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Bee-Keepers' Legal Rights

National Bee-Keepers'
Association
1910

BEE-KEEPERS' LEGAL RIGHTS

National Bee-Keepers'
Association

SF 523
.N3

ABUSE OF U. S. MAIL

SEC. 496 U. S. LAWS AND REGULATIONS

(a.) When not liquid or liquefiable, they must be placed in a bag, box or removable envelope or wrapping, made of paper, cloth or parchment.

(b.) Such bag, box, envelope or wrapping must again be placed in a box or tube made of metal or some hard wood, with sliding clasp or screw lid.

(c.) In case of articles liable to break, the inside box, bag, envelope, or wrapping must be surrounded by sawdust, cotton or other elastic substance.

When in glass bottles or vials, such bottles or vials must be strong enough to stand the shock of handling in the mails and enclosed in a metal, wooden or papiermache block or tube not less than three-sixteenths of an inch in the thinnest part, strong enough to support the weight of mails piled in bags and resist rough handling; and there must be provided, between the bottle and said block or tube, a cushion of cotton, felt or some other absorbent, sufficient to protect the glass in handling; the block or tube to be impervious to liquids, including oils, and to be inclosed by a tight-fitting lid or cover, so adjusted as to make the block or tube water tight and to prevent the leakage of the contents in case of breakage of the glass.

Queen bees and their attendant bees, may be sent in the mails when properly put up so as not to injure the person of those handling the mail, nor soil the mail bags or their contents.

Never send comb honey by mail, and see that all other packages conform to U. S. Postal Laws. I have received by mail several broken boxes of comb hoeny for inspection. I also find poor queen cages and packages with honey sent by mail.

Tested, laying queens are often injured in the mail, especially when in suspended mail bag caught by fast trains from an arm at side of track.

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TO THE CITY BEE KEEPER

There are many keeping bees in the suburbs of cities, whose bees are an annoyance to neighbors.

1. Spotting Clothes.

This is generally worst the day bees are set out on summer stands. Bees go only short distances at that date. It is best not to set the bees out on wash days but the day following; by next week the trouble will be over. If they must be set out and if it is wash day, go to the neighbor who is washing, explain the situation and offer a present of some honey or money if they will delay washing one day.

2. At Watering Places.

Always provide abundance of water in several places for bees. Shallow wooden dishes with sloping sides, with a slatted board float, is a good form of watering dish. Somewhere have some salt, also airslacked lime where bees can go to. There is something about it bees like, and it will save trouble to supply the bees' demand. If your bees bother a neighbor's pump, go and put a piece of chees cloth over the spout and fence the bees out as well as furnishing a strainer for the water. Stock tanks are places of annoyance. Just above the water line on inside of the tank fasten a three-inch strip; it will not bother the stock, and will keep the bees from going there. Also see to it that overflow is so arranged as to not make a mud hole near the tank.

3. In the Neighbors' Garden, or Field.

If your neighbor or his horse are stung by your bees in his garden or field, I find it a good plan to donate some honey, at same time ask him to do such work on cool days or early mornings. If he is unable to keep the ground clean, then some early morning surprise him by taking your own horse and cultivate for him up to breakfast. Generally one such act will establish such good feelings no farther trouble will arise. I have proven it so.

4. At Grocery Stores and Residences in Fall.

After the honey season often, bees are a great annoyance at above places especially in empty sugar and syrup barrels, and candy shops. Go to those places and ask to place the packages where bees can not get to them. Go to sugar cane mills and keep the premises cleaned up, and to neighbors' kitchens where bees come in and bother while canning fruit, and ask them to keep the door and windows screened while at such work. Bees do not go where no sweets abound.

5. In the Highway and Public Places.

If people or teams are stung in such public places by your bees, it is your duty to so locate the bees, or change the surroundings that they do

not disturb the public. If damage to person, stock, or property is done, by the bees, the owner is liable for damages. And if it continues, may become a nuisance. High board fences or high hedges are a great help. Even with all possible precaution if bees are near the street, the bees at times will bother. Keep out of trouble if possible. Don't get the idea that the National Association can win every case. We must keep within the law if you want protection. Avoid conflicts, compromise, and live up to the Golden Rule.

N. E. FRANCE,

General Manager of National Association.

WHAT THE COURTS SAY IN RELATION TO PROPERTY IN BEES.

New York Common Law Reports—Wendell, Vol. 12-16 Lawyers' Ed., P. 548

Kiltz vs. Goff.

PROPERTY IN BEES—WHEN RECLAIMED—TRESPASS.

The owner of bees, which have been reclaimed, may bring an action of trespass against a person, who cuts down a tree into which the bees have entered on the soil of another, destroys the bees and takes the honey.

Where bees take up their abode in a tree, they belong to the owner of the soil, if they are unreclaimed; but if they have been reclaimed, and their owner is able to identify his property, they do not belong to the owner of the soil, but to him who had the former possession, although he cannot enter upon the lands of the other to retake them without subjecting himself to an action of trespass.

Citations—2 Bl. Com., 393, 418; 2 Kent, Com., 394; 6 Johns, 5; 14 Johns, 406; 7 Johns, 16; 1 Cow. 243.

Mr. S. Chapman for Plaintiff in Error.

Mr. J. A. Seeber, for the Defendant in Error.

