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Vol. 4.

JANUARY, 1893.

No. 1.

THE NEBRASKA BEE-KEEPER.



Devoted to Bee-Culture, Honey Production, Fruits, Flowers, Etc.

PUBLISHED MONTHLY.

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York, Nebraska.



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Yours Very Truly,

L. D. Stilson,

Editor Nebraska Bee-Keeper, and Sec'y Neb. Bee-Keepers' Ass'n.

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THE NEBRASKA BEE-KEEPER.

Official Organ of the Nebraska State Bee-Keepers Association.

VOL. 4.

JANUARY, 1893.

No. 1

Winter Pastime for Beekeepers.

The time of the year is near at hand when the evenings will be quite long and those that are not up with the times in bee-keeping had better spend part of the evenings perusing the pages of some reliable bee book; such as, "A Year among the bees," "Cook's Manual," "A B C of bee-culture," or take the Bee Journals. All of the above named are very interesting as well as instructive. Of course, books do not make bee keepers any more than they make doctors or lawyers. Actual experience is what makes all. You will gain many useful ideas by reading and will have the experience of the best of apiarists.

Do not think that a plan that will work successfully in eastern and northern climates will always be successful here in the west. Climate makes a big difference in the work of the little bees and you can never tell by one season of work with the bees what you will have to do next. The bees do not act and work the same every year alike.

It is well for the bee keeper to plan for his next season's work, to see how many hives he will need for increase

how many sections and how much foundation he will need for his crop of honey, plan how to manage the increase as well as the parent stock, prepare the hives by putting in foundation in the brood frames and put starters in the sections and the sections in the cases, so that your work will not come in a lump during the busy season.

If you have a child that likes bees—likes to be with them, likes to work with them, or likes to eat the honey the bees make, give that child an opportunity to read and learn all about bees. Have frequent talks with the child on subjects pertaining to the apiary, about the actions and works of the bees and how to gently handle them, and it will be interesting to you to see how quickly that child will learn bee keeping. The young are more enthusiastic and eager to learn than adults are.

A few evenings well spent in study will repay any bee keeper. A true bee keeper is naturally inventive and will study out many useful improvements to be used about the apiary to assist him in the manipulation of hives and fixtures.—*A.L. Williams, Lawrence, Kan in the Topeka Capitol.*

Ms 31134

Which Are The Best Bees! Blacks, Hybrids or Italians.

We have been asked this question so often at fairs and farmers' meetings the past year, that we begin the new year by answering it in advance in printing an article, by Chas. F. Muth, of Cincinnati, read at the meeting of the North American Bee-Keeper's Association, at Keokuk, Iowa, Oct. 29—31 1890.

Are Italians or Hybrids Preferable in an Apiary Run For Honey?

Twenty-five or thirts years ago, after the Italians had made their appearance in this country, every bee-keeper was enthusiastic—not only because the good old rule held out yet, that there was one bad season only in seven, and large money was realized for good crops, but also because the three golden bands of his Italian were adding a peculiar charm to his apiary.

It was not a small satisfaction to show to his friends his golden-colored, large bodied Italians queens, whose royal manners and measured steps made one feel proud every time their hive was opened! Yes, a two-inch queen, as he called the large yellow queen to a friend, drew a host of admirers. Her mother had been sent him by a friend in St. Perersburg, Russia. No fifty dollars would have bought that queen, whose daughters and grand-daughters all showed their fine "Russian" family strain.

The Italian bees have developed interest in apiculture, and aided materially toward new discoveries. Their qualification as honey-gatherers was soon appreciated. The black bees or hybrids would attract no attention at all, and the Italian colonies found no rest with our enthusiastic bretheren. Their colonies would be divided, an unlimited numbr of queens reared, nuclei started, etc.

The arrival of a friend was the signal for the opening of the hives of the pure

Italians. The queen had to be admired. Who thought of hybrids? "That one is not pure," one would say, passing a hybrid colony. And it was all the attention paid to it.

The next thing we learned, was that the blacks and hydrids were better honey-gatherers than Italians. Yes and we were told that the dark colored Italians, and those bees that are the bravest on the war path, were the best bees for profit. Our good friends, Messers. Jones, Benton and others, explored Asia, and gave us Syrian, Cyprian and Carniolian bees. The Prussian government imported large numbers of Egyptian bees. Most of us old bee-keepers have tried them all, and I believe I express the opinion of the majority if I say that the pure Italians are the best, all points considered.

It happens sometimes that black or hybrid colonies give as good results as any; but as a rule, and according to my experience, they were my purest Italians that gave me the largest crops.

Pure Italian colonies are always best supplied with winter stores, after a poor season has been recorded, while during a good flow of honey, they seem to be the only variety whose energies appear to be bent on the collection of sweets. Very few swarms issue during such a time. Breeding is neglected, and decreases gradually as the yield or nectar ceases.

