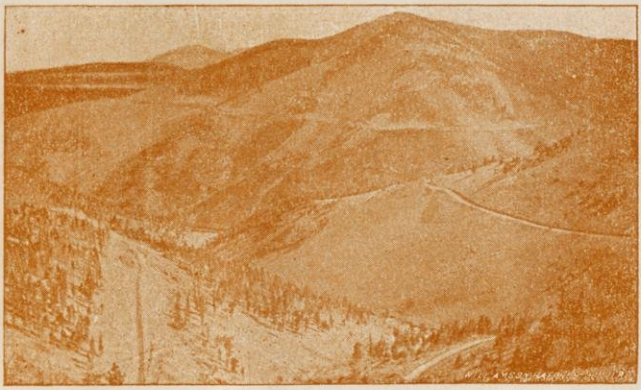
The Western bee-keeper. Vol. II, no. 3 October, 1900

Boulder, Colorado: The Labor Publishing Company, October, 1900

THE

WESTERN BEE KEEPER



Four Steps on Giant's Causeway.

Colorado & Northwestern Ry.

Vol. 2 OCTOBER, 1900 No. 3

WESTERN BEE KEEPER

DEVOVED TO THE INTERESTS OF HONEY PRODUCERS

PUBLISHED MONTHLY BY

THE LABOR PUBLISHING COMPANY

2015 Twelfth Street, Boulder, Colorado.

Entered at the Postoffice at Boulder, Colo., as second class matter, July 30, 1900

VOL. II. OCTOBER. No. 3

KEEPING COLONIES STRONG.

The first step toward proper and successful spring management should be taken not later than Sept. 15 of the fall previous (that is, when there is no fall honey flow) by contracting the brood chamber with a division board to a size accommodating the strength of the colony which may be from four to seven combs. The remaining combs in the space so contracted, whatever the number may be should contain not alone what we might consider was sufficient stores but a supply that we are absolutely certain will be an abundance to carry the colony safely, not only through the winter but right up to the time of fruit bloom.

By preparing the stocks in this way the beekeeper will have no occasion to open up the hives for examination until the weather is sufficiently warm that all danger of chilling brood or breaking the cluster will be reduced to a minimum. The first examination of bees in spring should not be made until some calm day when the thermometer will register 70 degrees or more in the shade, and after the bees have for some days been permitted to gather both water and natural pollen. When the above conditions are present the hives should be opened and the strength and conditions of the colony ascertained.

As the colonies of average strength will be found at this date with from two to four frames of brood in different stages of development, these frames should be raised sufficiently high so the honey along the top bars and in the corners can be uncapped. This will

cause the bees to move it and they will certainly store it in the cells that surround the brood, where it will be of most advantage. In the case of no honey being along the top bars of the frames which contain the brood, frames of honey (first having been uncapped) should be placed one on each outside of the brood next proper. Uncapping in this way serves a two fold purpose: First, by providing the liquid honey for larvae food, and of easy access; and secondly, by clearing the coast for the queen to widen out her circle.

Any queenless colonies that are found at this time should be forced on not more than three frames and united with weak colonies at the very first favorable opportunity. In eight or ten days if the weather has been propitious and the bees have been able to gather from the fields moderately, more uncapping should be done, the brood chamber enlarged if found necessary; frames containing honey should be placed on the division board "a la Sibbold," which is a positive prevention of starvation and an excellent stimulant for the extention of the brood nest.

Do anything and everything that will not disorganize or endanger the colony, but that which will compel them to convert honey into brood because it is bees we must get at this time, if we can expect to have our supers rapidly filled when the main harvest arrives. From this time up to the fruit bloom, frames should be added to the brood chamber, and frames of honey inserted as often as the condition of the colony and the amount gathered from outside may demand, always selecting a fit and proper day for the operation. At the opening of fruit bloom is the time when all full winged queens should be clipped.

