# The bee-hive. Vol. 4, No. 5 November, 1889 

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PUBLISHED FOR AND IN THE INTEREST OF BEE-KEEPERS, BY ONE OF THEM.

## VOL. 4.

ANDOVER, CONN., NOVEMBER, 1889.
NO. 5.

THE INNOCENT THEEF.

Not a flower can be found in the fields, Or the spot that we till for our pleasure, From the largest to the least, but it yields The bee, never wearied, a treasure.

Scarce any she quits unexplored, With a diligence truly exact; Yet, steal what she may for her hoard, Leaves evidence none of the fact.

Her lucrative task she pursues, And pilfers with so much address,
That none of their odor they lose, Nor charm by their beauty the less.

Not thus inoffensively preys
The cankerworm, indwelling foe!
His veracity not thus allays The sparrow, the finch, or the crow.
The worm, more expensively fed, The pride of the garden devours; And birds peck the seed from the bed, Still less to be spared than the flowers.

But she, with such delicate skill, Her pillage so fits for her use,
That the chemist in vain with his still Would labor the like to produce.

Then grudge not her temperate meals, Nor a benefit blame as a theft;Since, stole she not all that she steals, Nelther honey nor wax would be left.

- Cowper's Trans.

Colon? of Pollen. - Pollen from skunk cabbage is bright yellow; poplar, black; pussy willow, orange - yellow; soft maple, light pink; elm, green (several shades); hard maple, lemon-yel-Jow.-Doolittle.

See advertisement on last cover page and send in your advt. to-fay.

For the Bee-Hive.

## Brains and Muscle

Required to Become a Successful BeeKeeper.

BY C. H. SMITH.

\%ES ! and to become any thing else that is worth being. Of the two, brains or muscle, give me the brains, and you keep the brute force, and I will warrant that I can rhow you the fattest pocket-book at the end of the year.

To secure that success, by keeping bees, at which we all aim, both strength of mind and muscle are indispensable; the two go hand in hand, and in a perfect model of a human being we discover them both.
We see examples around us wherein apiculture has been ennobled and electrified, and this by one of the gentler sex. Here we see brain-work in ascendancy of other power, but were our fair friends blessed with an athlete's physique and a rigid constitution; all under the surveillance of a quick, comprehensive mind, would not the possibility of failure be reduced to the minimum? Give a man the best education possible, train and trim his mind to the fullest extent, see in him the learned man of the day; now should an unkind force palsy his body
and render further strength of limb impossible，could this man make api－ culture and similar pursuits practic－ able？No！of course he could not．

Now endow another with Herculean strength，but accompanied with a brain as undeveloped as that of a babe－will this being be a successful apiarist？We all know better ！

We thus readily notice the actual requirements for success and enter－ prise，when they are to be crowned with enough of＂filthy lucre＂to nicely flavor the toil．

I am well acquainted with a firm， one member of which can buy their goods at the closest figures．Every change in the market is watched eager－ ly，and if a chance occurs to secure goods at rock－bottom prices，the goods are his．But you cannot buy of him－ he has not the selling faculty．His partner，on the contrary，can sell you every time，even though you are not eager to buy；but mark you he does not trust himself in the buying，mar－ ket．Here we see traits in both that each should possess．

Many a bee－keeper has displayed wonderful talent in securing large yields of honey，and big increase in the number of his colonies；but the next season would find him with about all the honey on hand，and himself sore－ ly pressed for cash to keep his head above water．Another man seems never to grasp the first principles of apicultural science，but a good season favors him in his work，and he secures a few hundred pounds of honey．Pres－ to！and this small，insignificant stock is converted into double its actual val－ ue of the mighty dollar，and the wolf
is kept from the door．What a pity that these two elements could not have been combined in the one man．

But my friends，let us take courage． If we have the one we may possess the other．Wécan certainly educate our minds and thus provide ourselves with the means of harmonizing the unlike elements．With our pursuit we all wish to enjoy ourselves to the great－ est extent，and to do this we must make a financial success of the work， and this certainly involves the use of brains as well as muscle．

> Pittsfield, Mass.

## Introducing Queens．

## As Advised by Doolittle．

$\}$ET out two pieces of wood，$\frac{1}{3} \mathrm{in}$ ． larger than your frame is deep， by 2 in ．wide and $3-16 \mathrm{in}$ ．thick； then cover all but the top with wire cloth；mortise the top of side pieces so they will take in the top－bar of frame，and attach a cover to make complete．Into this wire crate place a frame of hatching brood，then liber－ ate your queen and attendant bees， fasten the cover，and place the whole in the center of hive where she is to be introduced．In a few days you can re－ move the wire crate and liberate the queen without danger．The frame of brood should also contain some honey．

## Introducing Virgin Queens．

＂I find that any colony that has been queenless long enough to have queen－cells sealed，and one which does not desire to swarm，will accept of a virgin queen every time；but if given before the cells are sealed，she will be
destroyed in nineteen cases out of twenty, unless some precaution is taken more than to let her run in at the entrance or at the top of the hive."

## Gleanings From

"Bees, Their Habits, Management and Treatment,"
BY REV. J.G. WOOD.