These virtues of pure Italians cannot be over-estimated. They are the cause of small consumption of honey after the harvest is over, and consequently have a better supply of winter stores when fall approaches.

My bees are wintered on the summer stands, and my success in wintering has been, so far, second to that of no one, in spite of full supplies of pollen and fall honey. I do not believe in extracting and back-feeding, nor am I afraid of any kind of fall honey being injurious to my bees. But I do believe

in large brood-chambers, which are appreciated by no variety of bees better than by pure Italians.

Their breeding ceases gradually with the flow of honey, and honey takes the place of their brood. Almost as soon as their young bees emerge, honey appears in those vacated cells, and keeps gradually spreading from the outside combs towards the center of the hive. No other race of bees has their brood chamber as well provided with winter stores, if, after the main harvest is over a let-alone policy is observed.

Besides the virtues mentioned above, the Italian bees are the most docile of all; they are beautiful to look at, and no stampede takes place when a comb with bees is taken from a hive and set them alongside in the grass. One can handle them without veil or gloves. A little smoke only is required to keep their temper within due bounds.

If I had no other reason than the last, it would be a sufficient one for me to say: Give me for profit and pleasure, the pure Italian bee every time.

◆ ◆

Professor Gillett's Lecture, continued from
Dec. issue.

proved *Microsoccus amylocorus* to be the cause of fire-blight in apple and pear trees, and Dr. Koch proved *Bacillus tuberculosis* to be the cause of consumption, and so on through the list. In the case of diseases occurring in man, however, it should be said that for inoculating with the disease germ lower animals are used.

After the organism of a particular disease has been determined upon in the manner above described, the presence of the disease can usually be detected with sufficient certainty by the characteristic growth of the organism in nutrient media and the presence of the organism in the tissues of the body. [Here the foul brood bacillus was shown under the microscope and its characteristic growth in culture tubes. Its

method of reproduction was also explained.]

Finally, how do these organisms grow how are they introduced from diseased into healthy tissue? A single rod or spore of *Bacillus alvei* is sufficient to cause the disease in a larval bee, and in a few days there will be nothing but a ropy mass composed almost entirely of these micro-organisms. Cheshire estimates that a single larva often contains as many as one billion bacilli. But how many is a billion? Perhaps it will help us to understand the enormosity of the number if I say that if you should represent each one of these billion microbes by a cube one inch on a side, there would be enough of these blocks to build a solid wall one inch thick, ten feet high, and more than one hundred and thirty miles in length.

The method of increase in all these micro-organisms is by fission, or division. One of the rods first breaks into two, These soon grow to the size of the parent germ, and each divides, making four. These four and all succeeding ones, grow and divide likewise, and hence we get an increase in a geometrical ratio. By a little figuring it will be found that a single germ will increase to a billion in five days if division takes place every four hours. So, although the number is enormous, it is not difficult to understand how such an increase is possible by this process of multiplication. It is also easy after appreciating as best we can, the number and minuteness of these organisms to understand how they are conveyed from place to place. They are so small that they float with perfect freedom in the air, where they are always present. No water exposed to the air is ever free from them. Experiments by Miquel of France show that rain-water contains sixty-four thousand germs to every litre—two pints. In fact they are everywhere and carried about by everything that moves; upon one's person, in articles of clothing, in letters through

the mail, by insects, etc.

There is much difference of opinion as to how the foul brood germ is introduced into the healthy bee. The popular belief is that it is conveyed in the honey. This being the case, the microbes should be abundant in the alimentary canal in the early stages of the disease. Cheshire, who has made a thorough study of the malady, says that it almost never makes its attack in the alimentary canal. He is of the opinion that the disease is more commonly conveyed to the larvæ upon the antennæ or feet of nurse bees, and that the bacillus usually germinates upon the surface of the body and extends its growth inward. It is, at least, certain that the germs will never grow in honey.

The name foul brood was given to this disease because it was supposed to attack the brood only; but Cheshire found that mature bees very often died from an attack of the bacillus, and that in badly diseased colonies it was common to find the ovaries of the queen diseased, and the eggs deposited by such queens had the germs of the bacillus in them. This seems probable, as Pasteur, during his studies of pebrine of the silk-worm in 1865, found that the eggs from diseased moths always contained the disease germ, and worms hatched from such eggs never came to maturity. There is abundance of room in the egg of the queen for the germs of *Bacillus alvei*, as it would take, according to Cheshire, a hundred million of the spores to fill the shell of a single egg. But, however the germs are most commonly carried, there is hardly a doubt but that they may be conveyed from colony to colony in currents of air, upon bees from an infected colony that enter another colony, in honey or pollen carried from infested colonies by robbers, or upon the hands of the person who manipulates a diseased colony and then the frames of another

colony without first thoroughly disinfecting his hands. One of the cheapest and best disinfectants is prepared by dissolving one-eighth ounce of mercuric chloride in a gallon of water. A very little of this poured over the hands will kill all of the germs of *Bacillus alvei* that may be upon them. The preparation is poisonous and should be so labeled.

