

## The bee-keepers' instructor. Vol. II, No. 11 November, 1880

Adelphi, Ohio: Webster Thomas & Sons, November, 1880

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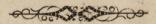


BEE-KEEPERS"

## → \*\*INSTRUCTOR. →



## W. THOMAS, Editor.



#### CONTENTS.

Valedictory.—Salutatory353	Honey
Bees in Winter354	Improved Race of Bees, etc
November Management.—Profits of Bee-	
Keeping	New Method of Obtaining Surplus Box
Another Grand Report from Wisconsin.	HoneyImported or Home-Bred
-Two Queens in a Hive356	
The Industrious Bee Bee Notes for No-	Officers of the North American Bee-
vember357	
What to do with bees that need Feeding	Editor's Corner
In November.—Locust Trees for	Miscellaneous36

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VOL. II.

ADELPHI, OHIO, NOVEMBER, 1880.

No. 11.

Published the mid-

W. THOMAS & SON, Publishers and Proprietors. Terms, 50c. per year, or 30c. for 6 months.

#### VALEDICTORY.

We take this method of notifying the subscribers and readers of THE BEE-KEEP-ERS' INSTRUCTOR that, we have disposed of the proprietorship of the same to W. Thomas & Son, of Adelphi, Ohio, who will hereafter continue its publication, commencing with this number. Our friends will no doubt wish to know, why this abrupt change? We answer:

1st. As we are engaged in several branches of business besides the publication of the Instructor that demand our personal attention, we can not give each branch that attention necessary to its successful prosecution, and at the same time publish a Bee Journal. Our health and strength will not admit of the "wear and tear" necessary to do justice to these several branches of business; hence our first reason for the change refered to above.

2d. The constantly increasing demand upon us for Italian queens, the rearing of which requires a great deal more labor in our Apiary than formerly; and as my partner in the business is unable to attend to the rearing and shipping of queens and the other labor in the Apiary, we have at his request concluded to assist him when not occupied in our other branches of business. We are expecting to make extensive preparations during the winter months for the queen as well as the apiarian supply business; thus our time will be fully occupied, so much so that we will have no time to continue the publication of the Instructor.

Having for the foregoing reasons disposed of our interest in the INSTRUCTOR we commend to the subscribers and readers of the same our successors, Messrs. Thomas & Son, who are honest and obliging gentlemen, and who will spare no pains to furnish the readers of the In-STRUCTOT with the best and latest news each month pertaining to progressive bee The Senior member of the firm is himself a practical bee-keeper, but does not deal in Apiarian Supplies; hence, as he will edit the Instructor will devote his time and attention to the publication of such matter as will be interesting to both the producers and consumers of honey, and the bee-keeping public generally. We hope that this new firm will be liberally patronized by the bee-keepers throughout the country, not only with their subscriptions, but also with articles and items of interest to bee-keepers, for publication in the Instructor.

Before closing we wish to say to our many friends and patrons that we are very thankful for past favors rendered by them during our labors connected with the editing of The Bee-Keepers' Instructor.

"With enmity towards none and charity for all" we bid you all adieu.

S. D. RIEGEL.

#### SALUTATORY.

The foregoing article sufficiently explains the cause of the change in ownership of The Bee-Keepers' Instructor, and it were superfluous for us to say any-

thing in that direction. We shall, however, briefly lay down the course we intend to pursue and take a little friendly chat with our new acquaintances. In assuming control of the editorial helm of the Instructor we are aware we have undertaken a difficult task; in launching our barque out upon the sea of apiarian journalism we know that we will not find it all plain sailing; but our strongest endeavor will be to "heed not the rolling wayes but bend to the oar." The goal of our ambition will be to make our journal the earnest advocate of the best interests of its patrons. We have no personal end to attain in so doing, except an earnest desire to accomplish the greatest good to the greatest number. Apiculture has made mighty strides within the past few years; like the embryo butterfly, it has burst its chrysalis, and as it begins to feel its powers is soaring onward and upward, and is fast assuming its rightful position as a great national industry. In preparing material for our journal we shall strive to keep pace with the demands of the times, ever keeping in view the good old motto, "Onward and upward,

As to our ability to conduct a bee journal we will say but little; time will decide that. We will say this much, however: We have had some practical experience with, and been a close and interested observer of, the genus apis for a good many years, and understand somewhat whereof we speak. We earnestly ask the hearty co-operation of all apiarists; let us make a long pull and a strong pull, and pull together for the advancement of the cause in which we have embarked.

and true to the line."

But we have talked too much for a stranger. Hoping that the bond of common brotherhood that binds us together may be strengthened by many new ties, we extend to you the fraternal per of friendship, and bid you, for the present, an revoir.

WEBSTER THOMAS.

[Indiana Farmer.

#### Bees in Winter.

The great loss of bees which occurs every winter is considered by some an insurmountable objection to bee-keeping. If this state of things were unavoidable, there would indeed be but little encouragement to begin in the business. When the principle of successful care of bees in winter is better understood and applied, this state of things will cease to exist. Loss in winter is attributable in almost every case to one of three causes; too few young bees late in the fall, too little honey, or else too little of it when the bees can have ready access to it, or in improper ventilation. What we mean by ventilation is not that there should be a current of air passing through; neither should there be an opening in the top to allow the escape of heat generated by the bees. There is a continuous vapor arising from the bees, and in preparing for winter some provision must be made for the absorption of this moisture, and not allow it to condense on the sides of the hives or on the frames of honey. We have seen colonies of bees frozen in almost a solid cake caused by the entire want of ventilation. The hives being air-tight, or nearly so, except the entrance, the moisture arising from the bees having no outlet, congealed on the sides of the hive. As the cold weather continued the ice kept forming, until completely encasing the bees .-Whereas, had there been any way for the dampness to escape, without the heat also, it would have passed off, allowing the bees to remain perfectly dry. We not unfrequently see an old hive with the top half warped off come out in the spring in good condition, while others in the same vard, which were seemingly in the same condition as the others in the fall, with the exception of being in air-tight hives, are frozen nearly solid.

