The Nebraska bee-keeper and irrigator. Vol 7, No 6 June, 1896

York, Neb.: L.D. Stilson, June, 1896

The Nebraska Bee-Keeper
AND IRRICATOR.

A MONTHLY JOURNAL DEVOTED TO APICULTURE AND IRRIGATION.

Vol. 7. YORK, NEBRASKA, JUNE, 1896. No 6.

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Planting For Honey Alone--Lindens.

R. S. RUSSELL.

In reply to Dr. Miller (see page 486, of the Bee Journal for 1895,) above topic, I would say that he demands the proof that it will pay, and admits that he may have been led astray in joining the crusade against planting for honey, or making any effort to perpetuate or improve our great honey-plants. He says he is ready to recant, provided the proofs are given that he is wrong. Now, it seems to me we should have some evidence to prove that the Creator of the bee did not understand the proper food required for its sustenance before admitting so mischievous a theory to controversy.

Who will come forward and prove that it will not pay to plant for honey alone? I wish to see this evidence. Let's see. The field of this locality contains at least 100 square miles for 100 colonies, and is growing larger as the flora decreases. This decrease has been so rapid in the last 40 years as to be utterly beyond computation, yet it is safe to say that for each acre of this field sown to honey-plants, 1,000 have been rendered as barren as any desert for honey. And for each honey-producing tree planted in the field, more than 1,000 of the very finest have been destroyed. Our honey industry has kept in line with the general destruction of the native flora, and the result is now visible to our people. In this once famous honey-belt where dearths were unknown, with its countless numbers of prosperous colonies in skeps, boxes and logs of all sizes and varieties, and the hollow trees breaking down with their loads of honey, and bees on a parity with gold and silver, may now be seen a lot of old patent hives of all kinds piled up in fence corners, with now and then a diminutive colony labeled "For Sale," or trade, and, like the poor tramp, they are looking for a job.

But with this great object lesson before our eyes, who is there yet to still declare that it will not pay to plant for honey, for they have tried it? How many square miles of honey-plants has he placed in the field to substitute for the thousands of acres of corn, wheat, oats, potatoes, rye, barley, timothy, blue-grass, sorghum, and tobacco raised in his field annually? How many lindens, poplars, honey-locusts, sour-

woods, willows, etc., did he use in the experiment to substitute for the thousands destroyed in his field annually? How many years were required for the experiment? These are factors that will bring the question to a point.

It is seen that sowing a few acres to buckwheat, or a small field of clover, or planting a few lindens, is no test whatever, and the fact remains that we must sow or we cannot reap.

I am asked to point to a successful case of planting for honey alone I answer, the wise Creator gave us a most beautiful example in North America, where each locality was supplied with honey-plants suitable to its latitude before introducing the honey bee, and that he designed they should be perpetuated there can be no doubt, as he supplied each variety with an abundance of seed, so constituted as to admit of almost endless improvement, which, unlike other plants, have been wholly neglected, and are now mostly destroyed, causing most disastrous results to the honey industry. The situation is not only strange, but alarming, as many bee-keepers now admit that the goose that laid the golden egg has been killed.

The Doctor asks, What shall we plant? I answer for our latitude:

First of all, lindens, for the following reasons: They are long-lived, native trees, very hardy, and originally produced more honey than all other plants and trees combined, and by proper selection of varieties they will give a steady flow for two months, with rare failure.

2nd. They are the most beautiful shade or ornamental trees on the earth, and require no trimming or pruning; but maintain a most beautiful form until death, when their bodies would again doubly repay the expense for rearing them, aside from the honey and shade.

Perhaps in other localities some other tree might be more suitable for the purpose. We have 1,000 miles of public roads on each 100 miles square—sufficient room for 650,000 lindens, or 2,000,000 to each county, or 182,000,000 in our State; and it is thought our next Legislature at its next session, will pass a law compelling all land-owners to plant suitable shade-trees on said roads, and if so, why can we not have the lindens? Surely we can, if we make proper effort.