The symptoms and remedies for foul brood have already been given by your bee inspectors, and they are frequently published in bee journals, so it hardly seems necessary that I should repeat them here. They are briefly as follows:

Symptoms: The disease attacks bees in all stages of development. If young larvæ are diseased they lose their characteristic pearly whiteness, gradually changing to a brown, then to a coffee color, and finally turning black and drying down into a mere black scale at the bottom of the cell. In attempting to remove this dark coffee colored mass from the cell with a toothpick or a pin it will be found to be tenacious and ropy in consistency, and will let go of the pin and snap back into the cell. If the larval bee is nearly grown when the disease attacks it, it may cap its cell and then, after it dies, the cell becomes sunken and dark in color, and is often perforated by a small hole at the center. Brood dying from this disease lose their form entirely, becoming a homogenous mass of decayed matter. If mature bees are attacked they simply weaken and die but retain their form. In the latter stages of the disease there is nearly always a characteristic odor, which is usually recognized as that of warm glue. If a colony is badly infected, it dwindles rapidly in numbers and becomes weak and finally dies out entirely or is robbed by some sister colony.

Remedies: There seems to be but one remedy for foul brood that is worth recommending, and that is to transfer

and destroy the brood. This may be done by removing the old hive from its stand and placing in its stead a clean hive containing frames that either are empty or have foundation only. Then take the frames from the old hive and shake the bees from them on sheets of paper at a little distance from the new hive, which they will enter. If the queen is a superior one, she may be returned on trial to the new hive. If this is done, close watch should be kept to see if the disease appears with the first brood. If this should be the case, it is probable that the queen is diseased and is depositing eggs that have the germs of *Bacillus alvei* in them. In this case the bees must be again transferred, the queen destroyed, and a capped queen cell given from some colony that is free from the disease. The safest way would be to destroy the queen and supply the queen cell when the colony is first transferred.

The honey from the diseased colony may be extracted, boiled, and used upon the table, but it is not advisable to feed it back to the bees, as there is a possibility of again starting the disease. The wax may be extracted and saved and the frames and hive, after thorough boiling may be used again.

Probably nothing more serious could happen to the apiary of a shiftless bee-keeper than to have foul brood get into it. I do not think that the intelligent, wide awake bee-keeper needs to fear any serious trouble from this source so long as we have bee inspectors empowered by law to destroy all diseased colonies. In fact, I believe that foul brood may prove a blessing rather than a scourge to such men, by driving out of business a large number who now raise honey for home consumption and put upon the market just enough cheap low grade honey to keep down the price of a product of prime quality.

Bee-Keeping and Horticulture.

Bee-keeping has reached such an exact stage now that considerable sci-

entific knowledge of bees and plants must be had before success can be assured. The apiarist must not only know the natural history of the bees, but he must be a patient observer, watching his pets carefully, and ready at a moments notice to improve upon their condition.

A point that has not yet been fully settled is the relation between the bee keeper and fruit grower. The value of the bees in fertilizing flowers and fruits is not disputed, and it is a question if pomology could advance with such rapid strides as it does if it were not for the bees. Apiculture is the handmaid to horticulture, and the question remains whether the two ought not to be conducted together.

The fruits and flowers must be cultivated for profit, and when they are supplied the richer nectar is prepared for many colonies of bees. The fruit-grower now loses all this nectar or allows his neighbor's bees to carry it away. By having several colonies of bees near his orchard he would not only gather the fruit, but the nectar in their flowers also. Little additional labor would be required for this, as the bees demand very little attention in the fruit season.
—*American Bee Journal*.

FARMERS' INSTITUTES.

Under the direction of the State University, are being held this winter. A series of twenty five are arranged for. So far six have been held. At Norfolk, West Point, Arlington, Friend, York, and Minden considerable interest was manifested. Beginning with the first of Jan. nineteen more will be held; at Neleigh, O'Neil, Scocia, Osceola, Weeping Water, Springfield, Ithica, Broken Bow, Ainsley, Wescott, Pindar, Oakland, Creighton, Island Grove, Table Rock, Verdon, Shelton, Ogalalla, and Sidney. At each of these, a program consisting of papers and lectures by University professors, practical dairymen, successful horticulturalists and wide awake bee-keepers, in connection with home workers is given.

For the *Nebraska Bee Keeper*.

Reversible Frames, and Invertable Hives, their advantages, etc.