In arranging ventilation care should be taken to have no draft of air through the

hive. The entrance should be made very small, and where honey boards are used, the holes or slats over which the surplus boxes have been placed should be left open, and over these some absorbing material should be placed. In very cold weather bees remain in a semi-torpid state, and do not consume as much honey as during warm weather when they can fly out every few days. There is a great diversity of opinion as to which is the better plan, wintering indoors or out. We have tried both plans extensively. We succeed very well in wintering in the cellar, but our best success has been on the summer stands. Considering the circumstances and conditions of the majority of bee-keepers, we believe the latter plan to be the best. Therefore we recommend wintering on the summer stands.

For the Instructor.]

November Management.

S. S. FETHEROLF.

The honey season is now over, and all the hives should have been prepared for winter; but in addition to the advice in last "Monthly Management" a little instruction can be added, especially to those that are using the Mitchell Bee Hive. We suppose the hive is two or more feet long, and you are using division boards. Separate the division boards sufficient distance apart to turn your frames just half way, running from end to end; take another division board, place it in the rear about one-half an inch from the back, making a small space to fill in with chaff or saw-dust; the front the same way, only make a covered way for the bees to pass in and out, a piece of tin or sheet iron bent so as to form a box to suit the size of the entrance. This work must be done on a very warm and sunny day, while the bees are flying freely. If you disturb the bees during a cold day they are apt to discharge their feces over each other in the hive.

Whatever hives and appliances in the apiary are not in actual use should be housed for the winter.

If you should find stocks in such poor condition that fears are entertained that they may not winter, from lack of stores, they can be united without any fears of their fighting much now.

In this changeable climate bees should not be housed, but left on their summer stands and protected in the various ways heretofore advised. In the extreme North where the winter sets in de facto, cellars and bee-houses are needed. But it only wants a winter's trial in Central Ohio to convince any bee-keeper that it will be best to winter on well-protected summer stands.

Glen Apiary, Palestine, Ohio.

[Semi-Tropic California.

#### Profits of Bee-Keeping.

N. LEVERING.

When this branch of industry is practiced in a careful and intelligent manner there is no ordinary business within the scope of my experience that remunerates us as satisfactorily as bee-keeping. "Good luck" is good, intelligent management, and "bad luck" is the reverse. Many a person invests in a swarm of bees, expecting it to make his fortune. He is ignorant of their wants, neglects them, except to rob them of their honey, and perhaps destroy the queen. They dwindle and grow less, moths and robbers attack them. other colonies attack them, the colony disappears, and the owner curses the business as a bad speculation. With proper care and intelligent management, one year with another, bees will average one hundred per cent. clear of expenses. The surplus honey will pay for the hives and care, and with ingenius finessing one may make from two to four and sometimes ten or a dozen colonies from one, it being strong and having a prolific queen,

Besides a fair increase of bees, instances are not rare where one hundred and more pounds of surplus honey per hive have been taken in a season from each colouy. The business is easy and interesting, and may be performed by women, or even by children who have aptitude and taste for it.

[Gleanings in Bee Culture.

## Another Grand Report From Wisconsin.

H. V. TRAIN.

As I am always so very glad to read reports from others, I suppose the rule, "As you would," etc., binds me to make report of my season's work. I commenced the season with 60 swarms in Simplicity hives (improved, as I think,) and 50 swarms in old boxes, wintered in cellar. All were the native brown bees. I wintered more but sold down to the number given. I have now sold 5556 one-pound sections, white honey, at 15c., and dark at 12c. per pound, delivered on the cars at our station. I have on hand about 700 sections, partly filled, average about 1 lb. each, and I have extracted the honey from 7 Simplicity hives, and have the combs put away for next season, and I have 19 Simplicities full of nice sealed honey. Shall I extract it, or shall I keep it for my young bees next season? These combs and honey I have obtained in doubling up for winter. I have now ready for the cellar, 129 Simplicity hives (improved) full of honey and full of bees, and 9 swarms in box hives, to be transferred next spring. I transferred 40 swarms last spring.

I am determined not to winter any swarm that has not made 30 lbs. of surplus, and but few that have made less than 42 lbs. Some of them have made me over 100 lbs. of comb honey.

One more fact I ought to notice: I have never bought a queen, but have for many years disposed of the queens that

did not do well, selecting my best workers to winter. Last year my bees were all brown (or black.) Now they are half yellow bees, and have as much yellow on them as have Judge Groty's, 2 miles from me, and he has no queens, but daughters of imported mothers. He has nearly as many as I have, as his drones are all full-blooded Italians, according to accepted theory, and from them I get my vellow bees, for there are no other Italians near us. My bees have done very much better than any I have heard of in this country. I want to start this inquiry: Will we not get better workers by Italianizing by the use of drones than to use queens? I believe it is a settled fact, that we carry the better qualities of stock more surely in the male than in the female. May it not be so with bees?

Manston, Juneau Co., Wis., Oct. 15, '80.

Why, this sounds like old times, friend T. If I am correct, Doolittle, advises to extract the honey remaining in the sections, but we have generally put them on the hives at a time when they were not gathering, and let the bees uncap it and carry the honey below. Your idea of Italianizing by the drones is a rather novel one, but by no means an unusual one; for nearly all the common bees in the vicinity of all our large apiaries are fast getting Italianized in that way.

[Gleaning in Bee Culture.