As the queen is heading for the top bar when the frame is held on an angle, I catch her by the wings with the finger and thumb of the right hand and then pass her over to the finger and thumb of the left hand, securing her by the two legs on her left side. When held in this position she connot squirm and the operators right hand is at liberty to remove (with a pair of scissors) any portion of the wings desired. When completed, simply hold her close to the comb, relax the pressure suddenly and she is at liberty without her body ever having been touched.—(D. W. Heise. Ontario Co, Ont.

It is gratifying to the beekeeper of Colorado to know that alfalfa honey is fast coming into favor and the demand for Colorado product is on the increase.

Four cars of No. 1 honey have been shipped from the thriving city of Longmont, this season.

sections, shipping cases and marketing. Sections and wax cost about 15 cents for each case of honey; the cases made up, cost about 20 cents; then the cash out lay for supplies is 35 cents. The honey sells in quantities from 6 to 10 cents a pound. This year the best bee-keepers are selling on an average a little better than $2 a case for their honey. It will appear from this that the bee keeper has about four-fifths of the selling price of his honey for labor, interest, rent, incidentals and profits. No man has been found to give a detailed account of the honey business, showing the exact cost of the several items of expense or the absolute profit. Yet it is confidently affirmed that bee-keeping pays—not like a bonanza mine or a newspaper, but like a modest useful business ought to pay.

A FATAL STING.

A victim of the sting of a bee, Daniel Steinman, died at his home in Paterson, N. J., after intense suffering. Physicians say the poison affected the heart. The fact that he was an athlete, possessed of a hardy constitution, added interest to the case, which is rare enough in itself. Steinman went camping with friends on a fishing excursion one week ago. One night he was heard to cry out with pain. He said a bee had stung him behind the ear, showing a red blotch. After a time the pain abated and nothing more was thought of the matter. Steinman returned to his home and not until the following day was there a reoccurance of the pain, which increased in intensity in spite of all efforts to allay it by the usual household remedies. The physicians diagnosed the case as blood poisoning. Every remedy known to medical science was tried but without avail.

Almost any farm in the country will furnish an abundance of honey for bees. We give below a partial list of the common plants that yield honey: Alfalfa, alsike, apples, asparagus, bean, blackberry boneset, box-elder, willow, buckthorn, buckwheat, burdock, catalpa, catnip, cherry, red and white clover, crimson clover, corn, currant, dandelion, goldenrod, gooseberry, grape, honey locust, melon, milkweed, mustard; many of which grow wild on the farm.

When taking hold of a queen-bee, always take her by the wings, never take hold of her body; the pressure of the fingers might injure her for life.

Every time wax is melted adds to its improvement.

Mr. Editor:—

I received your September issue of the Bee Keeper for which please accept thanks for same. The cut on the front cover of the Chautauqua buildings and the mountains in the distance, recalls to mind a trip I once had in search of those busy workers called bees. After spending the greater part of the day in "liming" we were rewarded by locating the haunts of two swarms of bees in the cliffs high up in the mountains. As night was fast coming on, we returned home. Owing to other business we did not visit the scene of our search until a month later and were armed with pails, drills, dynamite, etc. On location No. 1 we proceeded to drill a two foot hole about two and one half feet below where we thought the bees were located. After we had put off one shot we found to our dismay that the charge had "kicked" into the cavity and of all the stuck up messes we ever saw was there, yet we managed to save about 60 lbs of honey. Our second locating was more favorable and our former experience had taught us to put our hole lower down. We were rewarded however after our shot by seeing the combs of honey hanging to a top wall and such a sight of honey I have never had the pleasure of seeing since. From this location we received about 80 lbs of honey, the flavor of which was the finest I have ever tasted. We were obliged to make two trips for our honey but felt that we had been fully repaid for our trouble. Bee hunting is quite a study and it combines pleasure and business in the same trip (providing you make a location) and we know of no better place for bee hunting than along the foot hills and canons of the Rocky mountains.

Colorado alfalfa honey commands the highest market price in Chicago and other Eastern cities which speaks well for the Centennial state.

There are many little things that must be looked after before winter sets and no time should be lost in doing this for every opportunity lost is lost forever and cannot be recalled and we cannot afford to put off till tomorrow what can be done to-day.