By the Court, *Nelson S. Animals ferae naturae*, when reclaimed by the art and power of man, are the subject of a qualified property if they return to their natural liberty and wildness, without the *animus revertend*, it ceases. During the existence of the qualified property, it is under the protection of the law the same as any other property, and every invasion of it is redressed in the same manner. Bees are *ferae naturae*, but when hived and reclaimed, a person may have a qualified property in them by the law of nature, as well as the civil law. Occupation—that is, hiving or enclosing them—gives property in them. They are now a common species of property, and an article of trade, and the wildness of their nature by experience and practice has become essentially subjected to the art and power of man. An unreclaimed swarm, like all other wild animals, belongs to the first occupant—in other words, to the person who first hives them; but if a swarm fly from the hive of another, his qualified property continues so long as he can keep them in sight, and possess the power to

NATIONAL
BEE-KEEPERS ASSOCIATION
Renewal Blank

DEAR SIR:—

Your membership in this association expired_____

April 18, 1910_____ if records are correct.

There are NO BACK DUES. Annual dues are \$1.00, payable to General Manager, or if any local or State Association shall unite with National, and said Secretary sends 50c as dues of any of their members as National membership. The National Association promotes interests of its members, protects their legal rights, its information bureau has helped many members and continues its good works. If you have anything of interest to bee-keeping to sell, or want to buy, just report same to Manager, N. E. France. Special low prices secured on some supplies to members.

Every member gets free, an annual report, a badge button, receipt for dues and several other leaflets during the year.

Renewal to General Manager, N. E. France,
Platteville, Wisconsin

Date_____ Enclosed find \$_____ as
my annual dues to the National Bee-Keepers Association.

Name_____

P. O. _____

State _____

NATIONAL BEE-KEEPERS ASSOCIATION Renewal Blank

Dear Sir:—

Your membership in this association expired

April 16, 1910

if records are correct.

There are NO BACK DUES. Annual dues are \$1.00 payable to General Manager, or if any local or State Association shall unite with National, and Secretary sends \$2.00 as dues of any of their members as National membership. The National Association promotes interests of its members, protects their legal rights, its information bureau has helped many members and continues its good works. If you have anything of interest to bee-keeping to sell, or want to buy, just report same to Manager, N. E. France. Special low prices secured on some supplies to members.

Every member gets free, an annual report, a badge button, receipt for dues and several other leaflets during the year.

Renewal to General Manager, N. E. France,

Platteville, Wisconsin

Date _____ Enclosed find \$ _____

my annual dues to the National Bee-Keepers Association.

Name _____

P. O. _____

State _____

pursue them. Under these circumstances no one else is entitled to take them. 2 Bl. Com. 303; 2 Kent. Com. 394.

If a domestic or tame animal of one person should stray to the enclosure of another, the owner could not follow and retake it, without being liable for a trespass. The absolute right of property, notwithstanding, would still continue in him. So in respect to the qualified property in the bees. If it continued in the owner after they hived themselves, and abode in the hollow tree, as this qualified is under the same protection of law as if absolute the like remedy existed in the case of an invasion of it. If the property in the swarm continues while in sight of the owner—in other words, while he can distinguish and identify it in the air—that it equally belongs to him if it settles upon a branch or in the trunk of a tree, and remains there under his observation and charge.

THE BEE IN LAW—PROPERTY RIGHT IN BEES.

GLEANINGS.

By R. D. Fisher.

"If we have caught a wild beast or bird or fish or bee, the moment this animal has been caught it becomes ours, and it is regarded as ours as it is under the restraint of our safe keeping; but when it has escaped from our keeping, and regained its natural liberty, it becomes the property of the first taker, because it ceases to be ours; and such an animal is considered to regain its natural liberty when either it has escaped out of our sight, or though still in our sight, the pursuit is difficult."

Blackstone, the great law-giver, says: "Bees also are *ferae naturae* (wild by nature); but when hived and reclaimed, a man may have a qualified property in them by the law of nature as well as by the civil law." And words with the civil law, speaks Bracton: "Occupation, that is, hiving or including them gives the property in bees; for, though a swarm alights upon my tree, I have no more property in them till I have hived them than I have in the birds which make their nest thereon; and, therefore, if another hives them, he shall be their proprietor; but a swarm which flies from out of my hive is mine so long as I can keep it in sight and have power to pursue them; and in these circumstances no one else is entitled to take them." But in respect to such animals as are in the habit of going and returning, as pigeons and bees, which are accustomed to go into the woods and fields, and come again, we have this traditional rule that, if they cease to have the intention of returning, they also cease to be ours, and become the property of the first taker, because they cease to be what are termed *animus revertendi* when they have discontinued their habits of returning.

Ownership in bees is *ratione soli*—that is, bearing reference to the soil. and is said to be the ground of ownership in bees. So in the civil law, if a swarm of bees had flown from A's hive they were reputed his so long as they remained in sight and might easily be pursued; but they do not become private property until they are actually hived.

QUALIFIED PROPERTY RIGHT—HOW ACQUIRED; PURSUIT, RE-CLAIMING, REPLEVIN.

GLEANINGS.

By R. D. Fisher.

Having in a previous article laid down the general rules that govern property in wild animals, we shall endeavor to show, how the general nature of this class of property is applicable to bees.

Bees are classed with and regarded as wild animals. Therefore, since bees are wild animals, and until reclaimed and hived, no property right can be acquired in them; hived bees are the bona-fide property of the one who has reclaimed them, notwithstanding a temporary escape. So long as the owner can identify them they belong to him, and not to the owner of the soil to which they escape, although he can not enter the land to retake them without consent or committing a trespass. But even in such cases it will be seen, during the existence of this qualified right, bees are under the protection of the law the same as any other property. Every invasion of this property is redressed in the same manner, and reclaimed after the same forms of law, as any other property of the same class.