#### Two Queens in a Hive.

AND HOW SOME OF THE "QUEEN TROU-BLES" COME ABOUT.

#### A. W. DALZELL.

My last three queens have just arrived. If you will always send me such nice dollar queens as the last six I got of you, I will never call on you for a tested one. The first lot I received are filling every cell the bees will allow them, with brood.

I am sorry indeed to tell you my imported queen is dead. I am almost ashamed to tell you what a careless trick I did. I am 55 years old, and have worked with bees a good part of my life, and for several years I have done nothing else but handle them, and was well aware that about four times as many hives have more than one queen as most bee-men think. The hive in which I put my imported queen proved to be one of that kind. I first took out the black, as I always do before I give them another queen. When I found her, she was such a nice large one that I looked no further, but set the cage in the hive. In 24 hours 1 released her on a comb, and the bees received her all right. In an hour and a half I looked again, and she was there undisturbed. In 24 hours I looked again. She was traveling round over the comb, but seemed to be very stupid. In 48 hours I took my last look at her. Now, what bothers me is this: Why did the bees and the other queen, which was a nice large black one, let her stay there three days and then kill her? I could not find her, dead or alive.

Enfield, Ill., Oct. 8, 1880.

[Stock, Farm and Home Weekly.

The Industrious Bee.

There are 2,000,000 bee hives in the United States. Every hive yields, on an average, a little over twenty-two pounds of honey, and is sold at twentyfive cents, a pound. So that, after paying for their own board, our bees present us with a revenue of \$8,800,000. To reckon another way, they make a clear gift of one pound of pure honey to every man, woman and child in the vast domain of the United States. In 1860. over 23,333,534 pounds of wax was made and given to us by these industrious workers. An agricultural exchange says the keeping of bees is one of the most profitable investments that people can make of their money. The profits arising from the sales of surplus honey average from 50 to 200 per cent. of the capital invested.

[American Agriculturist

Bee Notes for November.

L. C. ROOT.

Wintering Bees .- Numerous inquiries are made as to the cause of the great loss of bees during last winter, and instructions are asked for, which will prevent a similar loss during the coming winter. There is probably no subject of greater interest than this, to both novice and the experienced bee-keeper. Many who have had experience can succeed in wintering their bees comparatively well, yet I may safely say that none have, as yet, reached uniform success. when a number of colonies, in apparently the same condition, are put into winter quarters, a certain portion of them should winter perfectly, while another portion wastes away, and the stocks become almost if not entirely worthless, is a question which puzzles the wisest? In answer to the first question, as to the cause of loss in the past, I would say that it was probably due to a failure to observe some of the essentials which I shall point out, yet with the mass of beekeepers, these failures seem at times almost unavoidable. I predict heavy losses during the coming winter and spring from the same causes. It is notable that the yield of honey from buckwheat and other late blossoms has been very light, and, as a consequence, brood rearing was discontinued at a much earlier date than usual: hence one of the essentials to successful wintering is, to a large degree, lacking. It is important to secure a large number of young bees late in the season, and each colony should posess a sufficient number before it is time to go into winter quarters.

Proper food for winter.—Twenty or twenty-five lbs. of well-sealed honey or sugar syrup is the next essential. This amount should not be guessed at, but should be ascertained for each hive by careful weighing.

Proper place to winter bees.—While it may be desirable, in many warmer localities, to winter bees upon their summer stands, I recommend only in-door wintering for northern latitudes. Many advocate properly arranged, above-ground houses, but I prefer a dry, dark, well-ventilated cellar. If the cellar is not perfectly dry, place a stove in it, and keep a fire until the walls are thoroughly dried. This should be done in time to allow the room to cool before the bees are placed in for winter.

Time to take in bees .- This is a point of much more importance than usually The exact date cannot be supposed. given, as the length of the seasons vary. With us, the time is usually from the 10th to the last of the present month. They should not be neglected until snow falls, as the hives will be wet, and they should be placed in a room as free from moisture as is possible. should be handled with care, so that the bees will be as little disturbed as may be. Never make the mistake of closing the entrance to confine the bees to the hive, after placing them in the cellar. It would be far better to raise the hive half an inch from the bottom board, thus giving an opening on all sides. This would afford better ventilation, and also lesson the liability of the dead bees falling down and closing the entrance, if that be small. After the bees are properly arranged, the room should be left dark and as free from noise as may be.

Present Season's Results.—Much interest is expressed as to the result of the present season's work, particularly as to the demand and supply of honey. Reports from all parts of the country indicate that the demand for the best quali-

ties of honey will far exceed the supply. The demand for such honey has been largely increased during the last year, while the supply is one-half less. The best box-honey will be in demand at from 20 to 25 cts., according to the size and nature of the box, while prime extracted honey will be called for at from 15 to 16 cts. I think an acquaintance with the honey market for several years, will warrant these conclusions.

[Gleanings in Bee Culture.

#### What to do with Bees that need Feeding in November.

#### T. F. SHEPHARD.

I can get a good many bees that will be killed, by going for them, and if sugar will do will try to use them. Nothing but black bees in this country, except one Italian nucleus I got of H. H. Brown this summer. My crop will be nearly 1000 pounds, all comb, in 6x6 sections, from 24 stands in spring. Only five swarms—surplus all buckwheat.

Town Hill, Pa., Sept. 4, '80.