## WAX SCALES.

40 CNHE wax-plate is five-sided, very thin, semi-transparent, and exCob ceedingly brittle, and requires preparation by the bee before it is in a fit state to build combs with. If a bee is plunged into water, the scales of wax may easily be detached with the point of a needle; they will then rise to the surface of the water, and can be examined with ease, or they may be mounted as specimens to show the state of wax in its first secretion."

## Propolis.

"It is taken from the bud in threads, moulded upon the thighs, and conveyed home just as the pollen is. The bees seldom make use of it in its original state, but mix it with wax in various proportions, according to the work to be executed.
Propolis signifies before the city; the Greeks having observed that it was used by the bees to strengthen the outworks of their city."

## Honey-Comb Cells.

"It has been discovered that each call is perfect in itself, and has six sides of its own, so that the side of one cell does not form a party-wall, as it were, to the cell next to it, but the wall of its neighbor will be spread upon the outside of its own wall. The
cells have been separated in order to prove this curious fact; and as every wall of each cell is varnished over with a thin layer of propolis, there is, of course, a double layer of propolis between the cells, by means of which a very careful person can sufficiently separate the walls to prove that each wall is double. The double walls, however, being exceedingly thin, and their external edges covered with one ridge of propolis, it is impossible, from their external appearance, to imagine that there is more than one thickness of wax between the cells. Had it not been for the varnish of "propolis, the walls would, of course, soon merge into one by the heat of the hive; but that varnish, although inconceivably thin, is quite sufficient to keep them distinct enough for the eye to ascertain that they are double."

## Honey.

"It may be as well to remark in this place, that the sweet liquid when extracted from the flower, is not what we call honey, but appears to gain its consistency and peculiar odor in the crop of the bee."
(To be continued.)
Sawdust for Covering Bees.-Dry sawdust, filled into common cotton cloth cushions, four inches thick and large enough to cover the broo chamber, are used by Mr. Doolittle in covering his bees for outdoor wintering.

Weight of Clover Honey.-Clover honey averages $13 \frac{3}{4}$ pounds to the gallon, says the British B. J.

Short interesting articles on any part of apiculture always welcome.


For the Month Ending Oct．15， 1889.

pART of my bees are packed on their summer stands in chaff hives，and the remainder will soon be．All have a strip of perforated zinc at the entrance，to exclude mice．I am some encouraged about their wintering，as several friends have told me that there is but little honey－dew in the late－gathered honey with which they are so abundantly supplied；－so don＇t count me among the defunct bee－ men，just yet．
－－The editor spoke last month of his experience with starters and drawn－ out combs，used side by side and in full crates of sections．As he there asks others to give their experience，I will give mine．In the season of 1888 I had some fifteen crates，with sections of comb drawn out the previous season． These were placed upon colonies in one part of my yard，without reference to their strength；some eight or nine of these required a second crate（each holding 40 sections），while the remain－ der completed nicely their first crate． Only two of these swarmed，and their average was over 50 lbs ．，while the av－ erage of my yard was 30 lbs ．The first completed section was of drawn comb，as was also the first completed crate．This year I placed two or three unfinished sections in the center of each crate，and think I gained much thereby．
－＂Although it may not be a source of direct financial income to attend bee－keepers＇conventions，farmers＇in－ stitutes，horticultural meetings，polit－ ical caucuses and conventions，literary gatherings，the weekly prayer－meeting， the Sabbath－school，religious Sabbath services，etc．，etc．，I believe it is a duty we owe ourselves，our families，our neighborhood，our country，and our God，to make use of every right influ－ ence，to help elevate the＂standard of excellence，＂in every direction that lies within our reach．＂－Dr．A．B．Mason， in Review．Place this sentiment upon the programme of every bee－keepers＇ convention to be held this winter，and you will increase materially the at tendance．
－Mr．T．F．Bingham has in the Re－ view a well－written article upon out－ door wintering．There are，however， some theories and assertions made therein which can hardly be supported by strict science．
－Artificial combs made of bees－ wax，and also from a block of wood， are a reality at last．The Eureka Supply Co．，of Detroit，Mich．，having brought forth a comb made from wax， whose side－walls are as thin as natural comb，however，the comb as yet lacks the midrib．Do not think，friends， that the summit of bee culture has been reached－far from it．When honey，＂that pure and healthful sweet from Nature＇s labratory，＂is found as a part of the daily food of all through－ out：the world；when sugar and butter are used not more than is honey；then will we saty the＂busy bee＂has at last found its object in life．
－We should very much like to see
an account of the bee exhibit at the Detroit International Fair．Some $\$ 500$ in premiums were given，and a very fine exhibit should have been made．This idea of advertising and displaying to get our product before the people，is one of much interest to us．
－Granulated or candied honey． We have some 500 lbs ．remaining of our crop of extracted honey，and it is all candied．Now cannot the consumer be educated to prefer it to the liquid， uncandied，and perhaps adulterated honey？We have had it on our table in this State，and it has been used con－ siderably instead of butter；indeed it is just as cheap as butter，even though used in much larger quantities．
－We have received a sample of Strohmeyer＇s patent honey package and comb protector．It is simply a rim of cardboard，about $\frac{3}{8}$ inch deeper than the section．In the bottom of his is placed a bent piece or tin，upon which the weight of the section rests and is supposed to prevent breakage． In our opinion it is，as a package，in－ ierior to the Crawford carton，with corrugated paper in the bottom of the rate．
－Mr．Frank McNay，of Mauston， Vis．，reports in Gleanings a crop of $6,600 \mathrm{lbs}$ ．of honey，nearly all ex－ racted，from 350 colonies，spring ount．Not a very bad honey season， iter all．
－How we should like to attend the ming International Convention．We ope it may be held as far east as pos－ ible next year，then perhaps we will ttend．

