now, Mr. Editor, you may think, from the style of my letter, that I desire to provoke a controversy, or question the rights of certain parties to patents. Such, however, is not my wish. Being deeply interested in apiculture, and all that pertains to it, my object is only to know what claim there is on the patented hives, as there are so many of them I can scarcely see any room for new apiarians to make a hive of their own without infringing on some patent.

ANSWER.—This is a question often asked, and rightly, too. But we will let those of our friends that have patented hives, answer, making such answers as short and concise as possible.

THE NATIVE LAND OF THE ITALIAN BEE.

BY CH. DADANT.

FRIEND MOON:—As there exists in the minds of several bee-keepers, some uncertainty as to where the cradle of the Italian bee is, let me insert in your paper part of a letter just received from Augusta, Ga., with my answer to the same:

“Please excuse, but with all due respect for your Mr. Chas. Dadant, I differ with him in regard to the bees of Italy. Now, I, too, have traveled a bit in Europe, and it is a fact that cannot be denied, that the bees in the neighborhood of the Adriatic Sea are not pure Ligurians, generally speak-

ing. Purity there, can only be found in the best apiaries, where the greatest care is used in breeding—the same as in this country. I still contend that the purest type of Ligurian bee is found in the Rhetian Alps.”

J. P. H. B.

I will first remark that the term, Ligurian, used by my correspondent, implies that the Italian exists in Liguria. Now, as Liguria is this part of Italy which lies along the coast of the Mediterranean Sea, and whose capital is Genoa, it is certain that the Italian bee exists outside of the Rhetian Alps. The name of Ligurian bee was given by Captain Baldenstein, who first brought this race into Germany. Later, a Mr. Hermann got some Italian bees from the Rhetian Alps, and gave these bees the name of Yellow bees from the Alps—name as much improper as the name of Ligurian, since the true Italian exists in all its purity from the Alps to the southern point of Italy.

Two years ago I spent five weeks in Italy, beginning my journey with the Rhetian Alps, visiting the apiaries of Bellinzona and its neighborhood; then I went to Lombardy, and after seeing the bees in this last country, I concluded to buy my queens there, on account of their beauty, which I found greater than in the Rhetian Alps.

During my sojourn in Italy, I visited some hundred apiaries, and saw several thousand colonies. I can certify that nowhere did I see a single bee which could be called a hybrid. Had I encountered, in Lombardy, some stocks of hybrids, it would have been an act of supreme folly to buy queens in that country, since the price was the same everywhere. Besides, as to the purity of the bees, I think I can

vouch for being a good judge, since, prior to my going to Italy, I had introduced, in my apiary, queens from Bellinzona, Biasca, Mendridio, Milano, &c. But, to prove my position, I will quote two good authorities on the matter.

Mr. Mona, a queen breeder of Bellinzona—a town situated on the slopes of the Rhetian Alps—wrote in a French paper:

“The name of Ligurian is as much improper as that of yellow bee of the Alps; the only name of this race is that of Italian; its exclusive native country being the whole of Italy, with the canton of Tessin, and a part of the Grisons. * * * * Last spring I traveled as far as Brindisi, situated in the southern part of Italy. In my travels, I stopped in several localities to study the bees and their nature, and I can attest that everywhere, I have incontrovertibly found the yellow bee in all its purity.”—[*Journal des Fermes des Chateaux*. Paris, April 1, 1870.

Mr. Mona, being a queen breeder of the Rhetian Alps, his testimony has the greatest value in the question.

A Mr. Hamet having, in a French paper, “*l'Apiculteur*,” criticized my choice of Lombardy to get queens, the secretary of the Italian Society for the propagation of bee culture, Count Visconti di Saliceto wrote in the journal *l'Apiculteur*:

“In Milano, in the high and low Lombardy, as well as in the middle and southern countries of Italy, all the three yellow rings around the abdomen. They are large, gentle, laborious; in a word, they possess all the characteristics of the Italian bee, and in nothing are they inferior, if they are not superior, to those which exist in

the Alps and in the canton of Tessin. As a proof of this last assertion, I can say that Mr. Mona sometimes comes in Lombardy, and even the neighborhood of Milano, to get the queens of the colonies killed in the fall by our peasants. Do you think he would come so far was not our race very pure?”—[*l'Apiculteur*, Milano, April 1873.

After two such quotations, I think it is unnecessary for me to write more on the question.

Hamilton, Ill.

BEEES IN NEW ORLEANS—DIARY OF A BEE KEEPER.

BY JAS. H. YOUNG.