Bees are regarded in law as a common species of property, an article of trade or barter, and the wildness of their nature by practice and art has become essentially subjected to the will and power of man.

FLIGHT AND PURSUIT.

In case a swarm fly from the owner's hive, his qualified right continues only so long as he can keep them in sight, and possesses the power to pursue them where he has a right to pursue, or otherwise positively and distinctly identify them. The difficulties in reclaiming bees after taking flight are many. The decisions of our courts furnish numerous peculiar circumstances, and unfold the difficulties in reclaiming bees that have escaped from the hives or soil of the original owner. In the case of *Goff vs. Kiltz* (15 Wend. N. Y., 550), the New York Supreme Court held that, where a swarm of bees left the hive of the plaintiff, and went into a tree on the land of another, he having followed the bees and marked the tree in which they entered, while he had no right to enter upon the property to recover them without the consent of the owner, yet he could maintain an action of trespass and damages against a third party who entered the land, cut the tree down, killed the bees, and took the honey away.

The New York court, in the case of *Goff vs. Kiltz*, above said: "They remain his property notwithstanding a temporary escape; the owner keeping them in sight, and marking the tree into which they entered, they belong to him and not to the owner of the soil."

HOW RECOVERED—REPLEVIN.

Replevin is the universal remedy in the United States when chattels have been wrongfully taken or are wrongfully detained from a claimant, and he seeks to recover them in specie instead of satisfaction in damages. It is a statutory action, and the statutes are considerably variant. (See Cooley's note to *Blackstone Com.*, p. 144).

Trover is the remedy by which, under the same circumstances, to re-

cover satisfaction in damages, the defendant being allowed to retain the chattels as of his own property.

ANIMUS REVERTENDI; TRANSPORTATION; LARCENY.

Bees are *ferae naturae*, i. e., wild by nature, and classed with such wild animals as have what is called the *animus revertendi*, or a usual habit of returning whence they have escaped. During this temporary absence they remain the property of the original owner (2 Kent, Com., 348). The law, as Blackstone says, "extends this possession further than the mere manual occupation; for my tame hawk that is pursuing his quarry in my presence, though he is at liberty to go where he pleases, is nevertheless my property; for he hath *animus revertendi*. So are my pigeons, and bees that are flying at a distance from their home, and likewise the deer that is chased out of my park or forest; all which remain still in my possession, and I still preserve my qualified property in them. But if they stray without my knowledge, and do not return in the usual manner, it is then lawful for any stranger to take them." (2 Blackstone, Com. 392).

TRANSPORTATION OF BEES; CONTRACT OF CARRIAGE.

Though it may be optional with railway companies whether they will accept the full responsibility of transporting bees, yet if they do so without any express restriction they are liable as common carriers. But they may agree for a less hire simply to transport bees, furnish cars, etc.; and if the shipper and owner of the bees agrees to the lower rate, he cannot hold them as common carriers. For a given reward they proffer to become his carrier; for a less reward they proffer to furnish the necessary means that the owner of the bees may be his own carrier. (Kimball vs. Ry. Co., 26 Vt., 247).

BEES THE SUBJECT OF LARCENY.

But in a recent Rhode Island case (Rexroth vs. Coon, 15 R. I. 35), the plaintiff, without permission, placed a hive of bees upon the land of a third person. The defendant, also a trespasser, removed the bees and honey which had collected in the hive. The court found that there was no cause of action, holding that neither plaintiff nor defendant had any title or right to possession to the bees or to the honey.

Bees are likened unto wild animals belonging to no one so long as they are in their wild state and property in them is acquired by occupancy, hiving, and reclaiming only, and are not the subject of larceny unless they are in the owners' custody as in a hive, bee house, or otherwise confined and within the control of the possessor or owner.

KEEPING BEES—WHEN AND WHEN NOT A NUISANCE.

1. **General Definition.**—The term "nuisance," in legal phraseology is applied to that class of wrongs that arise from the unreasonable, unwar-

rantable or unlawful use by a person of his own property, real or personal, or from his own improper or unlawful conduct, working an obstruction of, or injury to a right of another or of the public, and producing such material annoyance, inconvenience, discomfort or hurt that the law will presume a consequent damage.

2. **Public and Private Nuisances.**—Public or common nuisances affect the community at large, or some considerable portion of it, such as the inhabitants of a town or community; and the person therein offending is liable to criminal prosecution. A public nuisance does not necessarily create a civil cause of action for any person; but it may do so under certain conditions. A private nuisance affects only one person or a determinate number of persons and is the ground of civil proceedings only. Generally it affects the control, use, or enjoyment of immovable property; but this is not a necessary element according to the modern view of the law. A nuisance, to be a public nuisance must be in a public place or where the public frequently congregate, or where members of the public are likely to come within the range of its influence; for if the act or use of property be in a remote and unfrequented locality, it will not be a public nuisance. A common nuisance according to English authority, is an unlawful act or omission to discharge a legal duty, which act or omission endangers the lives, safety, health, property, or comfort of the public, or by which the public is obstructed in the exercise or enjoyment of any right common to all the people.

Strictly speaking, a trade or occupation, a business or industry lawful in itself, and which becomes a nuisance because of its location, or the manner in which it is conducted, or the character of the animals or thing, is not a nuisance per se, though it may be a prima-facie nuisance.

3. **Keeping Bees.**—When and Where Not a Nuisance.—Whether bees are or are not a nuisance is to be judicially determined in each individual case and it would seem the foregoing definitions were broad enough to include them. Only few cases have found their way to the higher courts, involving this subject; but, with the development of the fruit-growing industry the bee's liberty is more than ever questioned, and it is not unlikely that the future will be conducive to much litigation between the fruit-grower and the bee-keeper.