Your experience in Bee Culture will help to aid some one. Send us an article for publication.

We will send you the Western Bee Keeper unil Jan. 1, 1902 for 50 cts. Don't you think that you should subscribe.

There are about 8 Bee papers published in the United States, two of which are published in Boulder, Colo.

BEE CULTURE IN COLORADO.

BY D. W. WORKING.

Few persons excepting the bee-keepers themselves, are aware of the fact that the honey industry is of considerable importance in Colorado. Just now the beekeepers are as busy as the bees themselves in gathering and caring for the last honey flow of a prosperous season.

A few facts, briefly stated, may serve as an appropriate introduction to a study of the honey-producing business in this state.

There are more than 2,000 bee-keepers in Colorado.

The average number of colonies or hives owned is about 40—80,000 swarms for the state.

The average colony contains 25,000 bees and weighs five pounds.

The honey product for the average swarm during an ordinary season is about 20 pounds, so says the secretary of the Colorado State Beekeepers' association. This amount is exclusive of the honey stored by the bees for their winter food.

In 1899, 660,000 pounds of honey, 22 car loads, were shipped out of Colorado.

The honey crop of the present season will amount to from 800 to 1,000 tons worth $200 or more per ton.

The bee industry is profitable in Colorado, also growing, hence respectable. And there are reasons for this.

Colorado honey is the best in the United States—a fact which our own people are learning from the people of other states.

Why is our honey the best? Alfalfa! That is the answer in a word. Alfalfa nectar, unwashed and undiluted by frequent rains, is the basis of a honey that seems to be all sunshine and sweetness.

Denver people are honey eaters. Denver is a good honey market—one of the best of its size in the country

The beekeeper follows an ancient and honorable calling. Centuries ago Hybia was famous for its bees and honey. More than nineteen hundred years ago Virgil wrote so wisely and well about bees that his Fourth Georgic may be read with profit, as well as pleasure, by the modern apiculturist.

The beekeeper's round of work is full of interest; full, also, of watchful care. For the beekeeper must know what to do and when to do it, and the "what" and the "when" are known only by intelligence and observation.

In the warm days of early spring the beekeeper examins his hives to see that his swarms have stores enough to keep the bees till the early blossoms will furnish a new supply of nectar. He must also see to the health of his colonies.

Foul brood is a scourge at times, and must be guarded against or destroyed with an unsparing hand if it gets into an apiary. Then too the beekeeper must early see to it that every hive has its healthy queen, for a queenless hive means no young brood and no honey.

His colonies healthy and in good hives, at the beginning of the honey season the beekeeper supplies his hives with "supers" for the surplus honey. A "super" is merely a rectangular box, without top or bottom, and so made that it will carry 24 or 28 pound sections, each "section" being supplied with a piece of thin wax "foundation." The foundation is used to insure straight honey. It also serves to save labor on the part of the bees.

A great many kinds of hives are used in Colorado, but most of the up-to-date beekeepers are working toward uniformity in hives and other supplies. Most beekeepers buy their hives "in the flat" and put them together at their leisure or when they must use them. A hive that has sold extensively this season consists of eighteen pieces of wood and two of tin; its super consists of four pieces of wood and two of tin, with two wire springs. The ten brood frames used in the hive are made of 40 pieces of wood with ten additional strips to fasten the wax in place. The seven section frames for the super are made of three pieces of wood each. Separators or division boards, are used between the frames, and a thin board is used as a follower between the springs and the last section frame. This follower presses the section frames together so that every section will be held in place. One of these hives, thus made up, with a single super filled with sections, when ready for the bees to begin storing surplus honey, consists of 106 distinct pieces of wood, four pieces of tin, two steel springs and 38 strips of wax; every one of which had been handled separately before the bees were invited to enter, keep hours and make honey—as well as money for their owner.