Apis Amertcana．

## The Bee－World of Io－Day．

Interesting Paragraphs From Various Sources．

## A Hiving Staff．

To make one take a stick $1 \frac{1}{2}$ or $1 \frac{3}{4}$ inches square．Basswood will answer， but perhaps maple will hold a nail best．Dress one end eight．square 16 or 18 inches in length，the remainder of the stick，which should be from 6 to 12 feet，as desired，should be round－ ed and smaller．Take tough timber and dress some strips $\frac{3}{8}$ inch wide，cut two pieces 12 inches in length．Be－ gin at the octagon end of the stick， nail one of the pieces across the end in the middle of the strip in the form of the letter $T$ ，and place the other ex－ actly opposite and nail．Cut the two next strips from $\frac{1}{4}$ to $\frac{1}{2}$ inch longer， turn the staff just one－eighth around and nail on one，and one opposite．It will need from 16 to 18 pairs of the strips．If each pair is cut a little longer until the center is reached and then cut shorter again until the finish the staff will answer the purpose bet－ ter and look better also．
Place the edge of each pair of strips against the last pair nailed．This will strengthen the whole，and nail each strip securely to the staff．In using， when the swarm begins to cluster place the staff under them，close to the object they are clustering on． They will commence to cluster on the staff immediately．When nearly all are settled，move the staff aside a few feet and gently shake the branch，if a few are left on it，and all will take to the staff and be secured without troub． le．Have your hive in place where you wish it to stand．Place a wide
board in front of it，dip off a few bees and place at the entrance，lay the staff in front of it and your work is done．
Bees may be carried with one of these staffs for miles and they do a－ way with the carrying of hives in the apiary，which has to be carried to its permanent stand in the morning and causes the bees to fly back and forth where it was hived for a day of two．
A lady or an aged person，or even a child，can hive a swarm in a few mo－ ments from a place of clustering that would take the time of two men half an hour without one．－J．H．Andre in the Guide．

Origin of Honey Sections．－I con－ ceived the idea and made the first sec－ tion of the celebrated California（or Harbison）section honey－box，during the last week of December，1857，at Sutterville，Calif．－J．S．Harbison in Am．B．J．

Golden－Rod．－There seems to be much diversity of opinion as to its value as a honey－producer．New Eng－ land bee－keepers would，no doubt，be almost or quite unanimous in its being valuable，while western apiarists，in some localities，claim that bees do not work in it at all．The climate，soil， and locality are so diverse throughout our country，that it cannot reasonably be expected that any one plant or tree will yield nectar in every locality．

Bees by Mail．－This enterprise（？） has ended as we thought it would－ the great men have set down on it－ crushed it flat．It would not only re－ quire extra precautions to put them up for mailing，but in a majority of
cases the cost would be fully as much as by express．One can imagine the scene that would be enacted at an office when a broken package of bees was dumped out．What a stampede there would be！

## A REVIEW OF

## Langstroth 으․ Huney－Bee，

as Revised by CHAS．DADANT \＆SON． ［Commenced in No．10．］ SWARMING．－Concluded．

469NEW swarm often takes pos－ session of a deserted hive，well stocked with comb；whilst，if dozens of empty ones stand in the a－ piary，the bees seldom enter them of their own accord．＂

We can attest the truth of the above． The past season a swarm took posses－ sion of a hive that was filled with old comb．This hive was one of a number that were stacked together，the most of them being empty．

In hiving swarms the authors hold the ground that，when combs are giv－ en，the brood－chamber should be filled with them．

For taking swarms a sack of strong muslin，two feet long，fastened to a wire hoop and attached to a pole，is recommended．After the bees have been shaken into the bag，it can be held perpendicularly，thus closing the entrance and taken to the hive．

To remove bess from any place not easily accessible the following is ad vised：＂When a colony alights on the trunk of a tree or on any thing from which the bees cannot easily be gath ered in a basket，or jn a sack，fasten 2 leafy bough or a comb over them，and
with a little smoke，compel them to as－ cend it．If the place is inaccessible， they will enter a well－shaded basket， inverted，and elevated just above the clustered mass．＂

An interesting fact is mentioned of five swarms that clustered together being hived in a large box，each swarm keeping separate throughout the sea－ son．

As some bee－keepers are fearful lest the cells in old combs shall in time be－ come so filled with cocoons as to re－ duce in size the bees hatching out in them，instances are cited of combs that have been in use for 30 years without showing any decrease in the size of the bees．

Artificial swarming appears to have been practiced to some extent in an－ cient time，though probably not in the same manner that the modern apiarian is familiar with．
（To be continued．） For the Bee－Hive．

## More About Carniolans．

BY E．L．PRATT．

$\$$RO．COOK ：－You are so emphat－ ically in favor of the Italians that I don＇t know as you will admit this communication to your paper． There has been considerable written on the merits and demerits of the Car－ niolan race of honey－bees；but no one has touched upon the points I shall endeavor to cover in this letter．