Place of Keeping Bees.—One engaged in the business of keeping bees may not rightfully keep his bees in a place upon his premises so as to annoy his neighbors. Such an act is a nuisance. One of the earlier cases on this subject was decided by the New York Supreme Court (*Olmsted vs. Rich* 6 N. Y. Supt., 826), and other courts have been content to follow it. In this case the evidence showed that the plaintiff and defendants were neighbors; that the defendants were keeping a large number of hives of bees in a lot immediately joining the plaintiff's dwelling-house, and that at certain seasons they were a source of great annoyance to him and his family, and also that they could be removed without material difficulty to a place on the defendants' premises where they would not disturb the neighbors. The action was in the nature of an injunction to prevent defendants from maintaining their apiary at the place above named. The court held that the case was a proper one for a permanent injunction. In such action the issue was not as to defendants' motives in keeping bees, but simply whether the condition of things, as then and previously existing, constituted a nuisance. The court held affirmatively, and the bees were ordered removed in order to abate the nuisance.

On the other hand, an ordinance by a city council which makes the owning, keeping, or raising of bees within a city's limits a nuisance per se is too broad, and is, therefore, invalid. The most celebrated case of this kind on record is that of *Clark vs. City of Arkadelphia*, Arkansas, 52 Ark., 23. The evidence in this case showed that Clark, who had kept bees in that city for a number of years was not in political harmony with those in power and the latter sought to punish him and get rid of his presence by prohibiting the keeping of bees within the corporate limits of the city. Clark was ordered to remove his bees, but refused to do so, and his arrest and conviction by the city court under the ordinance followed. He appealed to the Circuit Court, the latter dismissing the prosecution, and then the state appealed to the Supreme Court, wherein it is held that, "Although bees may become a nuisance in a city, an ordinance which makes the owning, keeping, or raising them within the city limits a nuisance whether it is in fact so or not, is too broad and is not valid."

While bees have been kept for centuries in towns and cities it is a fact, so far as we have been able to discover by a careful search of the court records that the city of Arkadelphia is the first on record to attempt to forbid them. "All ordinances, arbitrary in their terms, and unreasonable, and unnecessarily abridging private rights, are void," says Dillon on Municipal Corporations. City ordinances can not be levied at a mere private nuisance to one or more persons. The nuisance must be public and general in its character, and must be an actual nuisance with sufficient evidence to sustain it. Courts have, therefore, taken knowledge of the habits of bees, and hold that it would be impossible at the present state of the bee industry for them to be more than a private nuisance, for which the person or persons injured or annoyed have their remedy as set forth in the *Olmsted vs. Rich* case, *supra*.

The decision of the Arkansas court is valuable and stimulating precedent is good law, and a menace to those who attempt to interfere with useful and growing industry pursuit or occupation.

DAMAGES—WHEN AND WHEN NOT A NUISANCE.

1. **Definition.**—Damages are the indemnity recoverable by a person who has sustained an injury either in his person, property or relative rights, through the act or default of another.

But no damages are recoverable for a mere inconvenience attending the existence of a public benefit.

CAPACITY TO TRESPASS.

Courts judicially know that bees can not be stabled as other animals are; that to do so would destroy their value as property. If the owners of houses, grocers, and fruit-dealers were not careless in leaving the attractions for them, bees would commit no trespass. They would go to pasture among forest, fields, and amid flowers. But the grocers, fruit-dealers, and fruit-raisers say they are not required to screen against bees if domesticated and regarded as property; that the law should protect them from the ravages of trespassing bees the same as any other trespassing animals.

This is true only so far as identification can be made positive. The instinct of bees is well understood, but their identification is difficult. The relation between fruit-growers and bee-keepers is said to be somewhat strained. The former claim it to be fair to compel the bee-keeper to feed his bees at home in seasons when they would otherwise prove a nuisance and damaging trespassers to his neighboring fruit grower. Whether it would or would not be possible to keep bees at home by feeding them heavily is an open question. But this plan would entail a heavy tax upon the bee-keeper. Would it be just to make the bee-keeper pay this when, quite likely, the cracked and rotting fruit which the bee would take from the neighbor's orchard has been produced, at least has set, because of the labors in pollination of these same bees? When bees find a fair supply of nectar in the flowers within reach of their hive they prefer that to fruit, and few bees then attack fruit. But it is not at all sure that liberal feeding will keep all of the bees at home, or nearly all of them, from trying to get fruit, sugar or juices.

The next suggestion is that of moving away if the cost would be less than feeding. But can the bee-keeper get away from the fruit-grower? If the extensive fruit-grower can sue and collect damages for injuries to the fruit on his 1,000 trees, the owner of one tree, and 1,000 owners of trees within flying distance of an apiary can also collect. If an abundant bee-pasture happens to exist a few miles away, the solution is easy and the moving practical. But this is usually of short duration; civilization and improvements, farms and fruit-gardens, soon follow, and the cry is again, "Move on!" On the other hand, it is claimed that the damages to fruit alleged to be due to bees is too remote and uncertain; and as already stated, the benefits from pollination are equal to, yes, far greater than the damages. Few if any cases have reached the higher courts, and the judgments of the low courts are largely based upon actual damages proved, and identification of trespassing bees.

INJURY TO PERSON OR PROPERTY.

A small son of an Indiana farmer left the team he was driving, near some bee-hives, while he chased a squirrel. The horses backed the wagon onto the hives, and the animals were so badly stung that they died. The boy was also stung so badly that he lost the sight of one eye. It was held that the boy's negligence occasioned the injury and resulting damages, and no recovery could be had.