It will be a little risky to try to winter colonies without combs, friend S.; but if you can get the combs also, or if you can spare a comb or two from several stocks of your own, I think you can save them without trouble. Years ago, some of you may remember I was very vehement in advocating coffee sugar as being cheaper and superior to honey for winter stores. Our friend Jones, when here, said that I might say that my position was all right on this, for he had tested it with hundreds of colonies. The only amendment he would make would be to use a purer sugar still than coffee A, and he has settled down on granulated sugar as being best and cheapest, all things considered. It costs only &c more than the A, and very likely furnishes just as much pure sugar for the money. He wintered 168 colonies entirely on su-

gar last winter, and all came out all right. We have fed out two barrels of it since he left. For winter stores, we melt grape sugar, let it get cold or nearly so, and stir in about an equal weight of the granulated sugar. It is stirred in a large dish pan, and when it is so stiff that it can be handled with a paddle, it is put into wired frames in the way I have told you. In half a day, or perhaps a little more, if the weather is warm, the frame can be hung in the hive, and it is the most satisfactory way of feeding I have ever used. One of these frames will be emptied into the combs in about two or three days, and the stores are ripe and thick enough to cap at once. The only trouble I have found, is that the bees build comb in the empty frame about as soon as the candy is out of it. You must look out for this, and get it out, and move up the division board. The tray to set over the frames will answer the same purpose; but in our queen work we find the frame of candy less in the way. One set of wired frames may be used over and over again.

#### Locust Trees for Honey.

#### 8. D. RUTHERFORD.

I notice an article in June No., p. 265, by some one wanting to know about the common locust as a honey-bearing tree. Since 1874 the locust has blossomed heavily until this spring, when it almost failed in this section. The consequence was that bees were nearly ready to starve before the clover blossomed. They are doing pretty well now, and are making a good deal of honey. I have had the only swarm that I have heard of in this section. I have made several artificial ones. which I think are doing very well. But to return to the locust. It is one of the most valuable trees grown here. it is a native of this State, I believe it is up to all other wood. For posts in the ground, at least, I know no other so good.

It grows very fast when properly cared for. But the borer is hard on it. They tell me in Missouri it must therefore be well cared for to get it to live. I do not know whether the bloom is full of honey or not. In the spring of 1879 they worked well on it, and filled their hives so full of honey that they blocked the queen and injured themselves. \* \* \* \* \*

Kearneysville, W. Va., July 13, '80.

We clip the above in relation to the common locust as a honey-bearing tree from Gleanings in Bee Oulture, and can bear testimony to its worth in this respect, as well as to its value for posts and for other purposes. It blossomed very profusely in this section of country last spring, and for some ten days or two weeks the blossoms were covered from morning till night with the busy little workers. air was so laden with the delicious perfume of the blossoms that we did not wonder at all to see with what avidity the bees swarmed upon the beautiful clusters of sweetscented blossoms.

We are satisfied that it is a valuable honey tree, and one that would pay well to cultivate. Like many honey plants it will grow and do well on very poor land. Points and hill-sides that are not tillable, and are found on many farms, will produce the locust tree to very good advantage. And after it gets well grown, if the borer should attack it, it can be very profitably manufactured into posts. Therefore, we say cultivate it.

The following able address was delivered by that prominent apiarist,. Prof. Newman, before the North American Bee-Keepers' Society, recently held at Cincinnati. Mr. Newman has been President of the society for two years past and is looked upon as one of the leading lights in bee-culture in this country. For this reason we invite especial attention to his address; and would also ask a careful perusal of the remarks that follow, giving in a nut-shell the views of several gentlemen of the convention, as to the characteristics of superior strains of bees:

President Newman invited Vice President Dr. J. P. H. Brown to the chair, and gave the following address on the

#### Improved Race of Bees.

To obtain the best results we must posses the highest grade of bees that it is possible to obtain. Our object being to elevate the race, there must be no backward steps; no deterioration should be countenanced; no thoughtless or hasty work must be allowed—but after carefully weighing the matter the most thorough and rigid treatment should be employed, all looking to the advancement of the art and science of reproduction, and the building up of a strain of bees that will give the very best of results.

In developing the highest strain of horses, not all their offspring are equal to the best; careful selection of those coming the nearest to the ideal animal must always be chosen, from which to breed, and the closest scrutiny is necessary while making that selection. same is true of cattle, sheep, hogs, poultry, and bees. "Sports" and "variations" continually occur, producing inferior progeny; but all careful breeders who have an eye to the improvement of the race will reject those that do not come up to the "standard of excellence;" sending such animals and poultry to the shambles-so let us carefully select the

best queens and drones to breed from, and remorselessly sacrifice all others.

Five points are essential to govern the selection: they must be prolific, industrious, docile, hardy, and beautiful in appearance.

The queen must be prolific, to be able to keep the hive full of bees, to gather the honey harvest when it comes; the bees must be industrious to let nothing escape their vigorous search, while gathering the sweet nectar; they must be docile to allow the apiarist to manipulate them with ease and pleasure; they must be strong and hardy, to withstand the rapid changes in the climate; and must be of singular beauty, to attract the admiration of the fancier of fine stock.

"The bee of the future" will be present at the very moment when the slumbering flower, under the penetrating dew, awakes to consciousness, and unfolds its buds to take in the first rays of the morning sun. The *ideal* bee will dip into that tiny fountain, which distils the honey drop by drop, and bear off its honeyed treasure to its waxen cells of virgin comb.

Much has been written and spoke about queens duplicating themselvesbut what we want is progression, not duplication! We want to breed upgood, better, best-not simply to hold what we have, but to improve the race. Mr. Langstroth struck the key-note when he said: "We want the best race of bees, or the best cross in the world." It is yet an open question as to what part will be taken by the Asiatic races in producing "the coming bee." A "cross" in this direction, and breeding in or out the distinctive features and propensities, may possibly be "the next progressive step." But of one thing I am certain, however, "the bee of the future" will be the one that will gather the most honey, be the most prolific, and, at the same time, the most docile, hardy and industrious; and when produced, whatever may be its

color or markings, its name will be Apis Americana.