I, for one, am sure that no man need fear a failure of honey with 250,000 nice lindens in reach of his bees. The Indiana State Bee-Keepers' Association, at its last session, passed a ringing resolution endorsing planting for honey alone, also urging our Legislature and various park commissioners, and all citizens of our State, to use their entire influence in propagating our most beautiful and useful lindens.

Zionsville, Ind. *American Bee Journal*

Past and Present of Bee-Keeping.

From the Canadian Bee Journal we take Editor Holtermann's reply to the "Past and present of bee-keeping" by G. M. Doolittle.

If our readers will study that article first, they will better understand what we are about to say. Mr. Doolittle wants to know if the depreciation in price is not due to over production. In reply to that first question we would say that when some of our best bee-keepers say they would sooner produce a pound of honey than a pound of pork (and pork is quoted at present at $4.75 per hundred), we can hardly say that there is over-production, in our estimation, is having to produce an article and sell it so as not to leave a living profit. We find cases in which people have sold honey at very low figures, but that does not necessarily prove over-production. It may show that the man has not found the best way of marketing his honey, or that owing to carlessness or ignorance, or disadvantage of locality or season, he has produced an inferior article. Again, without being justified in using the term over-production, there is in almost every business "the survival of the fittest," and in that management and locality plays an important part.

What has brought diminished prices to day is the fact that $1.00 will go further to-day than it would in 1874. Take that very American Bee Journal—in those days it cost, monthly, $1.00 or $2.00, where to-day you can get it weekly for $1.00. You can get a much better suit of clothes for $10.00 to-day than you could in 1874; bee-supplies are less, and so on. Again, every one admits there was big money in bee-keeping in those days. Those who engage in a new business at that stage say it is a reward for shrewdness and quickness to preceive an opening for business. The same man, if another man engages in the business, and he is the buyer, calls it "highway robbery prides," and so on, but as more engage in it, prices come down to something like a living profit.

As a study was made of bee-keeping, increase was kept down, comb foundation was used more freely, the value of shade and ventilation was, by some at least, known; we were able to produce for much less money, and yet make the same profit. As men learned better methods of wintering, and were more certain to bring their bees out strong in the spring they could produce for less money. These are only directions in which every business must go without arriving at the stage of over-production.

But there is still another point to which we must draw attention: Can we say that we have over-production before we have developed and cultivated our markets to the fullest extent? We think not. Bee-keepers have gone on, and on, producing, yet they have made little or no efforts to increase the demand for honey. Here and there, true, an indi-

vidual has made the effort, but he has become discouraged through lack of assistance from those who benefit as much as himself. He has done it without renumeration beyond what all other bee-keepers would receive through his efforts, and the necessity of winning bread for himself has prevented continuing that work.

United States bee-keepers could well combine, and engage the services of not one man, but several men, whose duty it would be through press and tongue to put the advantages to be derived from the use of honey before the public. We know of extensive manufacturers who guard the fact they use honey in the preparation of their products as a trade secret, and they will, and have been known to, purchase no more from those who mentioned the fact to rival manufactures to secure further trade. Amongst such men are confectioners, bakers, vinegar makers, liquor and beverage manufacturers, tobacconists, and makers of printers' rollers. Here is a vast field to work on, as yet almost untouched.

Again, few are using as a table article honey—one of the most wholesome and pleasant of foods. The people could be educated and induced to use 1,000 pounds where they use one to-day. This can be done by judicious items constantly supplied to the press; it is a case of "keeping everlastingly at it brings success." Keep honey before the people, in the paper, in the stores, and at the table, and success is as certain as it is sure that daylight follows darkness

We have before spoken of educating and inducing the public to use honey. Honey at present prices is an economic and valuable food—one which has a right to appear on the poor man's table, but during and since the days of ancient history it has been looked upon in the light which honey is, will suffer very much from the suspicion of adulteration. Much of that suspicion is unjust; it is in part owing to the finish and perfection of comb and extracted honey, the quantity produced, and ignorance about bee-keeping, that the idea is gaining ground. We can get nothing more powerful and quicker in action in returning confidence than Legislatures making adulteration a severe offence. A copy of such an Act upon the package, to spread the fact abroad that such an Act exists, will give confidence as nothing else can; and if needed, will apply the blister which will correct any evil tendency.