The Carniolans are a new race，fast gaining popularity．I can bring to mind a score of cases where men have turned their whole apiary to this race． My sales about double every year，and judging from the way orders are com－
ing in for next season＇s rearing，I shall have to more than double my ca－ pacity in 1890．The Carniolan bees are yet in a crude state；in their purity they go ahead of any other race for comb honey．I have chased down sev－ eral cases of published complaints， and find that they are all owing to im－ purity．With a reasonable amount of good breeding the Carniolans will not be in any way behind the Italians， especially north of the M．and D．line； for there is no bee in the world that will stand the cold and changeable weather as well as the Carniolan．

There is no bee that will give the satisfaction to gardeners，under glass， as will the Carniolans．They work in a house all day long，rain or shine，and will not spend half the time thumping their heads against the glass，as with many other races．I have discovered that wherever pure Carniolan queens have been furnished，good reports have come．With the advanced meth－ ods of advanced fertilization it is as easy to have the bulk of our queens purely mated，as to have them other－ wise．The season of 1890 will see al－ most as many Carniolan breeders as of any other race．What does this mean？It shows that the Carniolan bees are fast gaining in favor．No， Bro．Cook，our Carniolan breeders are not going to regret all the good words spoken in favor of this beautiful race of bees．

You have a＂good fellow＂editing your breeding department．He is in favor of the Italians，but he says he has great hopes for the Carniolans．I wish all doubters could come into my yard and see for themselves．I have
some very fine stock stock this season． Oct．30，＇89．Marlburo，Mass．
［We do believe the Italians are hard to beat，friend Pratt，and if you could have seen some of the bees in our a－ piarium this fall，on bright sunny days，flying about the hives with their bright，orange－hued bodies glistening in the sun，we think you would admit their being just a little prettier than the Carniolans．And even though they take after the weaker sex in dress－ ing so gaily，they are right royal work－ ers．］

## Short Notes．

$P^{T}$LEASE send Doolittle＇s Method of Queen－Rearing．Tinker＇s pat－ ented method I suppose will beat al！now－yet I want Doolittle＇s．I hope you will give a full and complete Yeply to T．A．Harrison＇s letter in Bee－ Hive for this month，eutitled＂Italian－ izing，＂as I wish to do the same，except I believe I shall try the Carniolans．
I have 16 colonies of blacks and did not get a pound of honey in sections this season．Am feeding some now， although they do not deserve it．

T．F．Cooke．
Dover，Del．，Oct．28，＇89．
［We will give an article on the sub－ ject of Italianizing next month．］

## When do Most Bees Die， And What Causes Their Death ？

$\xrightarrow{\text { 菏 }}$VERYONE knows that during the time when the fields are full of flowers young bees are hatched in all healthy and populous colonies daily，not by hundreds，but thousands， every parent hive，as a rule，giving off one first swarm，and one or more sec－ ond swarms，in which the work of in－
creasing the population is carried on in a similar way as in the parent hive． If this went on continually the hives would soon be incapable of holding the large number of bees forming the colonies，and the country would in a short time be unable to support the number of hives in the different dis－ tricts．But as it has been ordained that trees shall not touch the sky，so it has also been wisely arranged that the number of bees in a hive，and the number of hives in a country，shall not increase excessively，for quickly as bees make their appearance they die off just as rapidly．

It i well known，when and how the largest number of bees and new colo－ nies originate，but it is not so general－ ly known－because it does not strike us so forcibly－when and in what man－ ner most bees die．A discussion of this subject might not therefore be without interest to bee－keepers．

Very few bees，indeed，die a natural death from the infirmities of old age， unless we regard as natural that kind of death which finally overtakes them through inability of their wasted wings to carry the weight of the body any longer，when，especially during high winds，they fall to the ground at some distance from the hive aud per－ ish．When incessantly at work in the summer，the life of most bees does not exceed six weeks，but during the the period of rest in autumn and win－ ter，and in qeenless hives，there is lit－ tle or no change in the appearance of the bees，and they may then live for nine or even twelve months，of which any one may convince himself by al－ lowing a colony to remain without a
queen．Baron von Ehrenfels，in ex－ pressing the opinion that worker－bees， escaping from all dangers which threaten their existence，might attain the age of the queen，must have been greatly deceived．
［Concluded next month．］


PUBLISHED MONTHLY．
丑 포．COOK，
EDITOR AND PUBLISHER， ANDOVER，CONN．

Subscription Price， 25 cents Per Year in Advance．

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Rech All subscriptions will be stopped when the time paid for expires（see notice of same stamped on wrapper）unless renewed before．

We Desire Agents for the Bee－Hive，and to such we offer very liberal inducements．Sam－ ple copies and terms on request．