D. A. Jones, Ontario, moved a vote of thanks be tendered Mr. Newman for the able address. Carried unanimously.

Rev. L. Johnson, Kentucky, would like the question fully discussed as to the superiority of bees. Since he became enthused in the occupation of bee-keeping, he has been unable to pass a hive of bees without observing all the characteristics connected with it. He thought the Italian bee a great advance on the old-time black bee, and doubted not they were capable of still greater improvement. He thought all would admit the greater prolificness of hybrid queens. The past season he had one which produced at least a bushel of bees, and that colony had given fully 200 lbs. of honey. What we want is the race of bees which will bring the most money.

Mr. Newman was certain Mr. Johnson and himself agreed upon the general results to be attained. First, we want the bee which will obtain the most honey—and the most honey brings the most money; then the other traits as he had enumerated them.

Mr. Harrington, Ohio, has tried several strains of bees: First, Italians; second, Albinos; third, a cross between Italians and Albinos. The claim that the dark or leather-colored Italians are the best honey-gatherers is all bosh. He finds the larger Italians are the best honey-gatherers, regardless of color. He has a holy queen that is very prolific, and her bees gave the best yield of honey he has received this season. This queen was received late in the season, placed in a small nucleus, and had built up to the strongest colony he owned.

O. O. Poppleton, Iowa: I have experienced that the lighter bees are far ahead in all the desirable qualities. I invariably get a good return from the yellow bees, when perhaps the dark ones are in a destitute condition. When the yellow

bees have no sarplus, it is useless to look any further.

Mr. Muth, Ohio, had removed nine Egyptian queens in one day to give place to yellow Italians. The Egyptians were in a starving condition while his light Italians were filling the surplus boxes nicely; besides, the Egyptians were so cross that there was no pleasure in working them. In fact, they seemed almost intractable, even with the plentiful application of smoke.

Dr. J. P. H. Brown, Georgia, thinks the idea prevalent with some apiarists, that the dark Italians are the best workers, is a mistaken one. He thinks the amiable, light-colored bee just as good a worker as the darker colored.

Mr. Harrington, Ohio, inquired why the grand-daughters of imported queens are always lighter than those imported.

Rev. L. Johnson, Kentucky, thought it was undoubtedly owing to climatic change; the same effects were true of horses, cattle, and even the human family in point of superiority.

C. C. Coffinberry, Illinois, attributed much of the superiority of the American-Italian bee to a loose practice prevailing in the selection of queens for shipment to this country. In filling an order most of the Italian queen breeders paid but little attention to the selection of the best; with them it was enough to know that a queen was fertilized and laying to fill the requirements of an order, and he ventured the assertion that not more than one queen in a score was fit to breed queens for the market. With the American queen breeder, who had any regard for reputation, the best are always selected for propagation and the fact of the importation does not constitute it the best. By a careful selection from the very best of these imported, and a subsequent breeding with a special view always to perpetuate the best, we have now reached a point far in advance of the apiarists in Italy.

S. D. Riegel, Ohio.—The last speaker has expressed it exactly. Purchasers wanting the best queens and bees always select from the American improved stock, instead of the imported or that bred directly from the imported.

Dr. Brown, Georgia, acquiesced in the above opinions.

Mr. Harrington, Ohio, said he had never seen an imported queen that did not produce three-banded Italians, although some were very dark.

Mr. Coffinberry had seen several which did not.

A. G. Hill, Indiana, has seen at least two imported queens that produced hybrids.

Mr. Newman has noticed bees in Italy as black as any in this country.

Mr. Jones said he had seen black bees at several places in Italy, even in the vicinity of Rome. He gave as his opinion that the Italian bees were descended from the bees of Holy land, or those on the Island of Cyprus.

[The Western Rural.

#### Italian Bees and Queens.

#### J. M. HICKS.

Having seen in your valuable paper, questions propounded with regard to Italian bees, permit me to answer those who may be interested, that I consider the Italian bees by far the best of any that my long experience has been acquainted with, for the following reasons: First, they are more industriously inclined at all seasons of the year, and especially during the honey drouth in the hot part of the summer, or what we might call dog-days, during which time it is a well known fact among all bee-keepers, that bees do not gather and store as much honey as they do in other parts of the season. Yet I find that my Italian bees have gathered and increased their brood combs in size, as well as filled many of them quite full, and sealed their winter supplies over, while the native or black bees have not been so industriously inclined during the heated term. This I attribute to the fact that the Italian bees work on many flowers and especially the red clover, which our native bees do not work on. Secondly, I find that during the month of August, 1880, bees were bothered more with the ravages of the moth-worm than usual, and as a test I have taken sheets of brood combs from the bees and given the same to my Italian bees, and in every instance they would clean out the moth-worms which had been permitted to live in peace with the native bees. Thirdly, I will say the Italian bees are more vigilant in watching and protecting their stores than the black or native bees are, and as a rule they are more prolific, raising larger swarms and under equal advantages will usually be ready to swarm five to ten days earlier than the old-fashioned or black bees do. Fourth, and lastly, I will add that the Italian queens are much easier found and more gentle, so that, in artificially swarming my bees, I am not bothered near so much in finding the queens and making up my swarms of Italians as with the native bees.

Also here let me state, after carefully and many times testing the two classes of queens in laying eggs, I find the Italian queens lay at least one-third more eggs daily through the early part of the season than the native queens do; hence the reason of their being ready to swarm earlier. Yet I would not say but there are exceptions where we can find a native queen that would equal perhaps the same of the Italians, but they are few and far between; and while I am thus writing, my mind is full of instances of this season of failures among my black bees while but few of the Italians have been so unfortunate as not to support themselves, as well as have a brood chamber full of well stored supplies for their future wants, both in honey and in brood.