M. H. Dewitt.

Reversing: This, as the term signifies, is the process of inverting, or turning over the combs. Its object is twofold. First, by so taking advantage of the natural instinct of bees, as to cause them to complete combs only partially drawn out, or to fill said frames completely with comb. This will cause the bees to carry the honey from the brood chamber to the surplus boxes above, where it is wanted. Reversing is done by inverting the combs singly or collectively. By the latter method, the whole hive with contents is inverted at one operation. By the former, each frame is provided with reversible supports, so that the frame can be placed in the hive bottom, upward, and vice versa. After having given the reversible closed end frames and hive a fair trial the past season in my apiary, I am more than pleased with their advantages. Mr. Lowry Johnson, of Maestown, Pa., uses them in his utility bee-hives, and said in a recent visit he paid me, that he thinks that they are the best frame now in use. He has a very nice hive, which I gave a fair trial the past season, the frames are closed end frames and need no tightening up. The surplus cases take section holders and sections without any bee space. The honey in these sections is built out and fastened to all four sides of the sections.

Another advantage which reversible hives and frames has, in working for comb honey, you can reverse your frames during the swarming season, and thus destroy all queen cells which the bees may have under headway, and prevent the bees from swarming, to a considerable extent, and thus keep your bees good and strong and at work in the surplus boxes. After having given this frame a trial and being so well pleased

with its workings, I have secured some of as fine combs as I ever saw; the frame being filled out solid, from top to bottom of frame. This is a great advantage in extracting, for it leaves less uneven surfaces for the bees to lodge in while shaking the frame. Such well filled combs are also much stronger for shipping. I would advise all bee-keepers to give Mr. Johnson's utility hives and frames a trial the coming season, and see if you won't be as well pleased with them as I am. I would like to hear from others who have tried the closed end frames, through the *Nebraska Bee-Keeper*. Let us hear from you.

Adulterating Honey.--Is it Practiced?--If so What shall we do about it?

In the American Bee Journal for Nov. 17th, Prof. Cook has an able article in which he shows the extent to which honey is adulterated. As chemists are now able to successfully detect all sorts of honey mixtures, he urges that our states adopt good laws, such as, for instance, Michigan has. In his opinion, the National Bee-Keepers' Union is just the organization to enforce them, because good laws will not enforce themselves.

Under the able management of Mr. Newman, and with a modified Constitution, he thinks the Union could make things lively. In the next A.B.-J. Mr. Newman replies. So far, he says, not one of the members of the Union has asked to have the organization reorganized.

Right here may we suggest that people generally will not express themselves unless given an opportunity to vote. If the general manager would state in a circular letter, the desirability of having the Constitution changed, and submit to them a voting blank, which they could return, we feel sure that everyone would ask for the change.

But to return: The present General Manager, on account of ill-health, feels

that he is unable to assume such added responsibility. It would need a younger man he thinks—one full of vigor and push. Mr. Newman is *the* man, but if he is not available, we would recommend some bee-keeper who is also a lawyer and legislator—such a person, for instance, as R. L. Taylor.

With a Bee-Keepers' Union of 5,000 members, its chief should be salaried, and yet have necessary funds for carrying on the work of securing evidence, and arresting and prosecuting the guilty parties.

The reason, we think, why there has not been a more hearty response before is because we have not given those who are diffident about writing, an opportunity to express themselves. At any rate, it would not cost a great deal to try the experiment.

The present Union does not offer enough substantial benefits to make the mass of bee-keepers feel the necessity of enrolling their names. But a Union that could not only defend them against disagreeable neighbors, but could also ferret out and carry on successfully prosecutions against adulterers—in fact champion the rights of bee-keepers in all things, would offer sufficient inducements to call out a large support from bee-keepers.

General Manager Newman says: I will offer a few remarks on the matters at issue.

Mr. Root desires me to "state in a circular letter, the desirability of having the Constitution changed, and submit to the members of the National Bee-Keepers' Union a voting blank, with return printed envelope," etc.

The advocates of the measure should certainly be the ones to show the "desirability of the change," and if Mr. Root or any other one of its advocates, will undertake that duty, I will quote it in my forthcoming annual report, and call for a vote on the subject. As I have never advocated the measure, it would be quite out of place for me to cham-

pion the measure before the members of the Union. I will act in an impartial manner, and refrain from the discussion, simply to get the full, free and unbiased vote of the members of the Union.

I hope to have my 8th Annual Report ready about Dec. 20th, and then, the whole thing can be laid before the membership, and the matters to be voted upon can be included in the regular voting blank for officers. This can be done without extra expense to the Union, and will settle the whole question in a legitimate and authorized manner.

At a recent Farmers' Institute where we were talking bees, the question of profit was asked. And Yankee like we asked everyone present the amount of increase and honey. When responses were had from farmers having over 200 colonies, and figuring up their replies, it was found that 60 per cent upon the last spring's investment was the least, while the best was over 500 per cent, and still it was not thought to have been up to the average year. And others think bee-keeping a small business and say, "it don't pay to fuss with bees." Which reminds us of the story of Pat when first landed, and walking the streets of New York saw a 50ct. piece lying on the ground but would not pick it up, because he thought to find \$10.00 gold pieces lying around the same way.