## H0W＇S THIS ？

We offer the Farm Journal，of Phil－ adelphia，Pa．，a 16 page monthly pa－ per，and the Bee－Hive，each paper a full year，for only 30 cents．The reg－ ular price for the two papers is 75 c ．； but for a limited time we will send both papers for above price．
－As we have a large amount of press－work to do this month the Dec． issue may be a little late．
－－We have just printed a large size 8 －page catalogue of nursery stock， shrubs，plants，small fruits，etc．，and bee－keepers＇supplies，for Mr．Jno．C． Swaner，of Salt Lake City，Utah．
－In the report of the U．S．Agri－ cultural Exhibit at the Paris Exposi－ tion，a lady receives honorable mention for display of comb honey．As the ladies become interested in apiculture the men will have to look sharp for their laurels．
－The editor of the Guide fears that the new－fangled methods of rearing queens will result in larger size at the expense of prolificness and activity． Don＇t worry，brother，just cull out the small and frisky ones and send the big fat queens to the fellows that want ＂large ones．＂
－Our bees were all packed for their winter＇s repose nearly three weeks a－ go．While doubling several nuclei to－ gether，a neighbor wanted to know if we expected to＂get all those bees into that hive？＂How it does surprise the box－hive bee－keeper to see such masses of bees in one colony．
－We have just bought another lot of those Combination Pen and Pencil Stamps（see page 75），and they are selling lively．These last ones all have sliding pen and pencil，and round end， making them very nice for carrying in the pocket．They are nickel－plated， and the stamp on the end is very handy for those people who fail to write their names plainly．

## Bees In A Pound．

This subject is attracting some at－ tention at present，but so far as get－ ting at the exact，or even average num－ ber，is something like trying to catch a flea：now you have him，and next you don＇t．

## ＂Digested Nectar＂

is what Prof．Cook calls honey．What we should like to know is，how can honey be digested when it does not pass through the bee＇s digestive or－ gans at all，but is simply deposited in
the honey-stomach and ejected as soon as the hive is reached. Of course we all know that the nectar undergoes a change of some kind while in the bee's honey-sack. Would it not be as proper to call milk digested liquid ?

## The Chicage Convention

seems to have been a highly amusing affair to the newspaper reporters, according to the $A . B . J$. Just think of a man like Doolittle going up to a tree and "clucking and whistling" for a swarm to alight! Or on the question being asked: "What kind of hive is best to prevent swarming?" some dignified apiarist, like L. C. Root, for instance, jumping up and yelling "Mine!"

## Larvæ And Virgin Queens.

The Guide discourages the plan of giving a comb of larve to colonies having virgin queens, just previous to their mating, on the ground of its being unnatural. So far as its be natural is concerned, but little of modern bee management can be said to be natural. We should certainly prefer giving a frame of brood, where doubtful about there being a virgin queen present, rather than risk their being both broodless and queenless, as well as more liable to attacks from robbers.

## When the Millennium Comes.

Apropos to sending bees by mail, Mr. E. L. Pratt says in the A. B. J.: "Just think of it, reader, to be able to stick a ten-cent stamp on a five-pound article, and have it delivered at the very door of your customer, 1,000 miles, or more, away!" This is very pleasant anticipation for the senders of mail packages; but if Mr. Pratt had told how this desideratum is to be brought about, it would be still more interesting. Could the moneyed influence of the express companies be suppressed, there might be a chance for this desired reduction in postage. Is it not a shame to the "greatest gorernment in the world" that it should
lave a higher rate of postage on merchandise than any other great nation?

## Brace-Combs.

In removing the crate from a hive sent us by R. Stratton \& Son, two years ago, we were surprised to find the space between the crate and broodframes absolutely free of brace-combs. As this was something we never saw before it attracted instant attention. These friends have a faculty of doing very accurate work, and we more than half suspect that it was owing to their having made an exact bee-space between frames and crate, than from any other cause. If an exact bee-space will do away with the pieces of comb and the dripping of honey they contain, as seems probable, it would be worth while to have such hives, even if they cost a little more to make. Who can tell us more about it?

## Manufactured Honey-Comb.

It appears that this comb is simply a series of hexagonal tubes of wax, said tubes having no midrib (bottom). How the bees will accept this bottomless comb is the point at issue, and if the reports are to be credited no practical test has yet been made. The extract on "Honey-Comb Cells," on page 63 of this issue, is very suggestive on this matter of comb manufacture. Some doubts have been advancel as to the brittleness of this manufactured comb when filled with honey. Being made wholly of wax, which natural comb is not, it appears reasonable to think toughness and not brittleness may be one of its undesirable qualities. We suppose that the brittleness of natural comb is owing to the propolis incorporated in the wax, and if this is the case, then the manufacturers may have this problem to overcome; though it is possible that the bees may be able to so re-work the cells as to do away with this difficulty. Even should it prove a failure as honey comb, it may do nicely for the brood-chamber.

4 If you want to advertise where it will PAY YOU, see page 76.

I find Ideal Tooth Powder is without exception the best I have ever used. With its aid I keep my teeth very clean and white, which I was unable to do with any other powder I have ever tried before. So says Ferdinand E. Chartard, Baltimore, Md.
By the way, will you buy and use Ideal Tooth Powder? We can thoroughly recommend it. R. E. Nichols, Dentist, Salina, Kansas, says, Ideal Tooth Powder is in my estimation, just what its name indicates. An engraving $20 \times 24$ is given with each two bottles. Price 25 cents per bottle.