FRIEND MOON:—Poor health, extreme hot weather, an empty pocket, and the feeling of discouragement produced by failure when you were determined to succeed, had almost caused me to give up and say no more about my experience, but the magazines for the last two or three months show me that I am not alone. April 15th I traded for two boxes of bees and on the 22nd transferred them with my remaining box, making five new stocks. This time they were cross and I had to don both veil and gloves and work amid robbers who could not be subdued by either smoke or water. A friend, who was looking on, got stung in the neck, and declared that his bees might stay in their boxes. I got through all safe and next morning found all right, and as it rained hard during the 23d and 24th had no robbing. But now my trouble begins. I had two Italian queens but could get no drones, Italians and blacks had killed every drone in the hive, even dragging out the larvae. April 28th saw a swarm in the

air, the wind blowing so they could not settle in the tree, but finally clustered on a gate post. I hived them and gave them part of a frame with brood. I soon found that I was no better off, as they were my bees deserted from number 11; no honey in the hive they had left. I gave them the combs from the old hive and fed them, but on May 1st they left for parts unknown.

I got about fifty drones from a friend about a mile and a half from here, and put them in a nuclei hive, but in three days they were all gone.

During May and June I received about ten queens; three I took to my friend's and left them until they had mated, two mated at home, the rest were lost. Three other hives were lost by desertion, although I fed them every other day.

Sept. 1. I have fifteen queens, two Italians, six hybrids, seven black, and two hives queenless. I have capped drones from a hybrid queen, and will try and raise hybrids to supercede my black queens.

Sept. 11th. The WORLD is on hand this month before the A. B. J., or B. K. M. Friend Murray prints my note and says, "I judge you are not an experienced hand, &c.," although my note says, "I am a beginner." I will own that, in the face of my experience, I doubted the "two barrel" story, but since then I have visited a man eight miles from here, in the swamp, who has kept bees for twelve years on the let alone principle, and has taken, this poor season, five or six barrels of honey from about fifty hives. He has no access to the lower box, but cuts the comb from small frames, or from boxes or barrels placed over these, puts it in a small box press, and by means of a bench screw extracts the honey,

rendering the comb into wax. He pointed out to me the bees that were bringing in pellets of "wax" to build new comb. When told that the pellets were pollen, or bee bread, and that the bees secreted the wax used in the hive, he laughed at the idea, but admitted that they were not building new comb, although they were carrying in large quantities of honey.

This man has Langstroth on the Honey Bee, and some German works, but surely cannot read them. His bees—all black—may have some new way of gathering honey with their wax unknown to mine, for, although I had followed Friend Murray's advice, my bees would gather none.

Friend Goodlander is positive in his assertion, yet I do like good chromos; but let them be sold on their own merits. If a publisher can afford to give a chromo to each subscriber, he can afford to reduce the price of the magazine, or add to its merits, which I think would gain more subscribers than the cheap prints commonly used for that purpose. The book, *The Apiary*, will be of use to beginners, and makes a suitable premium, although I prefer each to have its price, and stand on its own merits.

New Orleans, La.

We take the following from the *Republican-Register*, Galesburg, Ill. It gives an account of honey matters in the immediate vicinity of our esteemed correspondent, W. M. Kellogg, and for this reason, if no other, it will be of interest to our readers.

"Several of the bee-keepers of Oneida clubbed together, and sent to Wisconsin by I. W. Cramer and bought eight bushels of buckwheat, which they gave to Mr. Dater, who sowed nine acres of

ground with it, just east of town. It has been in bloom for some time, and consequently there is a lively time just now among our bee-keepers. There are two honey extracting machines in town, W. M. Kellogg's and I. W. Cramer's which throw the honey out of the comb, leaving bee bread, etc., in the comb and returning it to be filled again by the bees. Following is a list of the bee-keepers, number and style of hives, and amount of honey taken for the week ending Sept. 12, 1874.

By W. M. Kellogg, for P. Mohler, 7 Kellogg's Improved Langstroth Hives, 167 lbs.; Dr. D. W. C. Bacon, 4 Langstroth hives, 70 lbs.; A. S. Curtis 3 I. W. Cramer's hives, 42 lbs.; Dr. D. D. Martin, 2 Cramer hives, 20 lbs.; E. J. Peterson, 1 Kellogg hive, 40½ lbs.; D. Hamilton, 2 each Kellogg and Cramer hives, 45 lbs.; and at Kellogg's own yard, 7 hives, 245 lbs. By I. W. Cramer, for T. Parsons, 2 Cramer hives, 36½ lbs.; and at Cramer's own yard, 200 lbs.; 12 hives. Mr. Cramer run his yard, more for queens than for honey. If we are favored with continued fine weather, the yeild of honey will be doubled. 875 pounds of honey at 20 cents per pound, is the snug little sum of \$175.00, for one week's work with the little stingers.

A bee-keeper gives the following plan to prevent a swarm of bees from getting away from the hive, with the statement that after ten years' experience he has never known it to fail but once. As soon as they show the first symptoms of swarming, stop up some of the outlets to the hive so as to force them to a considerable time coming out. The swarm being made up in part of young bees, many of them unable to fly well, and as the swarm can do nothing until all are out and flying about in the air, by prolonging their exit, the feeble ones become tired, and, finding their plans frustrated, they alight to arrange their journey. If they can leave the old hive at once, they care very little about alighting.