An Iowa farmer maintained a hitching-rack at the roadside in front of his residence. Near by, but within his enclosure, he kept a number of stands of bees. A neighbor voluntarily hitched his horses to the rack. A swarm of bees settled upon the animals, causing them to break the tethers and run away. In their flight they collided with a team and vehicle going in an opposite direction, and both teams and vehicles were damaged. It was held that the hitching of the horses near the bees was a voluntary act, and the attack by the bees was too remote to justify a recovery from the bee-keeper for the joint damages suffered by the owners of the wrecked outfits.

In the case of *Earl vs. Van Alstine* (8 Barbour, 630), the New York Supreme Court held that the owner of bees is not liable, at all events, for any accidental injury they may do; that one who owns or keeps an animal of any kind becomes liable for any injury the animal may do, only on the

ground of some actual or presumed negligence on his part. It was alleged in this case that defendant owned and wrongfully kept fifteen hives of bees in his yard adjoining the public highway, and that the plaintiff's horses, while traveling along the public highway, and passing the place where the bees were kept, were attacked and stung so severely that one died and the other was greatly injured. A judgment of \$71 was appealed from, and the court, in reversing this judgment said: "In an action against the owner of bees for an injury done by them to the plaintiff's horses while traveling along the highway where the bees were kept, it appears that the bees had been kept in the same situation for nine years, and there was no proof of any injuries ever having been done by them, but, on the contrary, neighbors testified that they had been in the habit of passing and repassing the place frequently, without having been molested. This rebutted the idea of any notice to the bee-keeper, either from the nature of the bees or otherwise that it would be dangerous to keep them in that situation, and hence he could not be made liable."

1.—OFFENSE AGAINST PRIVATE PROPERTY; UNLAWFUL ENTICEMENT OF BEES—PENALTIES.

Laws of Connecticut, 1882, Chapter 67, Central Stat. 1888, Sec. 1466, provide that every person who shall place upon the premises of another any tub, box, or other contrivance for the purpose of enticing swarms of bees from the premises of their lawful owner shall be fined not more than seven dollars or imprisoned not more than thirty days.

2.—BEES, PROPERTY IN; DEPOSITS ON LAND.

Laws of Georgia, 1883, Chapter 2, Sec. 3074; Stat. 1895, provide that any deposit made by wild animals on realty belongs to the owner; thus honey deposited by bees in a tree belongs to the owner of the tree, though the bees may be hived by another; so the eggs and young birds, or the increase of animals (bees), so long as they remain unable to leave the land, belong to the owner.

3.—BEES, WITH HIVES AND HONEY, EXEMPT FROM EXECUTION.

Statute of Vermont, 1894, Sec. 1805, provides that, among the goods or chattels of a debtor which are exempt from attachment and execution to satisfy a judgment debt, are three swarms of bees and their hives, with their produce in honey, provided the suit brought is not to recover payment for the purchase price thereof, or for material or labor expended on the same.

4.—POISON, EXPOSING WITH INTENT TO DESTROY BEES—PENALTIES.

Section 1247, Rev. Stat. Kentucky (Carroll), provides that if any person on land or premises not in his possession or under his control shall lay or expose any poisonous substance with intent to destroy honey-bees he shall be fined not less than five nor more than fifty dollars.

Same, Code and Stat. Washington, Sec. 7161 (Laws '97, p. 11), provides that it shall be unlawful for any person within the State of Wash-

ington to wilfully or maliciously kill or poison any honey-bees. It shall further be unlawful for any person within said state to wilfully or maliciously place any poisonous or sweetened substance for the purpose of injuring honey-bees in any place where such poisoned or sweetened substance is accessible to honey-bees within this state. Any person or persons violating said law shall, upon conviction thereof, be punished by a fine of not less than ten dollars or more than one hundred dollars.

5.—BEES, ENTERING PREMISES TO DISTURB, STEAL, OR CARRY AWAY—PENALTY.

Laws of Ohio (Rev. Stat. 1890 (S & B), Sec. 6840) provide that whoever unlawfully enters the premises of another for the purpose of disturbing, or carrying away any box, gum, or vessel containing bees or honey, or injuring or carrying away any such property, shall be fined not more than five hundred dollars or imprisoned not more than sixty days or both. (60 A. 5, Sec. 1, S. & S., 279).

Same, Laws of Nebraska, 1879, Sec. 81, provide that, if any person shall steal any hive, bee-palace, or other contrivance containing honey or honey bees, the property of another, of less value than thirty-five dollars; or if any person shall steal honey from any such receptacle or other contrivance, or shall wilfully and maliciously destroy, injure, or disturb any of the aforesaid receptacles or other contrivances containing honey or honey bees, or if any person shall steal, or by art, device, or contrivance, or in any manner whatever, decoy from any such hive, box, bee-palace, or contrivance any such honey bees, with intent to convert the same to his own use, or with intent to damage or defraud the owner thereof, or by any art or device, injure, damage, or destroy any such honey bees by means of poison or otherwise, such offender shall be fined not exceeding one hundred dollars, and be confined in the county jail not less than ten, nor more than thirty days, and shall be liable to the party injured in double the value of the property stolen, injured, or destroyed.

CITY BEE-KEEPING UPHELD.

Case of the City of Rochester, N. Y., vs. W. R. Taunton.