- Either of the following engravings; "Evangeline," "Bayard," " Monarch of the Glen" or "The First Step," without advertising on them, size $20 \times 24$ inches, given with one 50 cent or two 25 cent bottles of Ideal Tooth Powder. These are not cheap lithographs, but works of art. A. D. Bowman, Dentist, Nicholia, Idaho, says, I am using your Ideal Tooth Powder, and find it superior to all others.
The engraving "Evangeline" arrived safely on the 24th of December, making it seem like a Christmas gift. Trusting that Ideal Tooth Powder may flourish, I remain, yours respectfully, Elois Earnest, Denver, Col. One of these engravings without advertising on it worth \$1 retail is given with each two 25 cent bottles of Ideal Tooth Powder.


## ADVERTISING RATES.

t:2 No advertlsements inserted un ess the cash comes with the order. No other terms.

PRICES:

| space. | 1 mo . | 3 mo . | 6 mo .112 mo |  |
| :---: | :---: | :---: | :---: | :---: |
| One incl | \$.25 | \$ . 60 | \$1.00 | \$1.50 |
| Two inche | . 50 | 1.10 | 1.90 | 2.50 |
| Four inche | . 90 | 2.05 | 3.60 | 4.50 |
| One col | 1.50 | 2.80 | 5.40 | 8.00 |

E. H. COOK, Andover, Conn.

## Sprical Motices. E

Under this heading advertisements of 35 words will be inserted four times for only 25 cents.

To exchange.-One J. Stevens \& Co.'s Hunters' Pet Rifle, 32 cal., using short or long cartridge, in good order, for 53 lbs. light comb honey. Riffe cost \$18. 3 E. D. Barton, East Hampton, Conn.
Py Please mention the Bex-Hrve in writing to above advertisers and you will receive prompt reply, and do us a kindness also.

## Big Offers !

The First to Order Will Get Them :
I have the following subscriptions that I will sell at prices named:-

No. 1.-Two 1 year subscriptions to weekly "National Republican" at 40 cts. each. Regular price 75c.
No. 2.-Two 1 year subs. to weekly "Colorado Farmer" at 70c. each. Regular price $\$ 2.00$.
No. 3.-Three 1 year subs. to "Woman's Magazine" at 50c. each. Regular price $\$ 1.00$.

No. 4.-One 7 month sub. to the "Epoch" for \$1.50. Regular price \$2.25.

No. 5.--One 1 year sub. to monthly "Western
Agriculturist" 60c. Regular price $\$ 1.00$.
No. 6.-One 1 year sub. to "Illus. Arkansaw Traveler" $\$ 1.25$. Regular price $\$ 2.00$.
No. 7.-Five 1 year subs. to "Canadian HoneyProducer" and the Bee-Hive at 45c. each. Regular price 65c.

For description of above papers send for Bee-Keepers' Club List. No more papers will be offered at such low prices after these are sold, so order at once if you want any of them.
E. H. COOK, Andover, Conn.

CLARK COLD BLAST SMOKER
by mail, and the Bee-Hive one year, 90 ets.

## THE BEE-HIVE <br> FOR ALMOST NOTHING.

The following prices include the paper or book named and the Bee-Hive one year.
American Apiculturist......................... m . 85
American Bee Journal......................... w 1.20
Bee-Keepers' Advance.......................... $m$. 5.5
". Guide............................. $\quad . \quad .60$
Canadian Bee Journal............................. w $\quad 1.00$
Honey-Producer. .................. . m . 55
Gleanings in Bee Culture. ................. . $\mathrm{s}-\mathrm{m} \quad 1.10$
A B C of Bee Culture............................. . 1.25
Bee-Keepers' quide................................ 1.25

Doolittle's Queen-Rearing........................ . 35
Address, BEE-HIVE, Andover, Conn.


#### Abstract

WHITE CLOVER. It is not possible in all cases to have the contents of each package entiresly from the blossoms named, yet suificiently so to give distinctly their characteristic flavor.

This honey will candy as soon as cold weather begins, and is, in fact, \{the best proof of its purity. To restore it to the liquid form, set it in a \{ warm oven, or on the reservoir of the stove, removing the cover so it will not ooze out. When it is all melted, remove and cover again. Some liquify it by placing the receptacle in hot water, supported on a thin strip of wood.


Labels as above, 500,60 c.; $\$ 1.00$ per 1000 . Heading changed as desired.
E. H. COOK, Andover, Conn.


HONEY LABELS like the above，for one－pound sections，printed on white or colored paper，by mail，per 100， 20 cents；per $1,000, \$ 1.20$ ．EXTRACTED HONEY．－Labels for extracted honey，size $31 / 2 \times 6$ inches，printed in three colors，per 100,25 cents；per $500, \$ 1.00$ ．Labels made to order at very low prices．

E．H．COOK，Andover，Conin．


## The Clark Crgle Co． 340 N．Charles St．，－－BALTIMORE，MD．



## NEW RAPID BICYCLES． <br> NEW RAPID SAFETIES． QUADRANT TRICYCLES． QUADRANT TANDEMS．

Two hundred second－ hand machines，all kinds， sizes and prices．Bicy－ cles，Safeties and Tricy－ cles for Boys and Girls． Send for Catalogue and Price Lists．Mailed free． AGENTS WANTED．


Branch Store，－－－ 908 Pennsylvania Ave．，Washington，D．C．

## Are Yoi Going to the Fair?

Then of course you will want some neatly printed business cards to hand out among the people who are interested in your business. Well, send in your order and what you want printed on them, and you will be surprised to see what a tasty card (good quality of cardboard, too) we get up for the following very low prices, which includes all postage :

50 cards, 30 c.; 100,45 c.; $500, \$ 1.50$.
Oh, yes ! If you need al.y circulars, tags, etc., we know our prices will please you, for they are very low, and we guarantee to give satisfaction.
E. 'H. COOK, Andover, Conn.