No, Mr. Doolittle, we do not think any one is justified in throwing the blame on over-production. Take action, or get your Government to take action, along the above lines, and bee-keeping will have a new era of prosperity. Let the development of markets go hand in hand with the development of bee-keeping.

Fertilization of Flowers.

From a Lecture by Prof. A. Dendy, D. Sc., F. L. S., at Canterbury, N. Z.

It would appear that there was a time when insects did not habitually visit flowers in search of honey, and when none of them even possessed the long proboscis which is so essential to that pursuit, their mouth parts being adapted simply for biting. At that time, also, such flowers as existed had probably no honey to offer them, and, being on the whole a truthful family, they did not advertise by means of bright colors and strong scents, the possession of an article which they had not got. Still less did they exhibit any of those marvelous contrivances whereby insects are now pressed into their services as pollen carriers.

Cross fertilization was doubtless at first effected accidently by means of the wind, as is still the case in many flowers at the present day, and it is a very significant fact that such anemophilous flowers are always inconspicuous and devoid of scent, as, for example, in the grasses and cereals. In order to secure cross-fecilization by the wind, however, an enormous quantity of pollen must be produced, to compensate for the immense amount which is lost in transit; so that wind-fertilization is an extremely wasteful process.

Now suppose a certain species of insect took to regularly visiting a certain kind of flower, having found, perhaps that pollen is good to eat, or even that the flower afforded a convenient shelter. Then, whether the flower was previously cross fertilized by wind or not, it is certain that cross-fertilization will be occasionally effected by pollen accidentally carried by the visiting insects. In virtue of this cross-fertilization the flowers in question will produce as we know experimentally, more numerous and more vigorous offspring, and these offspring will inherit any peculiarities in the parents which make them attractive to insects, and will have some advantage in the struggle for existence over their weaker brethren. Of course, all living things vary to some extent, and no two flowers, even of the same species are ever exactly alike. Therefore the insects have a certain amount of choice, and they will certainly visit and fertilize those individual flowers which happen to be most suited to their requirements in preference to any others. Thus, if one is more conspicuous than its fellows, it will be most frequently visited and most surely fertilized. It will produce more seed and hand down to its offspring by heredity its own particular advantages.

Thus the flowers are gradually rendered more and more attractive to the insects by the slow accumulation of slight favorable variations, simply because the lucky ones always produce the most offspring, which in turn inherit the favorable variations of their parents. At the same

time the unlucky ones produce fewer and weaker offspring and gradually get weeded out by natural selection. In this way, the secretion of honey, the production of bright colours and strong scents, and lastly, the wondeaful mechanical contrivances for making the insects carry away the pollen, are all accounted for.

At the same time many of the flower-visiting insects themselves have undergone slow modification in a similar manner.

Those with slightly longer mouth parts than their fellows obtained most honey, and, being better fed, produced most offspring. These inherited the longer proboscis and so on, until the proboscis was by natural selection, developed to its present proportions.

It appears then that just as man has, through long ages of more or less conscious selection, produced an almost endless variety of domesticated plants and animals specially suited to his own requirements, æsthetic or otherwise, and differing very greatly from their original wild ancestors, so have insects acted in like manner towards inumerable flowers in a state of nature, always selecting as the recipients of their visits those which were best adapted to their own needs.