The Bee-Keepers' Union has, in the past been a power for good. The able manager, Mr. Thos. G. Newman, of Chicago, has always been on the "look out," and has done much to place our industry on a firm basis. He was the power "behind the throne." As the new year is here annual dues are in order, to help keep the band wagon moving. \$1. sent to T. G. Newman, 147 S. Western Ave. Chicago, will make you a member for the year. Let Nebraska bee-keepers stand up and be counted for the Union. It will pay you financially by doing good and it will pay morally by helping the right.

FRUIT AND FLOWERS

OAKS AS SHADE TREES.

Varieties of Vigorous Growth and Attractive Shape.

An opinion prevails that oaks are slow growers. The sketch here given is of a pin oak (*Quercus palustris*) 10 years old. It is twenty feet high, making an average of two feet a year. On account of this impression of slow growth oaks have never been to any extent used as shade or street trees; but what kind of a tree, as Meehan asks in his monthly, would make a prettier show and give more satisfaction than a row of oaks like the illustration? Meehan says: "The lower branches of a pin oak, where they have not been trimmed, have a tendency to droop, often touching the ground. When pruned up for shade trees the upper branches spread out like an umbrella



PIN OAK (*QUERCUS PALUSTRIS*).

Vigorous growth and pretty shape are not confined to the pin oak, as the red, black, scarlet and mossy cup also take good shapes and grow rapidly in cultivation. For shade trees they ought to come into general use, as they trans-

plant as well as most trees, and the trunks are always straight. No one who plants a row of the kinds named above will ever have cause for regret or complain that his neighbor's rows of maples, lindens or other trees give more satisfaction than his.

The Geranium Indoors.

There are many persons who think that space in greenhouses and in window gardens should be reserved for something better than pelargoniums, and yet there is no class of plants that surpasses these for profusion of bloom, brilliancy and variety of color and general adaptability for house culture.

The most successful winter flowering geraniums are those grown from cuttings especially for the purpose, just as roses are grown. A warm, airy and well lighted house is best for them, and the temperature should be kept at from 55 to 65 degs. They will need a few stakes, which are slightly spread, and the shoots should be tied so as to keep the center of the plant open.

Among single flowered varieties suitable for the conservatory or for window culture are: White—Queen of the Whites, Improved, International, Lily, Mrs. Benedict. Pink—Lady F. Russell, Mrs. Joyson, Norah. Salmon—Countess of Derby, Mrs. D. Sanders. Purple and magenta—Richard Dean, Dr. R. G. Tucker, Lord Churchill. Crimson and scarlet—Mr. H. Cannell, Brilliant.

Among the double flowered kinds may be named the following: White—La Cygne. Salmon—Queen of the Fairies. Scarlet—Golden Dawn, N. Bruant. Pink—Mary Geering, Glorie de France. Deep crimson—Black Knight.

Pineapple culture is rapidly extending in the southern parts of Florida and upon the islands off the southwest coast.

A Valuable Suggestion.

Mr. E. Williams, of Montclair, N. J., makes a suggestion worthy of note. It is to the effect that the necessity of repeating so often the words pistillate, staminate, hermaphrodite and bisexual, to designate the sexual character of the strawberry, may be easily avoided by giving to pistillate varieties feminine names and to perfect flowered varieties masculine names.

GREENHOUSE PLANTS.

Directions for Treatment Given by an English Authority.

An English florist in a paper read before an English horticultural association made these remarks:

The resting of plants is an important point. To bring about a gradual rest it is necessary to lower the temperature they have been growing in at the time the water is being withheld from them, but sometimes we are not fully aware as to how far we may go in the matter of low temperature until we have lost some of our plants by being kept too cold while at rest. The cultivator must study and apply the needful rest, lowering the temperature in proportion as the case may be, considering the climate and conditions under which the plants are found growing, always being careful in applying water to the plants in the lower temperatures.

I believe there are more orchids lost by overwatering than from any other cause; although not showing it at the time, it will surely tell upon them afterward. In their native habitats they receive a great deal of rain during the growing season, but in our houses they are closely confined, and evaporation does not take place to such an extent as where they are growing in nature. We must study the importance of rest to this and other classes of plants, and imitate as near as we can the natural rest to which they are subjected. In the case of greenhouse plants the resting period may or does extend from November to February, during which time we should maintain the temperature as near as we can from 45 to 50 degs., with as little fluctuation as possible.

It should be remembered that in whatever position a plant is placed it should stand perfectly level, and on some material where the water may drain away freely. If the plant is not level the danger is that the soil on one side of the pot is dry and the other side wet, which is the worst possible condition for a plant to be in. The action of rainwater, whether artificially or naturally applied, has been proved to be by far the most beneficial to plants, as by its aid the solubility of food becomes more rapid.