## H A IL COLUMBIA! <br> - THE -

## Western Apiarian.

The only magazine devoted to bee-culture in the Pacific States; filled with the most interesting original articles from the pens of western apiarists. Send for sample copy.

Watkins \& McCallum,
Box 87.
Placerville, Calif.
2. Cents is n't much, but it will pay for this paper a whole year. Send to-day.

## DO YOU WANT A  ON TRIAL AT A PRIIE THAT WILL STARTLE YOU?

Your Interest, Our Interest. THE NEW TIMES WINDMILL

Guaranteed the Best. We IIean What We Say.


## Zinc Clips Over Slats. Gannot Split or Wapr

Wrought Iron parts. Babbited parted beal ings. We will send you one on 30 days trial, (fit any Derrick), with complete instructions, and if it is not THE BEST Mill you ever saw, de. nounce us in this paper and return it AT OUR expense. Send for testimonials and circulars of Windmills, Pumps, Road Carts, Horse Powers, Sign Boards and Implements. Describe place and write what is wanted.
D. H. BAUSMAN,
gents Wanted.
Bos 163, LANCASTER, PA.

## A MOMRTMSE

if you expect people to know you are doing business. Our Bee-Keepers' Club List will be issued in November, and as we send out thousands of them to people who buy, you ought to have an advertisement in it. Write about how much space you will need and prices, terms, etc., will be sent you. E. H. Cook, Andover, Conn.

## The Bee-Keepers' Club List

is what you should see before you subscribe for Newspapers or Magazines, as I save money for every one who orders or me.
E. H. COOK, Andover, Conn.



## Bee-Keepers' Catalogue?

BEE-HIVES,
$\boldsymbol{C R A T E} \boldsymbol{A}$, SMOKERS, FOUNDATION, BEES,

Full Colonies,


SECTIONS,
FRAMES, HONEYEXTRACTORS,

QUEENS, NUCLEI, \&c.

Our Goods are of the Best Quality and Material,
 and will give Satisfaction.


HAZARDVILLE, CONN.
Mention the Bee-Hive, please.


EDITORTAL SPECIAL BUGGY OF ANY STYLE VEHICLE. SPECIAL FEATURES:
Proportion, Durability, Perfection of Finish.
This "Mirror" finish work is the best medium-priced work in the United States.
write for catalogue.
HAMIKTON BUGGY CO.
that is going to pay full price for your Newspapers and Mag－ azines，when you can get them at club Rates and save a part of your Money？Our 1890 Bee－Keepers＇Club List will be out about Dec．1st，and is sent free on request．Send your ad－ dress on a postal to－day．

E．H．Cook，Andover，Conn．

## G．M．DOOLITTLE＇S

－METHOD OF－

## I <br> earing quebas．

Without exception this is the best article on Queen－Rearing that Mr．Doolittle has written． It gives，in language so plain that all can under－ stand，the method used by Mr．D．himself，which is a guarantee of its valuable qualities．
Dr．C．C．Miller，of Marengo，Ills．，a prominent apicultural writer，says of it ：
＂You have done a good thing in putting in＇pam－ phlet form＇Doolittle＇s Method of Rearing Queens．＇ it is of value，and gotten up nicely．＂

## CONTENTS ：

A sketch of G．M．Doolittle，wherein his Early Love of Bees，Reading Bee－Books and Papers，In－ fluence of the Teachings of E．Gallup，Good Queens，Writing Articles，etc．，are interestingly described．Following this comes Mr．Doolittle＇s Method of Rearing Queens．The first subject treats on the Importance of Good Queens，show－ ing how necessary they are if one would be suc－ cessful．The old Way of Rearing Queens is then described and its defects clearly shown，followed by the Method Now Used，and its disadvantages． Eggs and Food are then discussed．The way of arranging and fastening the Queen－Cups is then clearly described and fulty illustrated．The cell－ Building colony is next described，followed by Larvæ for Queen－Cells；Transferring the Larvæ； Advantages of this Method；Points to Remember； Natural Queen－ceils；How to Make the Nuclei； How to cut Out the cells，and How to put cells in Naclet．This is followed by pithy points glean－ ed from Mr．D．＇s writings，as follows－Honey； Queens ；Scraps；Honey－Combs，Reports．

Also a Fine Illustration of Mr．Doolittle， The Pamphlet Consists of 30 Pages．

## Price Reduced to 10 cents．

## E．H，COOK，Pub＇r，

Box 101.
Andover，Conn．
－THE－ Canadian ECloncy PYoduce：
A monthly bee－paper．Forty cents per year three subscriptions at one time to any address， \＄1．00．Sample copies free．