Not only have they habitually selected those which have furnished them with most honey, but they have also selected those which have proved most attractiive to them in form, color and odor. They have, as it were, impressed upon flowers the stamp of their own standard of taste in these matters. A curious confirmation of this statement is afforded by the fact that certain flowers which are fertilized by carrion-feeding flies have in consequence developed yellowish or brownish colors, and a foetid odor of decaying animal matter which to our senses is highly objectionable, though doubtless extremely attractive to the flies. The vast majority of insect-fertilized flowers have, however, odors and scents which to our senses are very pleasnt, so that in these respects it appears that our own standards of taste agree with those of certain insects, and notably of the bees and butterflies.

Now we cannot doubt that flowers developed beautiful forms, and bright colors and sweet scents for the purpose of attracting insects long before man put in appearance on the scene, and as man's ideas of the beautiful in form, scent and color are largely derived from contemplation of flowers, while these in turn owe their characters to the selection of insects, it would appear that insects really set the fashon in these matters and that man owes his aesthetic ideals in great measure to some of the most despised of all his fellow creatures.—The Australian Agriculturist.

IRRIGATION.

"A boat, a boat, to cross this ferry."

Officers of the State Irrigation Association:—President, A. G. Wolfenbarger Lincoln; Vice President, H. E. Babcock, Ord; Treasurer, Joseph Oberfelter Sidney; Secretary, James L. McIntosh, Sidney; State Lecturer, I. A. Fort North Platte. Next meeting will be held at Lexington, Neb.

American Gardening-Talks on Water.

From all parts of the country comes the old, old story; the drought increases and all sorts of plant life, especially vegetables and small fruits, are being sadly injured or destroyed. When we consider the fact that water constitutes at least three-fourths of most forms of plant life, its necessity is evident. With ample wind power in the heavens above, and an abundance of water in the earth beneath, it would seem to be an easy matter for the gardener and the mechanic to use the power of the wind to elevate the water and relieve the parched plant life on the earth's surface, and yet, year after year comes the story of the destruction of vegetables, small fruits and farm produce by drought. Ten years ago Prof. Storer said that of any one item of good practice in agriculture more than of another, that is shamefully neglected in the Atlantic States, it will assuredly be said of irrigation. Not one farmer in a thousand seems to have any just conception of the fact that by applying water to the land we manure the land by means of matter which the water holds dissolved and invisible. Not only may land be fertilized in this way, but in many cases it may be fertilized adequately for the continual production of remunerative crops. In many situations a small amount of manure applied to irrigated land will produce results such as could not be obtained by the most generous dressings of manure, if the land had nothing to depend upon but the rain which falls upon it. Irrigation assists plant growth in three ways; it furnishes water, without which vegetable life is impossible; it furnishes fertilizing elements contained in well or spring water, and makes available similar ingredients in the soil, and it keeps the active cells of the plants in a glutinous, half liquid condition, and enables them to properly perform their functions of absorbing and digesting the food required by the plant.

It is, however, useless to call attention to the losses of the gardener and fruit grower resulting from the periodical droughts, or emphasize the physiological reasons which make successful plant growth impossible without an abundant supply of water, unless a remedy can be suggested that is at once cheap and practical.

The conditions for irrigation in the East are extremely favorable, although differing essentially from the conditions in the West. In most places large storage reservoirs with connecting ditches or sluices are

neither possible nor necessary. An abundant supply of water may be obtained a few feet beneath the surface, which can be pumped into tanks or reservoirs by wind-mills or steam or gasoline engines. A wind-mill or engine should be purchased and the entire plant built for less than $200. The interest, cost of repairs, etc., should not exceed $15 a year. This means, say, 150 quarts of strawberries, or perhaps 30 bushels of peas, and is equivalent to the cost of half a ton of ordinary fertilizer. Is it possible for the farmer, gardener or fruit grower to make a better or more satisfactory investment?

"June, the month of storms."

This season is not an exception, but a demonstration of the rule. The proverbial saying that, "the oldest inhabitant never saw such weather" is not far from the fact. The tornado which struck the city of St. Louis, causing such deplorable loss of life, was probably only more destructive than a score of other storms of the season because it struck a large city. The tornado which sweeps through a farming section is the same irresistable element of destruction; and the farmer who loses buildings, crops and stock, is as much an object for sympathy and aid as are city sufferers, even though his misfortune is overlooked by the newsgatherer who fills the papers with columns of detail about the storm which demolishes the ramshackle sheds of the city slums.