SUCTION CURE FOR BEE STINGS.

BY JNO. J. RIVERA.

MR. EDITOR:—Considerable interest has lately been aroused in apiarian circles in view of several dangerous and even fatal bee stings, and many very good remedies have been proposed in the columns of the bee journals, but I unhesitatingly affirm that the quickest, easiest and most effectual cure for the sting of a bee is to immediately extract the sting, and, by applying the mouth to the place to suck the poison out.—Nothing more, nothing less is required. I have demonstrated its value so clearly to my own satisfaction within the past year, in its successful application to several persons to whom a bee sting had formerly been a thing of pain and dread, and even danger, that I confidently suggest the adoption of this simple remedy wherever practicable. Its prompt application will reduce the bee sting to the insignificance of a mosquito bite, and so far as serious results are concerned, will relieve the bee-keeper of that anxiety he feels for the safety of strangers visiting his apiary, particulary ladies and children. The rationale of this simple remedy is so obvious that it is hardly necessary to say that the prompt extraction of the sting prevents its working any farther into the flesh, and enables the operator to draw out the last particle of poison before it has time to enter the system, thus allaying the pain and preventing the usual swelling. An eminent apiarian in an early work has for many years prevented the adoption of this practice by asserting that the poison thus taken into the mouth caused headache, but I am satisfied this result will not follow in one case in a thousand if the poison be at once spit

out. I trust our bee-keeping friends will try this simple method and report success. Of all the remedies I have tried, this seems to be the safest, surest, quickest and cheapest.

New Orleans.

PATENT HIVES.

BY P. L. V.

MR. EDITOR:—So much has been said and written about bee hives, that I dislike to trespass upon your time, but there is such a list of patents in this line that I need inquiry if the hive I make and use, is an infringement, and this I can only ascertain by giving you a description of it. I make the hive as follows:

I got boards twelve inches wide and an inch in thickness; add two lengths 18 inches and one 15½ inches. The two longest pieces are rabbeted on the inside upper edge $\frac{3}{8}$ x 6-8 of an inch, to receive the ends of the frames. The shortest piece is nailed against the rabbeted ones, which is the front of the hive, having, of course, the ordinary passage for the bees and holes for ventilation. The back part of the hive is generally shut by a door (this last I prefer, as by this means I can examine new swarms without disturbing them), which makes the inside of the hive just 18 x 13½ inches and 12 deep. I use a loose bottom board, and as my hives stand under shade trees, along the fence, I cover each one with three 7 x 16 in. boards. The frames for the inside are made as follows: First, I get strips $\frac{3}{8}$ of an inch thick and $\frac{1}{8}$ inch wide. I cut one piece 14 2-8 inch for the top, two ten inch for the sides and one 13½ inch for bottom. This last piece will project $\frac{3}{8}$ of an inch on each side, when the frame is made, which I

cut in this shape ∇ . When these strips are nailed together I have a frame 12 inches wide by 10 inches deep inside. This, when placed inside of the hive leaves a space between the frame and wall, of $\frac{3}{8}$ of an inch, the same on top and 6-8 in the bottom.—Eleven of these frames are placed in the hive, and the twelfth frame is made like a sash with a glass. This last I consider of great use, as it can be put in the place of any of the frames, and by this diminish the size of the hive when necessary. Now to keep my frames equally separated and to prevent them from oscillating together, I use for the top, bent wires in the shape of a reverse U, which I nail between each frame, so they will keep the regular $\frac{3}{8}$ space on the rabbetted boards. I have no trouble in making my wires, as I use a pair of round forceps, which bends them just the size. The wire I use is of the same size as that used for lady's hair pins. To keep the same space below I use large head nails (carriage nail), and nail one on each lateral piece 1½ inches from bottom. The top hive for surplus honey I make only 7 inches high, but of the same width as the brood hive, and make the frames to come level with the bottom. This surplus hive I place directly over the brood chamber, which makes a direct communication between the two, and is, in my experience, better than to have a board between, as I get more surplus honey, and the bees go to work sooner. The reason I make my surplus frames of the above size is that whenever I wish to have box honey I divide these frames in the middle by putting two strips close together, and when they are full of honey I saw them between the two strips and I have, by this means, two small

combs nearly six inches square, which I insert into glass boxes. And another reason is, that it is just the length to cut by strips for Mason's jars.

In speaking of standard frames, you say, "let each give good and plain reasons why they prefer their own frames and then we can tell if the diversity of opinion is the result of locality, superior skill and research, or a matter of taste." According to my experience I don't think plausible reasons can be given that 10, 12 or 20 in. frames are better adapted to the wants of the bees than other sizes within that limit.—I have been experimenting for five years on the bees, and I must say that I have found no difference in their work, either in 8x11 inch frame or a 20 inch frame. I have come to prefer 12x10 inch frames, because I found it better to handle and better adapted to my views. I speak for the locality.