Guard against the application of cold

or hard water to the roots of plants, and especially in the winter months, when there has been a heavy fall of snow, hail or cold rains. Use water a few degrees warmer than the house in which the plants are growing. This is very important in successful plant culture. We are apt to say on beholding a sickly plant—one mildewed or with rust on the foliage—that it must have been subjected to a draft or current of cold air, whereas the probable cause was the use of cold water, which paralyzed the roots.

Flowering Bulbs in Pots.

Bulbs are important winter bloomers for window culture; they are easily cared for and sure to bloom abundantly. In addition to the well known hyacinths, tulips, crocuses, etc., are the comparatively new ixias, tritelarias, alliums, freesias and the calochortus. The freesias and tritelarias bloom several weeks in midwinter.

The calochortus depicted in the cut is also known by the name of California or butterfly tulip. These flowers are, in fact, natives of California. While not



CALOCHORTUS.

sufficiently hardy to stand our winters in the open ground without protection, for flowering in pots they are unsurpassed. The flowers are very large, borne on long stems and are of charming butterfly colors.

The Lawrence Peach.

The Lawrence is a seedling that originated in West Virginia. It is described in *The Rural New Yorker* as possessing a high quality for a peach in its season. Moreover, it has withstood a temperature that has in every case proved fatal to all other peaches. Since the sprout came from the root it has not failed to produce a full crop each season, yet the trees around it have produced but one crop in four years.

The peaches have a yellow skin, some of them showing considerable red at the blossom end or on one cheek. The variety is of medium size, a freestone, yellow fleshed and of a quality equal to or excelling the average of late peaches. The suture mark shows plainly on one side, and most of them have the peculiar Melacoton tip, though reduced in size. The Lawrence is ready for market about the middle of October.

THE CROSBY PEACH.

It Has a Concord-Bartlett-Baldwin Combination That Makes It Valuable.

Among the more promising of the less well known varieties of fruits described by the pomologist of the department at Washington, with a view to leading to their more general trial, is the Crosby peach here illustrated. This peach is medium in size; shape, round or oblate; color, bright yellow, with crimson splashes and stripes; skin, moderately thick; flesh, bright yellow, red at the stone and juicy; stone, small, parting readily from the flesh; flavor, mild, sub-acid, rich; quality, above medium; season, the last week in September, in Massachusetts ripening just before Crawford's Late.

The tree is described as low, spreading and willowy, resembling Smock and Wager, and is not a strong grower. This peach was sent out about 1876 by Mr. Crosby, of Billenia, Mass. It was afterward propagated and distributed in a small way by the Massachusetts Agricultural college, and has been locally known as Excelsior. The fact that there is another variety already on the list named Prince's Excelsior made a change of name necessary, and the matter having been referred to the pomological division of the agricultural department the name Crosby was finally selected in honor of the originator. This peach comes with the statement that in north-



A VALUABLE COMMERCIAL PEACH.

ern Massachusetts and New Hampshire it has fruited for ten consecutive years, though standard varieties have in that time borne only two or three crops.

Professor S. T. Maynard, of the Massachusetts Agricultural college, thinks the fruit much like Wager, but as it has fruited several years when the latter variety entirely failed it would seem that the varieties are certainly not identical. In fact the principal point in its favor above other varieties is the unusual hardness of the fruit buds. The tree bears abundantly, and the fruit is quite even in size, although not large. Mr. J. H. Hale says, "I believe for the north it has a Concord-Bartlett-Baldwin combination that must make it a very valuable commercial variety." The illustration was made from specimens of average size grown by W. J. Hinds, of Townsend, Mass.

Fruit and Flower Notes.

Peach buds can be protected by bending the trees over to the ground and covering with some light, thin material.

The Royal Church raspberry is considered at the New York station to be a very promising berry. It is of bright red in color and of very fine flavor.

The demand for cranberries is reported as increasing every year.

—THE—
Nebraska Beekeeper.

*Devoted to Bee-Culture, Honey Production,
Fruits, Flowers, Etc.*

PUBLISHED MONTHLY.

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Stilson & Sons, Editors and Publishers.
York, Nebraska.

A Happy New Year to you all.

1893. Don't some of you owe us a little on subscriptions?

Keen and cold. Thermometer 18° below zero. How about the bees on summer stands?

Our office was remembered by the Pope Mfg. Co., in a daily calender and memorandum tablet.

One of the old sayings heard often in boyhood days: "A white Christmas a fruitful year." Christmas this time was white enough sure, snowing all day.

We send out a few sample copies to some who are not subscribers. It is an invitation to become a reader for this year and if you like our paper, send us 50 cts. and we will keep you company for 1893.