In December, 1900, the City of Rochester, N. Y., had under consideration the passage of an ordinance prohibiting the keeping of bees within the city limits. W. R. Taunton, a member of the National Bee-Keepers' Association, living in the city, and whose business and liberties would be interfered with by such ordinance, appealed to the general manager for advice and assistance. Such printed matter as it was thought would be of service to him was forwarded, and, with the assistance of able counsel, Mr. Taunton succeeded in having the proposed ordinance, withdrawn.

But in April, 1901, the matter was revived, and through the persistent efforts of one of the aldermen, and in spite of all objections and remonstrances, the ordinance passed.

Mr. Taunton was advised not to remove his bees, and assured that if he got into trouble the Association would defend him.

Mr. Marks—a director of the National Association—was requested to

go to Rochester and make a complete investigation. He did so, and reported that in his opinion Mr. Taunton was handling his bees in a manner not to annoy neighbors, and thought he ought to be protected.

In corresponding with our attorney, Mr. Dutcher, the latter stated that the police judge, before whom the case was likely to come, was an able man, and thought the Association would better risk it there.

The case was tried upon a warrant of arrest for refusing to comply with the ordinance, and the Judge of the Police Court rendered his decision, setting aside the ordinance, and discharged the defendant.

Police Court of Rochester, N. Y.)
The People vs. Taunton.)

MEMORANDUM FOR DEFENDANT.

The defendant was arrested upon a warrant based upon an ordinance passed by the Common Council of the City of Rochester on April last, which provides in substance that no bees shall be kept or maintained within the limits of the city of Rochester, without the permission in writing of the lot owners owning lots within one hundred feet of the lines within which any bees are desired to be kept or maintained.

At the trial, the defendant moved that the warrant be dismissed and the defendant discharged, upon the grounds:

First—That the ordinance upon which the warrant is based and which defendant is accused of violating, is unconstitutional and void.

Secondly—That the ordinance in question is not fair, impartial and reasonable, but is oppressive.

Thirdly—That the ordinance in question is an unlawful attempt on the part of the Common Council to delegate its powers to private individuals.

Upon this motion, the defendant will not discuss the question whether the Common Council has power to prohibit the keeping of bees, as that question does not arise under the ordinance.

In the first place, the question whether the ordinance is unconstitutional or whether it violates some other principle of law is a question of law for the court and must be decided irrespective of the facts in any particular case.

In *People ex rel. Kemmler vs. Durston*, 119 N. Y., at page 578, the Court says: "If it can not be made to appear that a law is in conflict with the Constitution by argument deduced from the language of the law itself or from matters of which a court can take judicial notice, then the act must stand. The testimony of expert or other witnesses is not admissible to show that in carrying out a law enacted by the legislature, some provision of the constitution may possibly be violated."

In the *Matter of Elevated Railroad*, 70 N. Y., at page 327, Court holds that a court can not take proof of facts for the purpose of showing a statute valid and regular upon its face to be unconstitutional.

So that the question whether the ordinance is fair, impartial and reasonable must be determined from the ordinance itself.

In *Beach on Public Corporations*, Sec. 515 the learned author says: "It is a well-settled principle that a municipal by-law or ordinance must be reasonable. The courts will decline to enforce it, it will be declared void as a matter of law."

And again at Section 514, the same author says: "It is, of course a

question of law and not of fact for the court, and not for the jury, whether any specific ordinance is so unreasonable as to be void."

FIRST.

The ordinance is passed under the so-called police powers of the city, but the police powers of the city are not above the Constitution and are subject to the control of the courts.

In *Re Jacobs*, 98 N. Y. 98, at page 110, the Court says: "These citations are sufficient to show that the police power is not without limitations, and that in its exercise the legislature must respect the great fundamental rights guaranteed by the Constitution. If this were otherwise, the power of the legislature would be practically without limitation. In the assumed exercise of the police power in the interest of health, the welfare or safety of the public, every right of the citizen might be invaded and every constitutional barrier swept away. Under the mere guise of police regulations, personal rights and private property can not be arbitrarily invaded, and the determination of the legislature is not final or conclusive. It matters not that the legislature may, in the title to the act or in its body, declare that it is intended for the improvement of the public health. Such a declaration does not conclude the courts, and they must yet determine the fact declared and enforce the supreme law."

SECOND.

The ordinance is unconstitutional for two reasons: First, it is an attempt to take property without due process of law; and, secondly, the ordinance denies the equal protection of the law, as guaranteed by the fourteenth amendment to the United States Constitution.

In *Stewart vs. Palmer*, 74 N. Y. 183, due process of law is defined as follows: "Due process of law is not confined to judicial proceedings, but extends to every case which may deprive a citizen of life, liberty, or property, whether the proceedings be judicial, administrative, or executive in its nature."

In *Re Jacobs*, *supra*, the facts were that the legislature passed a statute prohibiting the making of cigars in tenement houses in New York and Brooklyn.

The Court of Appeals set the statute aside as unconstitutional upon the ground that it was depriving persons of property without due process of law. The court says, at page 104: "What does this act attempt to do? In form, it makes it a crime for a cigar-maker in New York and Brooklyn the only cities in the state having a population exceeding 500,000, to carry on a perfectly lawful trade in his own home. Whether he owns the tenement house or has hired a room therein for the purpose of prosecuting his trade, he can not manufacture therein his own tobacco into cigars for his own use or for sale, and he will become a criminal for doing that which is perfectly outside of the two cities named—everywhere else, so far as we are able to learn, in the whole world."

In the case at bar, the ordinance makes it lawful to keep bees in one part of the city, provide certain consents can be given; but to keep the bees in another part of the city would be unlawful if the consents were not obtained.