Battle Ground, Ind.

The following is taken from the proceedings of the North American Bee-Keepers Convention, recently held at Cincinnati.

We commend the article to the attention of those who are fond of experimenting, not, however, without misgivings as to whether anything would as a general thing be gained by it. We have no doubt however but what surplus honey may be obtained in this way, at times, more readily than by most other methods; but it seems to us that it would be at the expense of weakening the colony and robbing it of winter stores:

D. A. Jones, Ontario, explained an important discovery made by him for obtaining surplus honey in the brood chamber; he thinks as much comb honey can be obtained as extracted. It consists of a division sheet of perforated zinc going across the hive and removable at will. The perforations are of such a size that the worker bees can pass through but the queen cannot. This sheet of zinc is placed behind the first three or four frames in the hive. The queen has access to the frames in front of the zinc, but not to those behind it. The worker bees will always deposit their honey in the middle of the hive if possible, and with the zinc sheet in, the queen cannot get at the middle frames to deposit eggs. Consequently the frames in front of the zinc get filled entirely with brood and the frames behind the zinc entirely with honey. If a little is deposited in the brood frames it is of no consequence, the object being to get the honey frames free from brood. As soon as a brood frame has been laid full of eggs it is lifted out and put at the

back of the hive for the eggs to hatch out, and another frame is given to the queen. The gain by this method is immense. Not only can box and extracted honey be obtained from the same hive, but the quantity deposited is increased greatly from the absence of brood and pollen in the honey frames. The zinc sheet can also be used to prevent swarming, if there should be any such signs at an inconvenient time; by placing it at the entrance of the hive the queen is shut in, and of course the swarming does not take place while the work goes on as usual.

For the INSTRUCTOR.]

#### Imported or Home-Bred Queens.

S. D. RIEGEL.

At the late National Bee-Keepers' Convention held at Cincinnati, the question arose as to the comparative value of Imported and home-bred Italian queens. I was pleased to see so many of our experienced bee-keepers come to the front and take a stand against the very general belief of the inexperienced, that imported queens are better than homebred for improving the race of Italian bees. I was also gratified with the resolution offered by Melville Hayes, of Wilmington, Ohio: "That the strain of Italian bees we now have has reached a higher standard of excellence than is to be found in the native home of the Italian," and "That queens reared from pure selected home-bred Italian mothers should command at least as high a market value as those bred from imported mothers." My only regret was that the resolutions were not made much stronger in favor of the home-bred queens. I think that the importation of Italian queens would long have been discontinued, were it not for their value, estimated in dollars and cents, by some who are largely engaged in their importation. (I guess somebody's toes are being tramped,

but I can't help it.) When it is positively proven-which was done at the convention by D. A. Jones-that there are plenty of black bees in Italy, is there any good reason for believing that Italian imported queens are any better, or even as good, as selected home-bred queens, for improving the race? I can't for my life see any consistency in the practice of home bee-keepers, of getting an imported queen from which to rear Italians, and then select from her daughters those posessing the most good qualities, such as prolificness, hardiness, long tongues, color, &c., &c., continuing the selection and breeding up to the highest standard of excellence that selection will bring them to, and then, in order to still continue the improvement (?) as they say, get another imported queen to infuse new blood, and prevent "in and in" breeding, &c. Is not this "new blood" very often flowing from the veins of some mongrel or hybrid, which would not be tolerated under any circumstances if reared in an American hive? and are not these same beekeepers' very often infusing new imported blood into their improved strains of home-bred Italians, that will give them the worst kind of characters? and instead of continuing the improvement of the race only degenerate it? If real improvement is desired why not get a home-bred queen from a reliable breeder? one possessing in the highest degree those qualities which are so much sought after by our best bee-keepers. I would much rather risk the introduction of a good home-bred queen, possessing the best traits of character, into my Apiary, with a view of continued improvement, than an imported one whose traits of character or good qualities are not known. I hope the day is not far distant when American queen breeders will set to the head of their advertisements, instead of the words, "from imported mothers," the words, "from noted home-bred mothers," Until then we have no assurance as to

the continuation of the improvement of the Italian race of bees.

Adelphi, O., Nov., 15th, 1880

The following are the officers elected for the ensuing year at the North American Bee-Keepers Convention, recently held at the Bellevue House Hall, Cincinnati, Ohio:

President, Dr. N. P. Allen, Smith's Grove Ky.; Recording Sec., Erick Parmly, New York; Corresponding Sec., C. F. Muth, Cincinnati Ohio.

#### STATE VICE PRESIDENTS.

Alabama, J. A. Austin, Huntsville; Arkansas, D. W. W. Hipolite, Devalls Bluff; California, C. J. Fox, San Dieger, Colorado, J. L. Peabody, Denver; Connecticut, H. L. Jeffrey, Woodbury; Dakota, Calvin G. Shaw, Vermillion; Florida, Dr. J. M. Keyes, Iola; Georgia, J. P. H. Brown, Augusta; Illinois, E. J. Oatman, Dundee; Indiana, Rev. M. Mahin, Huntington; Iowa, E. D. Godfrey, Red Oak; Kansas, D. P. Norton, Council Grove; Kentucky, W. Williamson, Lexington; Louisiana, Paul D. Viallon, Bayou Goula: Maine, J. H. Spauldings, Augusta; Maryland, J. M. Valentine, Pipe Creek; Massachusetts, Dr. E. P. Abbe, New Bedford; Michigan, Prof. A. J. Cook, Lansing; Mississippi, Rev. J. W. McNeil, Crystal Springs; Missouri, P. P. Collin, Benton City; Nebraska, Geo. M. Hawley, Lincoln; New Hampshire, J. L. Hubbard, Walpole; New Jersey, Prof. J. Hasbrouck, Bound Brook; New York, A. J. King, New York; North Carolina, T. B. Parker, Goldsboro; Ohio, A. I. Root, Medina; Ontario, D. A. Jones, Beeton; Pennsylvania, W. J. Davis, Youngsville; Quebec, Thomas Valiquet, St. Hilaire; Tennesse, S. C. Dodge, Chattanooga; Texas, F. F. Colins, Cuerco; Vermont, Jacob Ide, Passumsic; Virginia, J. W. Porter, Charlottsville: West Virginia, E. W. Hale, Wirt C. H.; Wisconsin Christopher Grimm, Jefferson.