The storms of this Western country have been notable for the destruction wrought by hail. From almost every state and in fact from almost every county come reports of destruction from this element. In many cases the loss is irreparable. Crops of fruit and grain especially have suffered severly, and on many farms the loss is total. For all such we express the sympathy which is never wanting among farmers and is a world wide bond of fellowship.

These storms have their compensation. They are the natural and apparently inevitable accompaniment of summer rain. The rain is the one thing above all others that the Missouri Valley farmers have needed. The anxious waiting on a season of normal rainfall which has prevailed for the past two years cannot be forgotten. Thousands have been financially ruined by successive droughts, and other thousands were despairing. The present season brings renewed hope, and, we hope, a new order of things. If some of us suffer by the process of restoring normal weather conditions let us thank God and take courage for new efforts. This is the silver lining to the cloud which has overhung Western agriculture. There is fury in the cloud, still; but the fury is for the few. The blessing of rain, abundant, refreshing rain, inestimably outweighs the damage from all elements.—The Cultivator, Omaha.

If "a drop of ink will make a million think," what will a drop of water do?

Nebraska State Horticultutal Report.

The twenty-seventh annual report of the Nebraska State Horticultural Society has just been received. The volume is uniform in size and binding with former years. The subjects of the volume are Small Fruit Culture and Birds These will scarcely suggest to the average reader the interest of this book and the value which attaches to it. The design is to make this not only a handbook of cultural directions for growing small fruits, but much more than this; it might well be used as a text-book for horticultural study. In this direction we have, for example, by Doctor Bessey, a complete botanical summary of the strawberry. In like mannea, Prof. Card, Horticulturist of the experiment station, has given an excellent botanical study of the "bush fruits." This ineludes the raspberry, blackberry, currant, gooseberry, juneberry, buffaloberry, tree-cranberry, etc. Accurate knowledge of these fruits is much needed, and Prof. Card's work is giving us what may be termed a monograph on their botanical relation constitutes no small part of the value of this volume.

Irrigation, tillage and marketing of fruits, with other interesting papers, make the purely horticultural features of the report equal to any of the society which is high praise.

But a feature of the report which is altogether extraordinary remains to be mentioned. Mr. Lawrence Bruner, Entomologist of the Nebraska experiment station, has prepared a study of the Birds of Nebraska in the interest of the Horticultural Society and in this volume has given the resul of this work We find here 768 species of birds classified, while the more important ones are described in detail, and illustrations given of many. This we believe is the first authoritative collection of the bird lore of this section on the purely local basis which makes it of economic value. The work is done with Mr. Bruner's usual careful attention to detail, and it will doubtless prove a permanent contribution to scientific knowledge as well as of great economic value to the farmers of Nebraska and the surrounding country.

About Surface Water Irrigation.

J. H. HALE, OKLAHOMA IN ORANGE JUDD FARMER.

Lack of moisture has wrought much destruction among growing crops in recent years, and many localites will continue to be affected from season to season. The unequal distribution of rain will be felt more and more each year as our country increases in population, as timber is cleared away, and ponds and lakes are drained for agricultural purposes. The business farmer is already looking about for relief from drouth, and depends much upon agricultural journals for new ideas. Rain-makers are a fake. Diversity of crops with early and late planting gives some relief; but even then there can be found on nearly every