The hive thus described is filled with "sections." These sections which are also bought in the flat—are made of single pieces of basswood a trifle less than 17 inches long, 1⅞ inches wide, so shaped that they can be bent and fastened together in the manner in which they may be seen in any Denver grocery store. Filled with honey, these sections weigh approximately one pound each. Section honey is the most expensive to make, is most attractive to the eye, and commands the highest price. It is also the kind of honey that is always pure. A man could not make a 15-cent section of honey for a dollar, if he could make it at all to look like the natural product.

Of course honey varies in flavor and color and to some degree in consistency. There is, first—and best—the pure white alfalfa honey, made when there are few other honey-producing plants to attract the bees. Then there is the honey in which cleome(the Colorado bee plant)predominates. Late in the season the yellow flowers give tinge and taste to the honey. There are many flowers that yield sweets for the bees. The blossoms of the basswood are famous for their nectar. Apple blossoms, white clover and sweet clover lend their flavor to Colorado honey at certain seasons.

Let it be repeated here that section honey is honey and nothing else. They can adulterate extracted honey and make it of what they will, but comb honey as it is sold in the pound sections is honey and nothing but honey, excepting of course, the wax of the midrib, cells and caps that shut the honey in. And this honey is not only pure, but it is one of the most wholesome of sweets.

The best part of the beekeepers' work comes late in the honey season. Of old they used to "rob" the bees, now they "remove the surplus." The wise beekeeper gives his workers room and opportunity to make honey and an attractive place to store it, but he does not rob them. He takes what they could not use and what they do not need.

Helmeted with a veil and armed with a "smoker" and a stout knife, the beekeeper goes through his apiary to discover whether his honey is ready to take off. If it is he puts a bee-escape under each full super. After the bees have had time to get out the super is carried to the bee-house and the honey removed. The sections are carefully scraped to remove useless wax, "gum," stains, and are then packed in shipping cases which hold twenty-four sections. These cases (as used in Colorado) have glass fronts, which expose one side of the six of the twenty-four sections in the case. Thus packed, honey will keep almost indefinitely, and will bear shipping to the ends of the earth.

In the introduction to this article it is said that the average colony of bees produces about twenty pounds of surplus honey during an ordinary season. But many colonies have no intelligent care and some others "barren pasture.." Where well managed, bees will produce honey very freely. The writer knows a small apiary (three hives, spring count) from which 256 pounds of first-class and 64 pounds of second-class honey have been removed this season. In addition the three hives swarmed four times. The apiary now consists of seven good swarms, and

there are at least 100 pounds of honey now in the supers and practically ready to be taken off.

Following is the record of one of the new swarms in this apiary: On June 26 the swarm was put into a hive which weighed 22 pounds. The bees weighed five pounds. The next day a nine pound super was put on the hive. At the end of the second day the total weight was 37¾ pounds, showing a gain of a pound and three quarters. The hive was kept on the scales till July 25 when it weighed 75 pounds showing a gain in 30 days of 36 pounds.

The record in detail is as follows the figures being the total weight at the end of each date given: June 28, 40 pounds; June 29, 42½; June 30, 44. July 1, 46½; July 2, 49¼; July 5, 52¼; July 6, 54¼; July 10, 59¾; July 11, 62¼; July 13, 63¾; July 17, 68½; July 18, 69; July 20, 69½; July 21, 72½, July 22, 73¾; July 24, 74; July 25, 75.

The notes show a slight loss on July 19. The best gain was made when the weather was fair and the alfalfa in bloom. Cloudy and cool days were bad honey days. On a number of days the gain was two pounds or more.

It happens that this swarm was not a good record swarm; it was only the "average" in size and production. The parent hives at their best must have done much better.

Large apiaries sometimes produce as much honey per hive as this small one, though they rarely if ever show as large an increase. A large apiary with which the writer is familiar has produced nearly 100 pounds of surplus honey per hive with an increase in swarms of nearly 50 per cent. In this apiary on Aug. 28 one hive increased four pounds in weight.