### Editor's Corner.

Show the INSTRUCTOR to your friends and tell them they can not invest fifty cents to better advantage than in a year's subscription to it.

DON'T SEND STAMPS when sending in subscriptions if you can possibly help it. Try and get somebody in your neighborhood to send with you, and send a dollar bill.

We intend to publish an unusually large edition of the Instructor next month, for gratuitous circulation. Advertising rates found elsewhere,

We design adding some new attractions to the INSTRUCTOR for December. Owing to the flurry incident to the change of ownership, we find it impossible to do so this menth.

The American Bee Journal is going to take a new departure. It will be issued weekly next year as an eight-page magazine, at \$2.00 per year. We wishifriend Newman unlimited success in his new yenture.

The American Bee-Keeper came to us last month with a bran span splinter new title page, which greatly improves its appearance. Give us your hand, brother Harrison, and long may the Bee-Keeper live and prosper.

The advertisements of Riegel & Drum and Riegel & Brehmer, which appear this month, should be taken advantage of by anyone desiring anything in their line. They are clever, reliable gentlemen to deal with, and of unimpeachable integrity.

The National Poultry Monitor is the name of a new twenty-page poultry journal, recently started at Ashland, O.,

the initial number of which lies before us. It is a very nearly gotten-up magazine, and its table of contents is exceptionally good. We welcome it to our exchange list, and hope it will meet with as great success as it deserves.

We cordially invite bec-keepers every—where to send us short and concise reports of their operations for the season, and especially of the condition of their bees for going into winter quarters. We invite you also to send us any questions you may desire answered, that will be of interest to bee-keepers, as we are making arrangements with some of the most prominent apiarists of the country, who will help us to do all that can be done to make everything "plain sailing" for bee-keepers.

We wish to call the particular attention of advertisers to our reduced advertising rates, to be found on the last page. Although the circulation of the Instructor is greater now than it has been for some time, we have reduced our advertising rates about one-third, believing that it will pay us in the long run to do so. We are confident that, taking everything into consideration, advertisers can find no better medium through which to reach the bee-keeping public than the columns of the Instructor. Try it.

We feel that, in justice to ourselves, we should offer an apology for the paper on which our journal is printed this month. We had ordered an excellent quality of calendered and tinted paper in good time, but from some unaccountable cause it did not come to hand as it ought, and we have been forced to use a lighter and inferior quality of paper than we intended. This matter will be avoided in the future, as we are determined that no bee journal, for its price, shall be, in any respect, superior to the INSTRUCTOR.

We think our subscribers will hardly

recognize the Instructor next month. Although we have greatly improved it this month-giving sixteen pages of reading matter instead of eleven as usual-we intend to still further improve it the coming month. We are negotiating with some of the leading apiarists of America and expect hereafter to devote the most of our space to original articles, written expressly for our columns. We also expect to improve the typographical appearance of it, especially the title page. All we need now is for our friends to help us by exerting their influence in our behalf whenever they have the opand we will get along portunity. "swimmingly."

FEEDING IN NOVEMBER .- To those who have stocks that are short of stores we would advise them to feed with candy made of granulated and grape sugar, as mentioned on page 358. If the colony is weak feed them small quantities at a time just over the cluster and cover them up warm. If yon have chaff cushions, and only a few stands of bees, they can be protected by almost any kind of old clothing. A partly worn blanket is an excellent article to put next to them, when you can finish up with whatever you may have at hand, that will keep them warm. If the colony is strong, a wired frame filled with this candy can be placed in the hive, and if the weather is not too cold the bees will soon place it in their empty combs, and cap it over for winter use.

WINTERING BEES IN CELLARS VS. ON SUMMER STANDS.—From what we glean from our experience, and more especially from experience of others, we are satisfied that this question stands about thus: In severe latitudes, say 40 degrees and northward, bees will no doubt do well, perhaps best, to be nicely put away in dry, well-ventilated cellars; but south of about this degree of latitude, we believe,

as a rule, that they will do best carefully protected on their summer stands. This is a matter, however, about which apiarists differ, each one looking at it from his own stand-point, and experience. Some will succeed best one way and some another; and about the best advice we can give is for each to pursue that course in which he has the most faith, (let him adopt whatever plan he may), and put away his little pets as comfortable as possible, in their winter quarters.

The honey season in this section of country has been a poor one, generally speaking, and many stands will go into winter quarters weak in bees, and short of stores. We know of a few colonies, however, of pure Italians, that have made considerable surplus honey, some as high as 100 lbs., but these are the exceptions while the rule is, that many stands have made no surplus, have thrown off no swarms, and in some cases have not stored away honey enough to carry them through the winter. Our advice in all such cases is to double up your swarms until they are strony, and then if they have not sufficient stores to carry them through the winter, feed them up with syrup, or bee candy, made as brother Root recommends, elsewhere in this number of the INSTRUCTOR. This ought to have been done early last month, but may be done yet, if the weather should not set in too cold.