The court further says in the case cited, at page 105: "The constitu-

tional guaranty that no person shall be deprived of his property without due process of law may be violated without the physical taking of property for public or private use. Property may be destroyed, or its value may be annihilated; it is owned and kept for some useful purpose, and it has no value unless it can be used. Its capability for enjoyment and adaptability to some use are essential characteristics and attributes without which property can not be conceived; and, hence, any law which destroys it or its value, or takes away any of its essential attributes deprives the owner of his property."

In *Butchers' Union Co. vs. Crescent City Co.*, 111 U. S. 746, Judge Field says: "The common businesses and callings of life, the ordinary trades and pursuits, which are innocent in themselves, and have been followed in all communities from the immemorial, must, therefore, be free in this country to all alike upon the same terms. The right to pursue them without let or hindrance, except that which is applied to all persons of the same age, sex and condition, is a distinguishing privilege which they claim as their birth-right." In the same case, Judge Bradley says: "I hold that the liberty of pursuit, the right to follow any of the ordinary callings of life, is one of the privileges of a citizen of the United States, of which he can not be deprived without invading his right to liberty within the meaning of the constitution."

In the case at bar, the ordinance attempts to deprive a person of his property and prevent its use at the mere will of a private individual. The duly constituted authorities of the City do not act in the matter at all, but turn over their powers to private citizens who are taking the liberty at their own sweet will to destroy the property belonging to another. Can there be any question but that this is taking property without due process of law?

Secondly—The ordinance is unconstitutional because it denies the equal protection of the law, as guaranteed by the fourteenth amendment of the United States Constitution. Upon this point, we will call the attention of the court to the case of *Yick Wo vs. Hopkins*, 117 U. S. 356. In this case, the board of supervisors of the City and County of San Francisco passed an ordinance which provided that it should be unlawful for any person to establish, maintain or carry on a laundry within the corporate limits of the City of San Francisco, without first having obtained the consent of the Board of Supervisors, except the same be located in a building constructed either of brick or stone. It will be noticed that in the San Francisco ordinance the consent of officials was required, while in the ordinance which we are discussing, only the consent of private individuals is required. An ordinance, which requires the consent of officials is certainly more reasonable and proper than one which requires the consent of individuals. Public officials are bound not only by the dictates of their consciences, but also by the weight of the judicial oath, and are responsible to the people for their actions; while private individuals can act at their own sweet will. In speaking of this ordinance passed by the Board of Supervisors of San Francisco, the Supreme Court of the United States says during the progress of its opinion: "We are not able to concur in that interpretation of the power conferred upon the supervisors. There is nothing in the ordinance which points to such a regulation of the business of keeping and conducting laundries. They seem intended to confer, and actually do confer, not a discretion to be exercised upon a consideration of the circumstances of each case, but a naked and arbitrary

power to give or withhold consent, not only as to places, but as to persons. The power given to them is not confided to their discretion in the legal sense of that term, but is granted to their mere will. It is purely arbitrary and acknowledges neither guidance nor restraint." And, again: "It does not prescribe a rule and conditions, for the regulation of the use of property for laundry purposes, to which all similarly situated may conform. It allows without restriction the use for such purposes of buildings of brick or stone; but as to wooden bulidings, constituting nearly all those in previous use, it divides the owners or occupiers into two classes, not having respect to their personal character and qualifications for the business, nor the situation and nature and adaptation of the buildings themselves, but merely by an arbitrary line, on one side of which are those who are permitted to pursue their industry by the mere will and consent of the supervisors, and the other those from whom that consent is withheld, at their mere will and pleasure. And both classes are alike only in this: that they are tenants at will, under the supervisors, of their means of living." And, again: "For the very idea that one man may be compelled to hold his life, or the means of living, or any material right essential to the enjoyment of life, as the mere will of another, seems to be intolerable in any country where freedom prevails, as being the essence of slavery itself." And, again: "The same principle has been more freely extended to the quasi-legislative acts of inferior municipal bodies in respect to which it is an ancient jurisdiction of judicial tribunals to pronounce upon the reasonableness and consequent validity of their by-laws." And, again: "Though the law itself be fair on its face and impartial in appearance, yet, if it is applied and administered by public authority with en evil eye and an unequal hand, so as practically to make unjust and illegal discriminations between persons in similar circumstances, material to their rights, the denial of equal justice is still within the prohibition of the Constitution." And, again: "The discrimination is therefore illegal and the public administration which enforces it is a denial of the equal protection of the laws and a violation of the fourteenth amendment of the Constitution. The imprisonment of the petitioners is therefore illegal, and they must be discharged."

No authority is needed except the case cited. A reading of the complete opinion of the Supreme Court of the United States will show that that high judicial authority condemned in the most severe terms ordinances like the one which we are discussing, as being only not reasonable, but a denial of the equal protection of the law.

THIRD.

The ordinance is void, not because it is unfair, partial and unreasonable, but is oppressive.

In Beach on Public Corporations, Sec. 90, the author says: "A city, although fully authorized to enact ordinances can not pass unreasonable ones. The ordinance of a city must be reasonable. It must not be oppressive; it must not be partial or unfair." The same author says, at Section 512: "It is a well settled principle that a municipal law or ordinance must be reasonable."

In Dillon on Municipal Corporations, Sec. 319, the author says: "In this country the courts have often affirmed that general incidental power of municipal corporations to make ordinances, but have always declared

that ordinances passed in virtue of the implied power, must be reasonable and not inconsistent with the laws or policy of the state."

In the case of *Yick Wo vs. Hopkins*, supra, also held that municipal corporations must be reasonable.