It is the practice of some bee-keepers to prevent swarming, as the bees that do not swarm produce more than the swarmers. Others allow their bees to swarm as often as they are so inclined. The increase in the number of colonies for the state is estimated at about 10 per cent. Sometimes an epidemic of foul brood will destroy the major part of an apiary. Generally a small apiary will increase much faster than a large one, and usually the increase in swarms is sufficient to provide against any unusual losses.

This article has said that bee-keeping is profitable. In the large apiary mentioned heretofore the increase is worth more than enough to pay for the new hives which have been bought and to pay for keeping the old hives in repair. The income from honey and wax will, then, have charged against it only the value of labor, interest, rent and the cost of wax,

Honey as Food and Medicine.

Honey used to be one of the most important farm products of Europe. Time has made great changes in the quality of the product sold by merchants. To-day the cheaper the article(purity not being considered)the quicker it will sell. Before sugar became such a staple article of food, honey was the sweet generally in use. It is estimated that 60 pounds sugar are consumed on an average by each person in the U. S. When honey was in general use as a food we knew but little about Bright's disease, diabetes, etc. Cheap sweets, such as sugar and malasses have not done much to improve the general health of the country.

Right at the door of every farmer should be found the finest and purest sweets obtainable; this in the form of honey gathered by bees. Honey is the only food that does not leave a residue or coating in the stomach. On the contrary, it cleanses and cleans the stomach, which means the whole system for most troubles of sickness to-day arise first in the stomach. The deception practiced by putting glucose in fancy jars with bright labels has turned people somewhat against honey. But that does not say that honey when pure is not wholesome.—(J. H. Denyer, Northampton Co, Pa.

Be careful not to leave comb honey on the hive too long, for as great a loss will result from having them imperfectly filled. A simple way of telling when honey is ready to remove is to slide the cover far enough from the edge of the super to enable you to see the outside sections. If they are fairly well capped, you may be sure those in the center are ready to be removed.

All honey boxes should be scraped before the honey is marketed, as this adds to the value of the crop. It pays to grade honey for though you may have to accept a slightly lower price for the poorer grades, a higher price is received for the strictly fancy, and the net returns are much greater than if good, bad and indifferent were sold in one lot.

A few years ago when the honey crop was poor, I bought a few cases of extracted honey at six cents per pound and fed it to secure a crop of comb honey. I made a slight profit, but it was not sufficient to encourage me to continue on a small scale at least.

The Mating Season of the Queens And its Dangers.

BY W. P. COLLINS.

There is no branch in bee culture where one can lose so easily as in the loss of new queens at or just after mating time.

If one does not keep a close watch at this time, the aparist will wake up some morning and find that a colony is queenless, with the bees either old and all ready to die or else in their struggle to procure a queen, that they have a fertile worker and are unwilling to receive a queen or eggs, out of which to produce one. The usual result is the loss of the entire colony. One apiary near my own, this season, has had one-seventh of the entire number of colonies, lost in the above manner.

Most aparists lay the loss of queens to the poor birds and I have no doubt but they are to be blamed for some of it, but on the other hand, it is more reasonable to think that poor Mrs. Queen in her anxienty to meet her gallant lover, forgot to note minutely, the landmarks about the door of her own home and thus gets lost in the endless row of houses that front on the same street as does hers, wanders about and finally dies of hunger and exposure or else tries to enter another house and is there killed. My firm belief is that ten queens are lost in the above manner to one lost by birds picking them up and if the reader of this article will take particular notice, he or she will notice that every apiary is composed of hives, identical in shape, size and are all painted the same color and the bee must have just simply wonderful capacity in order to emerge, as does the queen, for the first time and return to her own door; the wonder is that there ars as many of them, as actually do, get back home from their bridal tour.

But how to requeen, when the hive is queenless is the important question; if the fact the colony is queenless is discovered before there are any fertile workers, it is comparatively easy; of course if there is a queen cell handy it is put in at once and if there are no queen cells, give the colony fresh bee eggs and they will attend to the rest. But should there be a fertile worker, then the task is more complex.