CHANGE IN DATE OF PUBLICATION.—
We have concluded, after mature consideration, to change the time of publication of the Instructor from the first to the middle of each month. Several considerations, not necessary to mention, have had a bearing on the matter; but one of the chief reasons is the fact that all the other bee journals of the country—so far as we are aware—come out on the first of the month; and in order to supply the "missing link," or rather to

form a connecting link between the first and first of the months, we have concluded to drop into the middle of the month, that we may from time to time the better review the past, take in the present, and anticipate the future necessities of our patrons. We will therefore make it a point to send out the INSTRUCTOR promptly the middle of each month; and hope that all contributors will send us their articles the first week of each month promptly, so that we may have the material before us, at the beginning, from which to make up our journal.

The North American Bee-Keepers' Eleventh Annual Convention, which met at Cincinnati on the 28th of September, seems to have been of unusual interest. The meeting was well attended by the leading apiarists of the country, and a commendable degree of interest was manifested by the members of the Association. Everything passed off with zeal and harmony, and much was done that is calculated to encourage bee-keepers all over the land to move forward with greater confidence in the work in which they are engaged. And although the entire proceedings of the convention would be of interest to bee men, we will only be able to give such portions as we believe will be of unusual interest to our readers. These portions of the proceedings will be found treated under their appropriate heads, elsewhere, in this number of the INSTRUCTOR.

We are glad to see that the bee-keepers' of North-West Missouri and Eastern Kansas have become aroused to the necessity of having a regular organization to further the interests of Apiculture.

The bee-keepers from the sections named met at St. Joseph, Mo., on the 12th of September last and perfected an organization by adopting a constitution and by-laws, and electing the following officers for the ensuing year:

President, D. G. Parker; Secretary, R. S. Musser, St. Joseph, Mo.; Treasurer, B. F. Colt; Vice Presidents, J. P. Rodgers, Holt county, Mo.; F. C. Frost, Clinton county; John Merlin, Andrew county; Dr. H. Johns, Caldwell county; J. Needles, Gentry county; J. Rhodes, Atchison county; J. A. Matney, Buchanan county; Jesse Crall, Atchison, Kansas; G. Lanker, Garay City, Kansas.

A meeting was set for October 13, 1880, the following important subjects being selected for discussion: "The Location of Apiaries;" "The best mode of Wintering Bees;" "The Moth." We will keep our readers advised as to the time of the Society's next meeting.

PREPARING BEES FOR WINTER.-In preparing bees for winter many things are to be considered, and the next thing in importance, aside from plenty of stores, is to have the room occupied by the colony proportionate to its strength. No colony should have more frames than they can nicely occupy. In the American and Riegel nine frame hive it is better in most cases, at this season of the year, to take out two or three frames and close up on the bees with a division board, or boards, and make the room correspond with the strength of the colony. A good way is to close up with the chaff cushion boards, if you have them, and if not, move the division boards up close to the bees, and fill in with chaff, paper, or some other material to make the hive as warm as possible.

A little bunch of bees in a large hive would be situated about like we would on a cold winter night in a bed so arranged that the blankets would hang about us, but so far away as to be entirely out of our reach. We have wintered weak colonies nicely on five frames, and believe there are few that require more than seven. We are speaking now of wintering on summer stands; and are fully satisfied from reason, and observa-

tion, that the warmer and more comfortable we keep our bees through winter, the less stores will they consume. We can "tuck them up" in their winter quarters, if we will take a little pains, much as we would "tuck" our children "in their little beds" on a cold winter night; and they will well reply us for our trouble by coming out in the spring in good condition for a profitable spring and summer's work.

TEMPERANCE MEN PREFERRED BY BEES.

"Persons using liquor or tobacco are never successful bee-keepers."—Quinby's New Bee Keeping.

We can not tell whether the above is a fact or not, as we neither use liquor or tobacco; but fact or no fact, we believe it is the duty of the bees to chastise their keepers if they commence practicing at the bar.—American Bee-Keeper.

We sail in the same boat friend Harrison, and will only say if it is not a fact, it ought to be.

The following from the Wisconsin Farmer expresses our sentiments exact ly, in relation to the cultivation of honey crops. We believe the day is not far distant when the cultivation for bee pasturage will become as common among apiarists as pasturage for cattle is with farmers. This it seems to us is the only way to guard against the present disastrous results in bee-keeping:

"After the poor yields from white clover of the last two years, we are confirmed in the opinion that it will not only pay to plant with a special view to the honey product, but also that honey will not become a staple, with a fixed and permanent value, and quotable as are other staples, until more attention is given to providing forage for the bees, that the product may not depend wholly upon the favorableness of the season for white clover, basswood, or any other bloom of spontaneous growth. With but a few acres of honey plants, judiciously selected, and proportioned to the extent of the apiary, never would we hear the doleful reports of "bees starving," "feeding to prevent starvation" "starved out in winter;" but, instead, in good seasons for spontaneous bloom, the burden of the song would be one of gladness, and in poor seasons it would be one of content."

J. N. Bick, of Toledo, Ohio, says:—My father, before using the "Only Lung Pad," could not sleep nights on account of his violent coughing. Since wearing it he has slept soundly every night. See advertisement.

#### To Contributors.

In writing for the INSTRUCTOR write on one side of the paper only, and be careful to write NAMES very plainly, that mistakes may be avoided. It will suit us just as well (if it will you) to write on a light quality of manilla paper, as on the finest writing paper. In lengthy articles postage can be saved in this way. Do not be later than the 5th of the month (unless unavoidable) in mailing your contributions to us; otherwise they may not reach us in time for publication. We invite correspondence from all bee-keepers on subjects relating to the apiary, and will always cheerfully give such articles room in our columns. We want to lead the van in publishing a practical bee journal, and think we can do so if each one who reads this will take it as a special invitation for him to write.

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