farm a tract of land that can be conveniently irrigated either by means of well and windmill, sidehill spring, or artificial reservoir. A few acres of now worthless land can be made valuable on most farms as a pond. Select as high an elevation as convenient, without too much water-shed, and plow and scrape the loose dirt into a heavy dike on the lower side, making the pool as deep as possible. Use but very few rocks or fixtures until your dam is completed, and then on the outside only. Commencing with solid footings, carefully arrange a riprap wall on all parts of the dam where there is likely to be an overflow, and if the surplus water is allowed to escape through the center, lay that much of the wall in cement, and cover the flat places and where the waves chafe the dike with common gravel. Don't build a perpendicular wall of any kind, or waste time placing rock inside or on top of the dike. All loose soil not covered with rock should be sodded. A gaspipe can be laid through the bottom of the dike and a hose attached to conduct the water to the growing plants without the usual waste incurred by ditches. A few acres of garden vegetables, berries, potatoes, etc., will pay for the outlay in one season, and then the pool can be utilized in many other ways. Stock it with fish and water fowls, set trees about it, build a boat on it for summer, in winter get the year's ice supply and skating and last but not least, you utilize the surplus water from summer showers that is now allowed to pour down over the fields and wash the growing crops away.

Praying For Rain.

The rainmakers having utterly failed, the people of this country are learning that rainmakers are not needed anyway. But the fact is not yet generally known throughout the world. Reports come from Spain of a prospect of terrible destitution owing to the damage to the wheat crops by insects and drouth. The United States consul at Malaga writes to the state department that a new insect pest as destructive to wheat as the phylloxera is to the grape has damaged the crops in several provinces, while owing to a severe drouth not only will the entire wheat crop be a total failure, but there will be a shortage of every other crop of grain. The poor are suffering much, and unless rain comes the wine and fruit crops will become a total loss, and great suffering and want will prevail throughout the whole country. In this extremity the people have gone to praying, and the relics of a saint who has been dead several hundred years were carried through the streets of a Spanish city, followed by a multitude praying for rain. With all due reverence for the simple and sublime faith of these people, we must submit that it would be more to the point if the people or the government would inaugurate experiments to discover some rational method of overcoming the dangers of drouth and the evils of insect plagues.—The Western Soil Culture.

SUMMER MEETING

Nebraska

* * * * *

State Horticultural Society.

* * * * *

York, Nebraska, July 22-23,

. . 1896 . .

Harvest excursion rates from eastern points. Many visitors from the east and noted Horticulturists are expected.

Free conveyance for all visitors to points of interest in the vicinity.

Horticulturists and others are urgently requested to bring in exhibits of fruits, flowers, trees, seeds, and vegetables; also horticultural appliances, traps, pickers, pruners, dryers, sprayers, etc. more especially such as can and are made at home.

Nebraska Peaches won highest praise for quality at World's Fair in 1893.

COME, SEE, AND EAT?

HOTEL RATES:

LeGrand	$1.50	Miller	$.80
Blodgett	1.50	Stelmo	.75

Program, July 22.

Arrangement of Tables and Exhibits until 2:30 p. m

Wednesday Afternoon, 2:30 p. m.

* . . Music . .

Invocation.

. . Music . . *

Address of Welcome by.....Hon. B. King, Mayor.

Response in behalf of Society, E. F. Stephens, Pres.

* . . Music . .

A Commercial Peach Orchard, by .... J. M. Russell, Wymore.

Discussion, led by.....C. A. Whitford, Arlington.

Reports from Fruit Districts.

. . Discussion . .

Fruit Growing and General Outlook in Central Nebraska by.....W. F. Jenkins, Arcadia.

. . Discussion . .

Profits of Orcharding, E. C. Sanborn, Springfield.

Practical Culture of Flowers at Home, by..... ....E. Corbin, Grand Island.

Propagation of Seedling Evergreens, by..... ..... W. R. Harris, Tecumseh.

Wednesday Evening, 8:00 p. m.

* . . Music . .

Invocation.

Embellishments of the Modern or Park Cemetery by..... .....J. Y. Craig, Omaha.

* . . Music . .

Early Days of Horticulture in Nebraska, by Hon. Alvin Saunders, (last of the War Governors.) (Omaha.)

Rocky Mountain and Black Hills' Conifers, by .... Rev. C. S. Harrison, Weeping Water.

* . . Music . .