Authors have advocated many ways, none of which have worked as well with my practice as the following: Take a table fork or a saw knife and go over all the drone brood and saw and tear it to shreds; literally, tear their home all to pieces; tear down enough of their old combs to keep them busy for a day or two in rebuilding and putting things in order. Then upon closing the hive, put a frame of brood from another hive with a capped queen cell and fresh eggs thereon, the result will be that the bees will have a nice, healthy, laying queen in from 12 to 21 days.

Raising Queens.

During the swarming season is a good time to raise some of the best queens. Queens reared in natural swarming are certain to be the best and it is a very easy matter to save them, if we but take the trouble to cut out the cells and divide them around in some nucleus of one or two frames each. This can easily be done by taking a frame of hatching from a strong colony and placing it in a hive to itself and using a division board to contract the space in the hive. This frame of brood should be near the hatching point and best if the young bees are just hatching, and the bees adhering to the frame should also go with it.

We must be careful when taking out such frames that the old queen of the colony is not with it, and it is best to first look for the queen and see on what comb she is located. When the frame of bees is established in the hive proceed to select the queen cell for it and cut it out of the comb where located and insert it in the nucleus by cutting in the centre of the comb a hole to receive it. It should be well fitted in and made as secure as possible for the bees in waxing it may tumble it out.

In cutting out queen cells it is necessary to do it with care and in no wise damage it. A little of the comb should be taken with it so that the cutting will not interfere with the cell proper. After the first swarm issues until about eight days thereafter is the time to get those cells and perhaps three or four days after the swarm is out is the best time to do it as the cells are thus nearly ripe and will stand more hardship than if taken out earlier. But about the end of eight days after the first swarm issues the cells begin to hatch and the bees again swarm and the surplus of cells will be destroyed.

Time passes so rapidly by, that we can scarcely realize that a month is here until it has passed and gone. It seems but yesterday that the September issue of the Beekeeper was mailed to our numerous subscribers and friends.

We urge upon every one who is interested in Bee Culture, to make all necessary arrangements for the care of the faithful busy workers who have helped and worked for us during the hot days which have just gone. Provide for them some kind of shelter even though it be ever so cheap and rudely made. Those who care best for the bees will reap the best results the coming season.

When you see bees hunting around nooks and corners, you may be sure there is robbing going on somewhere.

MY EXPERIENCE.

I bought one small colony of bees, in the spring, in a box about 12 x 16 inches(no frames)—knew nothing of Bee Culture and in the fall I had three new swarms in good condition and more honey than my family could consume.

The second year closed with nine good colonies and a large lot of honey for sale.

The third year closed with twenty seven strong colonies all in good condition for wintering and a still larger honey crop for us and for sale.

What the writer has done without any previous knowledge of the business, any intelligent man can do if he will study the experiences of others.

As the bees come in heavily laden and wearied with their long flight, see to it that no weeds are in front of the lighting as if weeds are in the way they fall down exhausted and ready to perish before they can enter the hive.

Look out for robber bees as the pasturage begins to diminish in the fall. Many colonies are utterly ruined by colonies robbing each other. If you see them fighting, narrow the entrance to the hive to say ½ or ¼ of an inch by placing blocks at the entrance. The defenders will at once take courage and throw out a strong guard and so protect themselves.

Watch for queenless colonies in the fall. If you find a colony with a superabundance of drones you may suspect the loss of a queen and if they have no eggs or young larvae to grow a queen, some worker will set himself up as queen and lay eggs but these eggs will produce drones only—such colonies should be united with a weak colony.

If you have weak colonies, now is the time to prepare for winter by uniting them or doubling two together.

All colonies should be made strong before winter sets in and if they are new ones, better transfer a few frames from strong to weak swarms.

To make combs into wax, break them into small pieces and put them into a cheese cloth bay, then put the bag of combs into a boiler half-filled with cold water. After boiling half an hour, remove from the stove and sink the bag to the bottom with a weight. Cover up and let it cool off slowly; then you will have all the wax on top of the water and the refuse in the bag.

If you have to feed, do not feed at the entrance or out of doors, as it teaches the bees to rob. Feed in the hive above the brood.

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THOS. V. WILSON