Before ending this already long article, I must say that if the above described hive is no infringement, that all parties are welcome to make and use it as they please, provided they don't get it patented. Should any not exactly understand my description, they can write to me and I will be very glad to give them a diagram, gratis.

I would suggest to all those who wish to make their hives themselves, to buy a hand circular saw about eight inches in diameter, to saw the strips for the frames; to make a form to nail the frames and to have a gauge box to saw the strips of the proper lengths, and by this way save time and a great deal of measurements, and above all, money.

Bayou Goula, La.

Give your bees plenty of stores to winter on.

BEE ITEMS.

BY J. P. H. BROWN.

DOUBLE HIVES.

MR. EDITOR:—Having tried two story hives and others on the "new idea" principle, I am fully satisfied that the long, one-story hives possess many advantages over the former. The advantages may be summed up as follows: 1st. Plenty of room for the queen to lay, and consequently great strength of colony. 2d. Very little disposition to swarm. 3d. At least one-third more honey. 4th. Convenience in opening—the frames can be removed from one end while the bees at the other end hardly know what is going on. In my long, one-story hives I do not use Adair's sections, but simply from 20 to 30 frames of the Langstroth size.—The entrance I prefer at one end, which, of course, makes it front the sides of the frames of comb. The frames are covered with two honey quilts, which meet in the centre. The cover of the hive consists of a shallow cap instead of a flat board. The bees never hang out even in the hottest weather. To succeed with their hives, it is very important to know how to manage them in the spring. To put a small colony in, say February or March in our climate, with the full complement of twenty or thirty frames of comb, would be only to discourage the bees, and give room for worms, cockroaches, mice, &c. At first, only place in ten frames of comb if the colony is strong; then, as they grow stronger, place an empty comb in the center of the brood nest, say once a week, or oftener if necessary. If the nights should be cold, one comb placed in once a week would be sufficient.

Gallup and Adair say the bees in this hive will not construct drone comb. Such is not my experience.

STANDARD FRAMES.

After having started with the Langstroth frame, and becoming dissatisfied with it, I practically tested nearly every other size, but finally settled down on a frame of the Langstroth size, which I think, taking our Southern climate into consideration, suits us better than any other size. It is finely suited where honey boxes are used, for bees will more readily work in boxes where the brood frames are shallow and not too deep. It works well in the extractor; and is also adapted for the long one story hives. With these frames we have less handling to do than where they are smaller. Ten Langstroth frames will contain a superficial area of about 3060 square inches, while it will take nearly twelve frames 12x11 to contain the same surface. In a large apiary the time consumed in handling these extra frames would be quite an item. I shall vote for the Langstroth frame every time, until I can find something better.

THE LOSS OF BEES.

The loss of bees by robbing, transferring, artificial swarming, desertion of hive, the moth, etc., is owing, in ninety-nine cases in a hundred to carelessness, want of vigilance, and a correct system of management. It may be doubted, but nevertheless it is a fact, that only about one person in fifty ever succeeds at bee-keeping. Simply because so few persons possess the requisite watchfulness, care, energy and tact required in order to manage an apiary successfully.

CHEAP QUEENS.

Whether a queen can be sold at a low or a high price, depends much up-

on the amount of honey the locality will yield. In good honey locations \$10 or \$15 may not be too much for a tested queen; while in a poor locality \$3 to \$5 may be a fair price, unless the queens are reared in such a way that they are physically weak and defective in constitution.

As regards untested queens, I hardly think any honorable breeder would send out any such unless they were from pure, genuine Ligurian mothers. And if the mother possesses type or individuality of character (and unless they do, they are not fit to breed from, I care not whether they are imported or home bred) sufficient to stamp her queen progeny, any such are cheap at one dollar, even though mis-mated. It is acknowledged that hybrids are better honey-gatherers than the native stock, and if so, the bees of the country become improved by the infusion of foreign blood the same as your cattle, sheep, poultry, etc.

Augusta Ga.

REVIEW.

BY JEWELL DAVIS.

MR. EDITOR:—Friend Snipes shows us that he averaged only twenty-five pounds of fine box honey to the colony of bees this year, previous to the 15th of July, at Carson's Landing, Arkansas. Yet he calls this the worst year he ever saw. He then presents the true idea of the moth worms getting possession of, and destroying colonies of bees. They soon take possession, if the colony has an unprolific queen, or is queenless. Queens become unprolific from old age, and measurably so, frequently, when the bees are not gathering honey freely. A strong colony being a tower of

strength against the moth worms. To save the misfortune of having the queen cells removed or cut down when introducing into other hives, among strange bees where they were not built, led to the invention of the Queen Nursery, in which they are perfectly safe. If all of Bro. Snipe's colonies had been equal to his strongest one, how changed would have been the result in honey and profit.