The Pope Mfg. Co. have done more to excite interest in good roads and road making than any other one party in the nation. That's right, we want good roads and we glory in their push in this matter.

This year we will publish a biographical sketch with portrait of some of our western bee-keepers. This will seem as a good introduction to our readers and will, we think, be of interest and will make a collection worth preserving.

The annual winter meeting of the Nebraska State Board of Agriculture will be held in the Chapel Hall of the State University on Jan 17. Also the Winter corn exhibit, will be held at the same time in Grant Memorial Hall University Buildings.

We are carrying a good line of adv's of good articles, and whenever our readers have occasion to write to one of our advertisers, tell them that you saw their ad. in our paper, and then if they do not do the square thing in their business transactions and you think you are not getting things as advertised just write to us and say so. We will advertise no snide goods or firms if we know it. We are running our paper as a legitimate business, and will only aid legitimate goods or firms knowingly. So if you find that any of our advertisers are not as represented, we will be glad to know it.

A few weeks ago came the sad news of the death of Joseph Harris, whom we knew in boyhood days as the editor of the Genessee Farmer. And now another veteran writer, Orange Judd has passed over the river into the great beyond. Mr. Judd died at his home at Evanstown, Ill., Dec. 27, aged 70 years. For about 40 years, Mr. Judd has been an able writer and editor of agricultural papers, and the *Orange Judd Farmer* is his own creation. Personally, we never met met Mr. Judd, but for nearly forty years we have been a reader of his writings and an admirer of Mr. Judd, and in his death we feel that we have lost an old acquaintance.

The latest and prettiest sang now being sung on the stage, is entitled *The Indian Summer Time*. It is by the popular author, Will L. Thompson, East Liverpool, Ohio. The price is 40 cents. Send the author half price, and you will receive a copy.

Last month while we were away from home, talking bees at Farmers' Institutes, some one sent us a half dollar on subscription, and instead of putting it away, *ala* bloated capitalist we have had our picture taken and put it on the first page of this issue of our paper, and in that way show you our face for this New Year's Greeting.

As to the historical part of our life, will say we were born in Erie Co., N. Y., July 26, 1839, but regarding our life work, we think better to wait until it is finished and then leave it for others to write our biography.

An inquiry reaches us, asking if surplus foundation can be bought in sheets large enough to put in frames same size of those in brood nest.

In our exhibit at the fairs last fall, we had sheets of foundation made by Van-Deusen & Son, fine as lace measuring 17 x 30 inches, or large enough for good window curtains. If these are not big enough, we will have some made to order. Give us the size, please, cash to accompany the order, to pay the expense.

From all accounts received from this state as well as from other states, we think that Nebraska has come as near making an average crop of honey for 1892 as any other state in the Union. The yield was not up to 1891, but the quality has been extra fine, and has found a ready market, generally at good prices. Let us take courage and go to work to produce the best crop in 1893 ever produced in the state. The World's Fair people will want plenty of good honey. Let us show them that our bees work to order.

BEATTY'S ORGANS Are the Best. Write for catalogue, address Daniel F. Beatty, Washington, New Jersey.

The Pure Food Bill introduced into Congress by Senator Paddock, still hangs fire, and should be passed this session. The bee-keepers of Nebraska are as much interested in this bill, as any other class of men. For honey is adulterated and sold as pure honey, which is certainly a great damage to our industry here, with our heavy honey weighing 13 to 15 pounds to the gallon. Let us sell our honey pure and unadulterated. Write to your representative asking him to push the Pure Food Bill.

F. C. Stilson, of York, Neb. has purchased the surplus stock of a prominent breeder of W. H. Turkeys, and has only 1 pair and 1 trio left, which must be sold soon, to make room for breeders. See adv. elsewhere.

The Domestic Coffee Berry.

Uncle Sam will produce his Own Coffee.

The Domestic Coffee Berry, which has proven a success in the U. S. will work a revolution in the Coffee market, as a good article can be produced in all the Corn-growing states at 1ct. a pound. *The American Horticulturist* gives a full account of it, see their adv. in another column, or address them at Lawrence, Kansas.

BEATTY'S PIANOS AND ORGANS.

Hon. Daniel F. Beatty, the great Organ and Piano manufacturer, is building and shipping more Organs and Pianos than ever. In 1870 Mr. Beatty left home a penniless plow boy, and by his indomitable will he has worked his way up so as to sell so far, nearly 100,000 of Beatty's Organs and Pianos since 1870. Nothing seems to dishearten him; obstacles laid in his way, that would have wrecked any ordinary man forever, he turns to an advertisement, and comes out of it brighter than ever. His instruments, as is well known, are very popular and are to be found in all parts of the world. We are informed that during the next ten years he intends to sell 200,000 more of his make, that means a business of \$20,000,000 if we average them at \$100 each. It is already the largest business of the kind in existence—Send to Daniel F. Beatty, Washington, N. J., for Catalogue.