Address E．L．GOOLD \＆CO．，
Brantford，Canada．

W ANTto exchange a nice Box Machine， nearly as good as new，with tongue and groover and swing－saw．Cost when new， $\$ 150$ ；also one Root Four－piece Section Machine， cost $\$ 35$ ；one Saw Bench，with arbor，saws and belts； 2 Tables with boring attachment，cost when new $\$ 40$ ；also 20 feet $2-\mathrm{in}$ ．Shafting with hangers； 12 cast iron Pulleys，from 10 to $30^{\circ} \mathrm{in}$ ．； 1 Grindstone，cost $\$ 75$ ，for a nice sound young Car－ riage Horse．Address，

J．B．MASON，Mechanic Falls，Me．

## CARNIOLAN BEES．

## Pleasantest Bees in the World．

Hardiest to Winter．
Best Honey－Gatherers．
In order to introduce not only the bees but our paper，
－＂THE ADVANCE＂－
we offer to any one who will send us \＄1．25，a copy of our paper and a nice Carniolan queen．The queen alone is worth 32 ．Address，

THE adVance，Mechanic Falls，Me．


This Combination Pen and Pencil， including a Rubber Stamp of name and address，will be sent by mail for 20 cents．
The Bee－Hive one year and above Pencil， 30 c ． For four＂subscribers and $\$ 1$ ，a Pencil will be sent free．Shell of indelible black stamp ink， 6 c ．；or with Pencil， 5 c．

E．H．COOK，Andover，Conn．

## BEE－KEEPERS＇बー－ －नf：SUPPIEA

Quality and Workmanship unsurpassed．We are prepared to furnish Bee－keepers with Supplies promptly，and with goods of uniform excellence as heretorore．Our Hives all take the simplicity Frame．The＂FALCON＂Chaff Hive and the ＂CHAUTAUQUA＂Hive with dead air spaces，are both giving universal satisfaction．We manufac－ ture a full line of Bee－keepers＇Supplies，including

## ＂FALCON＂BRAND FOUNDATI0N．

We gladly furnish Estimates and solicit Corre－ spondence．Send for Illustrated Price－List for 1889 ，tree．

The W．T．Falconer Mfg．Co．， JAMESTOWN，N．Y．
（Successors to W．T．FALCONER．）


IT F to Poultry
Poultrix Guide．－Book of 32 large ppg．；illustrated；well printed；covers entire subject． SENT FREE to all sending 15c．for 5 months trial trip to our peerless 60c．monthly．
the rural call，
Columbus，Ohio．



## The Last Call

Our Bee－Keepers＇Club List will be out the last of November，and all ad vertisements must reach us by the 15th．A large edition will be issued and sent to fresh addresses of bee－ keepers，farmers，and others．

Those having any thing to sell will find that it pays to have an attractive advertisement in our Club List．

See the following low prices for in－ serting them．

Price for full page． $\$ 2.00$
＂＂half page．
Size of printing space on a page， $2 \frac{1 / 2 \times 41 / 4}{1}$ inches．
All advextisements must reach us by Nov．15th．Do not forget．
Now if you are going to advertise， this is the best chance out，as it will be read by thousands of people．

E．H．COOK，
Tolland Co．
Andover，Conn．

## NEARLY THIRTY TONS

## DADANT＇S FOUNDATION

Sold in 1887.
It is kept for sale by Messrs．T．G．Newman \＆ Son，Chicago，Ill．；C．F．Muth，Cincinnati，O．；Jas． Heddon，Dowagiac，Mich．；F．L．Doughty，Indian－ apolis，Ind．；B．J．Miller \＆Co．，Nappanee，Ind．； E．S．Armstrong，Jerseyville，Ill．；E．Kretehmer， Coburg，Iowa；P．L．Viallon，Bayou Goula，La．； M．J．Dickason，Hiawatha，Kansas；J．W．Porter， Charlottesville，Albemarle Co．，Va．；E．R．New－ comb，Pleasant Valley，Dutchess Co．，N．Y．；D．A． Fuller，Cherry Valley，Ill．；J．B．Mason \＆Sons， Mechanic Falls，Me．；G．L．Tinker，New Philadel－ phia，O．；Jos．Nysewander，Des Moines，Ia．；C．H． Green，Waukesha，Wis．；G．B．Lewls \＆Co．，Water－ town，Wis．；J．Mattoon，and W．J．Stratton，At－ water，O．；Oliver Foster，Mt．Vernon，Ia．；C．Hertel， Freeburg，Ill．；Geo．E．Hilton，Fremont，Mich．；J． M．Clark \＆Co．， 1409 15th St．，Denver，Col．；Goodきll \＆Woodworth Mrg．Co．，Rock Falls，Ill．；J．A．Rob－ erts，Edgar，Neb．，and numerous other dealers．

Write for free samples and price－list or bee－su ）－ plies．We guarantee every inch of our foundati in equal to samples in every respect．Every one w． 10 buys it is pleased with it．

CHAS．DADANT \＆SON，
Hamilton，Hancock Co．，Illinois．

100
ENVELOPES，size No．6，Good Quality， with your business printed on them． post－paid，for 3 ets． $6 \overline{y y}^{-5}$ Satalaction guaranteed． E．H．Cook，Andover，Conn．

## THE STERLNE CO．



> Quality of I＇one，Beauty of Design， FINISH and adaptability for stand－ ing in Tune have no equal． Every Piano Warranted for Five Years
> And satisfaction guaranteed to every purchaser． Also Manufacture the World－Renowned
STERELINGORGAN Factories，Derby，Conn．