All who wish to learn the whys and wherefores of comb building, will, of course, read Connoisseur's article on that subject.

Our friend Rambo has given a little here and a little there of his "broken pieces." Let me ask him, why not feed at once, to keep his bees from consuming their winter stores, and keep the queens breeding, so there will be full stocks, and a due proportion of young bees, and ample stores for safe wintering? Yes, certainly, you should provide ample pasturage for your bees, such as buckwheat, Alsike and Mililot clover, and all other available honey-producing plants. Without doubt the movable comb frame hive you must have, and try your hand at artificial swarming, since you "believe it a good plan," if judiciously done. But see here, how many bee-keepers know when it can be "judiciously practiced," to prevent natural swarming? Hold on, friend Rambo, be cautious about that salt petre, or you will blow up Mr. Quinby's smoker and destroy all of its excellent qualities. I protest against your notion of keeping the correspondents address a secret matter. Their names and address should be a public matter for the benefit of all parties interested.

Please excuse me on the cheap queen question, since I may not be

a competent judge; but I refer you to the more practical queen breeders for a decisive answer, or discussion.

That is it, friend Sherendon, show all of us confident bee-keepers that we have not seen all the world yet, and the bee hives in particular, and that when we are claiming the best we may be far wide of the mark. It may be better not to assume too much, then, less certainly, will be the deception, if any is connected therewith.

Friend G., who seems loth to write over his proper signature, gives Mr. Sherendon a close rub about our government being bought off in the patent hive business by a few pitiful dollars. Truly, that would be a disreputable little affair for our honorable government, if true. But, if not true, why dare Mr. Sherendon to assume it? Again, friend G. (I wish he would write over his proper name), points out the necessity of the bees obtaining a liberal supply of honey to make transferring a success, since the scarcity of honey induces robbing, in the exposure of their stores while transferring. Assuredly novices will take the warning. But see here, friend G., was that key hole in your table drawer so small that the moth miller could not gain access to your wax ball?

Please be a little more particular, and show us how we are bringing the BEE WORLD, more particularly than the other journals, and bee-keepers into the adoption of standard hives and frames? Why is it impracticable, if desirable? Cannot everything in that line, desirable, be rendered practicable, since all patent hives are to be absorbed by the will of the bee-keepers? The dollars and cents invested in them, may retard the execution of that will for a little season, but it will pre-

vail. I grant you hit the mark when you said the bee pasturage was measurably destroyed by the clearing up of the forests. Well, what is the remedy, but to cultivate such grains and plants as will supply a continual flow of honey the whole summer season? Will you try it? Yes, friend G., bees must have as good attention paid to them as we give our cattle, sheep and hogs, to make them profitable; and early in spring they should be fed, even when in possession of ample stores, and much more so if scanty, to make them breed up to full, strong colonies; later in the season they should be fed during every dearth of honey in the flowers, to keep the queens laying and the stocks strong. Must I disagree with you, friend G., about the frame hives requiring more attention than the box hive? If both are rightly dealt with, and kept strong, there is no danger of the moth worms, especially if your hives are rightly constructed, making no harbor for the worms where the bees cannot go.

My friend, Kellogg, is here again, full of light, for Mr. Connoisseur's benefit, showing that he should smoke and tame his bees before he begins his brushing practice. Well, how is that, who can answer his question about water subduing the disposition of bees to rob? I will venture to say I have, repeatedly, and with success too. Shall I say it is really provoking to see the farmers so loth to favor the cultivation of buckwheat, when they know it will be to their own interest as well as enhance the interest of the bee-keeper? Do they wish to keep bee-keepers from prospering? I notice it is now both moved and seconded, that Dr. Davis act as reviewer. Who will decide that question? Is my

friend Kellogg to be critic? I trust he will remember to report by the time the honey is running a foot deep in the yard. Look out for his streams of honey.

Read friend Marvin's article, pro and con, it is worth your attention.

Thank you, Mr. Nesbit, for your sober reflection on dollar queens. May we keep in mind the stubborn facts you portray before us, and never forget them. Always remember the closing sentence.

I notice that friend Argo seems to think that Dadant's standard frame is too long and too deep for his practical use. Why did he not give his reason for so considering? And why say twelve inches is too deep for the frame, and why say ten and three fourth inches deep, more handy? Why prefer the frame fourteen inches long, instead of thirteen? Stop, friend Argo, are you sure the BEE WORLD is ahead of all other bee journals, and should stand on its own merits? If it is true, success to it. Let it improve. No, help to improve it. I like your notion friend Argo, of having each correspondents name appear in the journal, with Post Office, County and State.

Well, uncle Harry Goodlander, we hear your voice once more. We want you to have your say about the standard frames. You seem to prefer a long frame 19x12 inches. Please give your reason for choosing such a large one.