What Inducements for Fruit Planting in the West? by.....Geo. VanHouten, Des Moines, Iowa.

Horticultural and Agricultural Advantages of Nebraska as compared with other States, by..... ..... H. F. McIntosh, Omaha.

July 23.

Thursday Morning, 8:00 a. m.

Talk on Parks, by.....W. R. Adams, Omaha.

Arrangement and Planting of Home Grounds, by.. ..... J. H. Hadkinson, Lincoln.

Cross Breeding and Fertilizing American, European and Japanese plums, (experience with and record of 1500 varieties,) Theo. Williams, Benson

Discussion, led by H. C. Raymond, Council Bluffs, Ia.

Most Promising Varieties of Native Plums, ...H. A. Terry, Crescent City, Iowa.

Reports from South-eastern Nebraska.

G. N. Titus, Nemaha.

Paul Nemechek, Humboldt.

Report from Kearney County, Nebraska.

G. A. Strand, Minden.

Reports from North-eastern Nebraska.

R. N. Day, Tekamah,

G. A. Marshall, Arlington.

Reports from Central Nebraska.

Peter Youngers, Jr. Geneva.

Montreville Robbins, York,

Outlook for 1896.....

G. A. Slayton, Salem.

Clyde Barnard, Table Rock.

Thursday Afternoon

Carriage drive, City and Country, by the Citizens of York.

E. F. Stephens, President,
Crete, Neb.

J. H. Hadkinson, Secretary,
Box 1352. Lincoln, Neb.

L. D. Stilson York Neb., in charge of local arrangements.

Fruit sent in advance to L. D. Stilson will be held safely in cold storage.

The Nebraska Bee Keeper

Published Monthly.

Subscription Price, 50 Cents per Year.

L. D. STILSON, -:- -:- EDITOR.
YORK, NEBRASKA.

Official Organ of the Nebraska State Bee-Keepers Association.

Entered at the postoffice as second class matter.

Officers of the North American Bee-Keepers' Association 1896:—President, A. I. Root, Medina, Ohio; Vice Pres., Wm. McEvoy, Woodburn, Ont.; Secretary, Dr. A. B. Mason, Auburndale, O.; Treasurer, W. Z. Hutchinson, Flint, Mich. The next meeting will be held at Lincoln, Neb.

Officers of the Neb. State Bee Keepers Association:—Pres., E. Whitcomb; Vice Pres., H. E. Heath, Lincoln; Sec. and Treas., L. D. Stilson, York.

The Nebraska Irrigation Annual has been received. This is the first number, and is as the title suggests a hand-book for the progressive citizen, farmer and business man. It contains a stenographic report of the proceedings of the third annual convention of the Neb. State Irrigation Association. It also contains contributed articles by irrigation experts of national and state reputation. The editor, A. G. Wolfenbarger President of the Association is a genuine Nebraska hustler and in this work he has got more common sense and real information for the western irrigators than any work we have ever seen. After the report of the state convention he gives his readers kodak and pen pictures of some of the promotors and workers in irrigation, also the laws in regard to water as applied to irrigation in Nebraska; also gaugings of the flow of some of our principal rivers, underflow windmill and storage resevoirs. It is a very complete work and none but he who had the push of Wolfenbarger could have bettered or even equaled it for the first one. Price 25 cents in paper covers.

Stand up for Nebraska.

The Summer Meeting of the State Horticultural Society will be held at York Neb., July 22-23, 1896. On July 21 Harvest Excursion tickets will be on sale at Eastern points for this occasion. Send east and have your friends visit Nebraska at this time.

Our crops look fine. Young men come, visit and see.

Program of the meeting on another page.

For further particulars address,

L. D. Stilson, York Neb.

Sweet Clover Seed.

WE have just received a supply of Sweet Clover seed and will sell at 30cts per pound, by mail, postpaid; 5 lbs. for $1.00 to be sent by express, purchaser to pay expressage. Send CASH with order. Address,

BEE-KEEPER, York, Neb.