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Do you want bees that will just please you? if so, try my strain of leather colored Italians, they are the finest honey grtherers in the land. They are very gentle and good winterers. Prices, Untested, \$1. each, or \$9. per doz. Tested after May 20, \$1.50 each or \$12.75 a doz. On all orders received before Mar. 1st, with cash, 10 pr.ct. discout will be given. Will begin shipping May 20. Safe arrival and entire satisfaction guaranteed. Bee Supplies at lowest rates. Send for 1893 price list of Italian queens, and bee supplies. Send money by registered letter or postal note. M. H. DeWitt. Sang Run, Garrett Co., Md.

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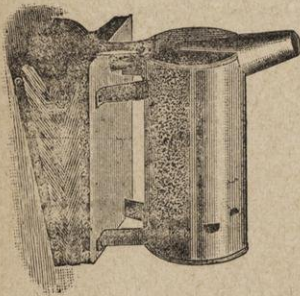
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This Smoker burns chips or hard wood without any special preparation. Very reliable. Greatest Smoking capacity. Easiest to start and cheapest because it saves time.

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Smoker, 3 inch barrel, freight or express, each \$1.20; by Mail, \$1.40; per dozen, \$10.80.

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 - W. H. Bright, Mazeppa, Minn. Gregory Bros. Ottumwa, Ia
 - H. McK. Wilson & Co., 202 Market st., St. Louis, Mo.
 - W.S. Bellows, Ladora, Iowa co. Ia. E.F. Quigly, Unionville. Mo.
 - E. Kretchmer, Red Oak, Ia.
 - Thos. G. Newman & Son, 199-203 East Randolph St., Chicago, Ill.
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 - Chicago Bee-Keepers' Supply Company, Topeka, Kansas.



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National Bee-Keepers' Union.

MEMBER'S VOTING BLANK.

Officers for 1892.—President, James Heddon. Vice-Presidents, G. M. Doolittle, A. J. Cook, A. I. Root, G. W. Demaree, C. C. Miller. Manager, Secretary and Treasurer, Thomas G. Newman.

The Constitution, as it is proposed to Amend it.

ARTICLE I.—This organization shall be known as the "National Bee-Keepers' Union," and shall meet annually, or as often as necessity may require.

ARTICLE II.—Its object shall be to protect the interests of the Bee-Keepers, and to defend their rights.

ARTICLE III.—The Officers of this Union shall consist of a President, five Vice-Presidents, and a General Manager (who shall also be the Secretary and Treasurer), whose duties shall be those usually performed by such officers. They shall be elected by ballot, and hold their several offices for one year, or until their successors are elected; blank ballots for this purpose to be mailed to every member by the General Manager.

ARTICLE IV.—The Officers shall constitute an Advisory Board, which shall determine what course shall be taken by this Union, upon any matter presented to it for action; and cause such extra assessments to be made upon the members as may become necessary; provided that only one assessment shall be made in any one fiscal year, without

a majority vote of all the members (upon blanks furnished for that purpose), together with a statement showing why any other assessment may be required.

ARTICLE V.—Any person may become a member by paying to the General Manager an Entrance Fee of ONE DOLLAR, for which he shall receive a printed receipt, making him a member of the Union, entitled to all its rights and benefits. The Annual Fee of \$1.00 shall be due on the first day of January in each year, and MUST be paid within six months in order to retain membership in this Union.

ARTICLE VI.—The Funds of this Union shall be used for any purposes in the interests of the pursuit of bee culture, when such are approved by the Advisory Board; and to pay the legitimate expenses of this Union, such as printing, postage, salary of the Manager, clerk-hire, etc.

ARTICLE VII.—This Constitution may be amended by a majority vote of all the members at any time.

How to Become Members.

The entrance fee is \$1.00, and that pays for the dues of any portion of the unexpired calendar year, ending Dec. 31. Then it costs \$1.00 for annual dues, which are payable every New Year's day, and must be paid within 6 months, in order to retain membership.

If membership ceases, then all claims against former members also cease; and all claims to the protection of the Union are dissolved.

To **Thomas G. Newman**, General Manager,
147 South Western Avenue, **Chicago, Ills.**

I enclose **\$1.00** for Annual Dues to December 31, 1893, and my Ballot for Officers for the ensuing year, which you are requested to record, as follows:

For President

For Five Vice-Presidents..... |

For General Manager, Secretary and Treasurer.....

Amendments to Constitution—Yes—No, [Cross off one word.]

Salary of Manager—20.....per cent of gross Income of current year, to begin on January 1, 18..... Here write any year after 1885, when the Union was organized.

Sign here.....

P.O.....County.....State.....

Be sure to fill all the blank spaces.

This Blank must be filled up and returned (with \$1.00) before January 31, 1893, or the Vote will be lost.