Thank you for the suggestion, that cobwebs make a good moth trap, and are capital for subduing robbers. You are right again about cultivating a variety of honey producing plants. We need them. We must have them, if we treat our bees fairly. Yes, tell them to use an extractor that does not break the combs. Raise your voice

against all swindlers.

Mr. Nesbit gives his standard frame the following dimensions: 10x17 inches inside measure, frame made $\frac{3}{8}$ inch stuff.

He next instructs how to brush bees all day long, without a single sting. Certainly Connoisseur may be benefited by reading the article.

Now read the "sketches from Tennessee." Friend McLean informs us how the Italian bees have been brought into disrepute by carelessness in breeding and the sale of impure queens, resulting in a disreputable failure in their character, being stigmatised a humbug, and the breeder a swindler. Hit them friend McLean.

Charlston Ill. Sept. 1874.

LARGE BEE NESTS.—A GOOD HONEY YIELD.

BY J. F. LOVE.

EDITOR BEE WORLD.—It seems to me to be a kind of mirage, this thing of bees being found in cliffs, bluffs and other inaccessible places. I have always heard that there was bees in a bluff on Paint Rock River, equally as strong as the swarm said to have been found in Pentress Co., Tenn. Paint Rock River is in Jackson Co., Ala. I was along that river some two or three years ago and stayed all night with an old man by the name of Latham, and he said that he had known the river from the head to the mouth and that he knew that there was no bees in any bluff on it, as he had known it for fifty years. I heard a man from Texas tell about getting honey by the wagon load out of a bluff on the Bosque, and I did not believe it, because he could not tell it the same way twice, and I saw an account of the

same kind from California two or three years ago, and I think it like other good things that you hear of—too good to believe. What say you Mr. Editor? We have three apiaries in about five miles, that are managed on the scientific plan. There is Mr. Y. W. Rambo who has seventy five; a few of them are in Triumph, but mostly in Langstroth hives, and there is Mr. Eli Coble who has about eighty swarms in Langstroth hives with a few in the Triumph. Coble is one of the best posted bee-men that we have in our country, his bees are all Italians. He has now one of the Nunn importation of queens, and is breeding from her, she is rather dark, but I like them the best; as I think they make the best workers. I also have one that was brought by the Nunn Bros., Oberlin, Ohio, last spring; her workers are very fine, the young queens from her are rather dark. We don't make any box or comb honey—use the extractor altogether. A two story Langstroth, of a good season, should make one hundred lbs. I had one that I took 254 lbs from last year during the poplar bloom. It made, some days, eleven lbs per day. I have tried one of the spread out Langstroth or rather, a single story made wide enough to hold twenty frames. I do not like them as well as the two story Langstroth. My hives have ten frames in the lower or brood department, and nine in the same space above, that is, the top box is the same as the lower in width. I have no honey board at all, and do not leave more than $\frac{1}{4}$ inch between the bottom of the upper set of frames and the top of the lower set, because if you leave more than that, they will build comb between them, and annoy you every time you open and take them out. I can make more money from extracted honey at 12½ cents per lb, than I can at 25 or 30 for box honey, though I have always sold at 15 cents. I made about 2,500 lbs of extracted honey this season, and we had no rain from the first Sunday in May, until about the 27th of Aug. We had a few light showers.

Cornersville, Marshal Co., Tenn

 EDITOR'S TABLE.



SEND us the names of bee-keepers, one at a postoffice.

THE book, *The Apiary*, will be sent to every new subscriber to the *WORLD*.

SEVERAL articles will appear in our next, which are crowded out of this issue.

DON'T forget to write your name and postoffice plainly. We often receive letters which are not signed properly, and we therefore, cannot answer.

SEE the new advertisements in present number. Brown, Nesbit and Bowen have bees to sell, cheap. Kretchmer has books and periodicals for sale.

WE intended to give a report on queens this month, but as we have a few that have not perfectly developed their workers, we defer it until our next issue.

WILL our friends in sending for sample copies, send the necessary stamp? This request does not refer to our correspondents, who are always welcome to extra copies.

NOTHING has been received from the secretaries of the N. A. B. Association in regard to the rates of fare, order of business, &c. The convention will be held at Pittsburg, Pa., on the 11th of November. Let there be a general attendance.

THE Italian bee is darker in cold weather than in warm, and, also, age will materially effect their color. Some have been led to believe that their Italians were impure from this cause.

WE want all the advertisement in the *WORLD*, beginning with Vol. 2, No. 1, to be new and re-set. Send in your advertisements and we will insert, or change old ones, if desired.

WE are in receipt of a fine queen from some unknown friend, there being no name or clue whereby its source can be ascertained. If the sender will write we will gladly make the proper acknowledgment.

OUR correspondent from Pine Bluff, Ark., M. Parse, send us a plant, on which the bees are working finely, for a name. We have not succeeded in finding its true name, although we think it resembles wild cammomile. We will report again next month.

BEES are now done gathering honey, and all swarms should be examined. All that need any help can be readily supplied, by taking frames of honey from the strong swarms and giving to the weak. Swarms in frame hives can be very easily strengthened; and box and log gums had better be taken up than left to starve. See that they all have good queens, which fact can be ascertained by the amount of bees and brood they have.

PATRONS OF HUSBANDRY.—We have received the last number of *The Georgia Grange*, an agricultural and family journal. It OUGHT to have a place at every farmer's fireside in Georgia. The publishers of THE GEORGIA GRANGE are offering to the farmers of Georgia a journal claiming their best patronage and support. They are printing a paper that must and *will* become a necessity to every intelligent planter in the State. Send \$2 for a single copy, or a club of ten at \$1.50 each, to Georgia Grange Publishing Co., P. O. Drawer 24 Atlanta.

Publishers' Department

ADVERTISING RATES.

SPACE.	1 Month	2 Months	3 Months	6 Months	1 Year
1 Page	16 00	30 00	40 00	70 00	125 00
3-4 Page	12 00	20 00	30 00	55 00	80 00
1 Col. mn	10 00	18 00	25 00	45 00	75 00
3-4 Column	8 00	15 00	20 00	35 00	70 00
1-2 Column	7 00	12 00	18 00	25 00	50 00
1-3 Column	6 00	10 00	15 00	20 00	30 00
1-4 Column	5 00	8 00	12 00	16 00	30 00
1 Inch	2 50	4 00	6 00	9 00	15 00
1-2 Inch	2 00	3 00	5 00	8 00	12 00

Fourth page of cover, double rates. Third page of cover, 50 per cent added to rates. World included in all advertisements of eight dollars and over. No advertisements continued longer than ordered. Bills of regular advertisers payable quarterly; transient in advance. Address all communications to

BEE WORLD.

BEE-KEEPER'S

DIRECTORY

Cards inserted in this Directory, and a copy of the World, one year for twelve dollars—cards to be four lines or less. For each additional line one dollar will be charged. A line will average eight words.

20 COLONIES ITALIAN BEES

— AT —

EIGHT DOLLARS PER COLONY,

If taken before 15th December—100 cold to ship after that.

STRONG IN BEES

AND

HEAVY IN HONEY.

"Dollar Queens"---Straight Combs Delivered

At shipping office, this place.

H. NESBIT,

Cynthiana, Ky.

**B. T. BABBITT'S
PURE CONCENTRATED POTASH
OR LYE,**

Of double the strength of any other

SAPONIFYING SUBSTANCE.

I have recently perfected a new method of packing my Potash or Lye, and am now packing it only in Balls the coating of which will saponify and does not injure the Soap. It is packed in boxes containing 24 and 48 lb. one lb. Balls and in no other way. Directions in English and German for making hard and soft soap with this potash accompanying each package.

B. T. BABBITT,

64 to 84 Washington St., N. Y.

EVERY AMATEUR PRINTER
EVERY AMATEUR PRINTER
EVERY AMATEUR PRINTER
EVERY AMATEUR PRINTER

SHOULD HAVE

Our Own Fireside !

Instructions in Printing and the answer to queries which will remove difficulties in your way to efficiency, appear in each number.

EVERY FAMILY SHOULD TAKE
EVERY FAMILY SHOULD TAKE
EVERY FAMILY SHOULD TAKE
EVERY FAMILY SHOULD TAKE

OUR OWN FIRESIDE!

*For its Good Stories,
For its Fashion Articles,
For its Miscellany,
For its Household News,*

AND FOR ITS

PURCHASING DEPARTMENT

Through which every desirable article in New York is furnished at the lowest rates without extra charge. Our Fireside is a Home Journal now in its Fourth year. 16 large pages with illustrations. Price \$1.50 a year. Every subscriber makes selections of a valuable premium from the many offered. Those subscribing now receive the paper the remainder of this year free of charge.

SUBSCRIBE NOW

At the beginning of

A NEW STORY

If you cannot afford to subscribe an arrangement will be made by which you can receive the paper for one year without money. Send three cent stamp for sample copy.

Canvassers Wanted.

A CHAMPION PRINTING PRESS
A CHAMPION PRINTING PRESS
A CHAMPION PRINTING PRESS
A CHAMPION PRINTING PRESS

IS GIVEN AWAY
IS GIVEN AWAY
IS GIVEN AWAY
IS GIVEN AWAY

For a club of 15 subscribers to Our Own Fireside. Every Business Man and Boy should have one. Send three cent stamp. Address

OUR OWN FIRESIDE PUBLISHING Co.,
Room 4, Sun Building, N. Y.

STEAM ENGINES!

—AND—

BOILERS,

2 to 12 Horse Power.

GET THE BEST AND CHEAPEST.

Address, M. L. GUMP & CO.,
Room 4, Sun Building, N. Y.

THE CHAMPION JOB PRESS

—FOR—

PRINTERS, BUSINESS MEN AND BOYS.

The best press made. Also

JOB TYPE FOR AMATEURS.

Send five cents for pamphlet. Address,

M. L. GUMP & CO.,
Room 4, Sun Building, N. Y.

NEWS PAPERS BOOKS.

Through Kretchmer's Club you get all the leading Newspapers and Magazines at the lowest club prices. For instance: Leslies papers, regular price 4 00, we furnish for 3 00. New York Ledger, or Weekly, regular price 3 00 for 2 50; and other papers in like manner. To members of our Club we furnish all

Books at one-fifth Less than Retail Price!

Great inducements to agents. Send for our Club List and book circulars. Address,

E. KRETCHMER & CO.,
Coburg, Montgomery Co., Iowa.

FOR SALE!

Full Colonies of

Pure Italian Bees, With Young Queens,

In the Improved Langstroth hive, with honey boxes complete. Price 5 00. Address

Dr. J. P. H. BROWN,
Augusta, Ga.

THE VICTORY Bee Hive.

PATENTED SEPT. 20th, 1872.

THIS well known and popular hive was fully tested, and its superior advantages over other hive has warranted the patentee to send it forth upon its own merits. We call the attention of bee-keepers generally to it as the Victory.

Address patentee, A. R. Moulton, Fall Branch, Washington county, Tennessee. For the State of Georgia, address

J. F. PRATHER,
Dalton, Georgia.

ITALIAN BEES for 1874

Pure Colonies of Italian



Bees, Queens & Hives.

Bred from the best imported stock.

Ch. DADANT & SON.

Hamilton Hancock Co., Ill.

Pure and Prolific Italian Queens

AND

FULL COLONIES.



From the original imported stock of Dr. T. B. Hamlin, obtained from the best sources in Italy and Germany.

One tested queen in May \$8
 " " " June 6
 " " " July 5
 " " " August

or after, - - - - - 4
 Untested queens reared from the same stock at lower price. A reduction will be made on large orders.

Purity and safe arrival of tested queens guaranteed. Full colonies at from \$14 to \$20. Send for circulars.

HAMLIN & BENTON,
Edgefield Junction, Tenn.

ITALIAN BEES AND Pure Breed Poultry.



I will furnish full stands in Langstroth's Hives, early in the Spring, at \$15,00 per stand, and QUEENS at \$5,00 after 1st of May, purely tested, and in their highest grade of purity.

Also Eggs from the following six leading varieties of POULTRY:

	Per doz.	Per doz.
Light Bramahs	\$2 50	Buff Cochins - - - \$4 00
Dark do	3 00	White Leghorns - - - 2 50
Partridge Cochins	3 00	Houdans - - - - - 2 50

I have a few pair of light Bramahs at \$5,00, and a few extra Cocks yet to spare; one part Cochin Cock, eight, months old \$5,00, White Leghorns \$3,00, and a few others.

My Poultry was selected with care from the best strains in the country.

Purity and safe arrivals guaranteed. For further particulars address

R. M. ARGO.
Lowell, Garrard County Ky,

ITALIAN QUEENS.



In their HIGHEST GRADE of PURITY, for sale at

Reasonable Prices.

Satisfaction guaranteed in every particular.
Address

T. H. B. WOODY,
Manchester, St. Louis county, Mo.

ITALIAN QUEENS.

I am prepared to fill a limited number of orders for pure Italian Queens, and full Colonies. Can fill orders for young tested Queens from April 10th to October 1st.

Send for price list. Address. M. PARSE.

Pine Bluff, Arkansas.



OSWEGO SILVER GLOSS STARCH

FOR THE LAUNDRY.
MANUFACTURED BY

T. KINGSFORD & SON,

HAS BECOME A

HOUSEHOLD NECESSITY.

Its great excellence has merited the commendation of Europe for American manufacture.

Pulverized Corn Starch,

PREPARED BY

T. KINGSFORD & SON.

Expressly for food, when it is properly made into Puddings, is a dessert of great excellence.

For sale by all first-class Grocers.

AARON BENEDICT,



Importer and breeder of
Thorough bred ITALIAN

QUEEN BEES.

I also keep on hand full colonies of thorough-bred Italian Bees for sale.

My little book

'THE HONEY BEE.'

just published, is now ready to be sent out. Price 50 cents. For further particulars address with stamp,

AARON BENEDICT,
Bennington, Morrow Co., Ohio.

PURE ITALIAN

QUEENS.

I have on hand for the Spring market, a limited number of Queens bred from select mothers.. Price \$5,00,.. and shall be able to furnish pure Queens throughout the season, at reasonable prices.

A. SALISBURY
Camargo, Douglass Co., Ill.