Can it be said that the ordinance which we are discussing is reasonable?

It does not provide that citizens living within one hundred feet, must give their permission to keep bees, but that the owners of the lots wherever they may live must give such permission. These owners might live in New York, Buffalo, or Europe, and have no personal interest in the matter and yet their permission is required. Again, under this ordinance, permission might be obtained, and then, immediately afterwards, the lots within one hundred feet of the place where bees are to be kept might be sold, and permission would have to be obtained from the new owners.

Under this ordinance, a person who owns a lot in the outskirts of the city, a mile from any dwelling, might not be permitted to keep bees, while a person living in a thickly populated district can keep bees, if he gets the permission. In other words, under this ordinance, the owner of a lot in the center of a city or adjoining a school house, may be permitted to keep bees, while a person owning a lot in the outskirts of the city would not be permitted to keep bees. In fact many illustrations might be given, and will readily suggest themselves to the mind of the Court, of the purely arbitrary character of this ordinance and the unjust manner in which it may operate. The private citizen, from mere caprice or ill-temper or bad feeling against the bee-owner may deprive him of the use of his property.

In fact, the right depends wholly upon the personal inclinations and caprice of adjoining lot owners.

FOURTH.

The ordinance in question is an unlawful attempt to delegate the powers conferred upon the Common Council to private individuals.

Article Two, Section 12, of the City Charter, provides that the Common Council "has authority to enact ordinances not inconsistent with the laws of the State, for the government of the city and the management of its business, for the preservation of good order, peace and good health, for the safety and welfare of its inhabitants and the protection and security of their property."

This statute plainly contemplates that the discretion as to whether a certain thing is or is not a nuisance must be vested in the Common Council; but in the ordinance in question, that body has not determined that bees are a nuisance, or that they should only be kept in certain prescribed portions of the city, but the Common Council has turned its powers and its discretions entirely over to private individuals. That the Common Council has not passed upon the question as to whether or not bees shall be kept, is illustrated by the fact that with the requisite permission of adjoining owners, bees can be kept in every lot in the city of Rochester. There is an ordinance in force which provides against intoxicants in public places; but suppose an ordinance should be passed which would provide that a person might be intoxicated in a public place, provided he could get the written permission of every person owning property within a certain distance of the place where he desires to get drunk—could such an ordinance be supported in the courts? And yet, such an ordinance would be precisely like the one in question.

In *Birdsall vs. Clark*, 73 N. Y., 73, the Court holds that public powers of trust devolved by law or charter upon the Common Council or governing body of a municipal corporation, to be exercised by or when and in such manner as it shall judge best, can not be delegated by such body to others.

The ordinance is not a determination by the Common Council that the preservation of good order, peace and health, the safety and welfare of the inhabitants of the city, and the protection and security of their property demands that bees shall not be kept; but the ordinance leaves such questions entirely to the determination of private individuals. Under the ordinance, there is absolutely no restriction to the keeping of bees in any part of the city, providing the bee-owner can obtain the consent of his adjacent lot owners. There can be no question but that under the several points made above, the ordinance in question is void and can not be enforced; and it follows that the defendant should be discharged.

FREDERICK L. DUTCHER,
Attorney for Defendant, Rochester, N. Y.
JOHN A. BARHITE, of Counsel.

TAXES ON BEES.

In most of the States the bees are considered as personal property, subject to assessment and taxes. Valuation ranging from 25c to \$3.00 per colony. Generally however, the assessor takes the owner's word as to number of colonies spring count, and as a rule places valuation at \$1.00 per hive reported. In a test case, it was decided bees are wild by nature, uncertain, and not property. But that the hives and fixtures are personal property, subject to taxes as other property. Again if the city or town tax your bees, they are not a nuisance. A certain number of colonies in majority of the States are exempt from taxes. (Wisconsin exempts five colonies). In some states there is a special tax of from one cent to five cents per colony on all hives, to become a special fund, reserved to pay expenses of an inspector of apiaries in said district. (See Ohio, Kentucky and South Dakota laws.)

NO LICENSE.

Decision of Chief Justice Bradley, U. S. Supreme Court, March 7, 1887.

No decision of the United States Supreme Court attracted more interest than this by Chief Justice Bradley exempting agents, salesmen, solicitors, peddlers from special State, County, or Town taxes. Such special license and tax laws are declared unconstitutional and any officer who attempts to enforce them is individually liable for damages.

The case under consideration, a resident of Cincinnati, Ohio, sold goods by sample in Tennessee, and was arrested—fined for selling without a license. Congress regulates commerce among the several States. The

failure of Congress to make express regulations indicate its will that the subject shall be left free from any restrictions or impositions. Any regulation of the subject by the States, except in matters of local concern only, is repugnant to such freedom.

REGARDING SELLING HONEY.

Producers of honey can sell without license his goods. With help of team if necessary. Does not have to label the same. But if it is labeled the same shall not be misleading. (U. S. Pure Food Laws).

If you buy honey to sell, and in the city where sales are made have a place of business, (your own place of business, or is a rented place), there take and deliver orders, with help of horse if necessary, you for the time have become a part of said city, and doing business, require no license for same. Your rental of room is considered as paying taxes. Also for the time you are residing in the city as a resident. After certain number of days would be entitled to the privilege of voting.

I know of several beekeepers shipping quantities of honey to themselves in cities, then renting a room in the city, there melting and bottling the honey before taking orders in said city. Using horses to help delivery of same as any other merchant.

Purchased honey sold in original packages should have label on showing from where and by whom produced. If the honey is sold in your packages, label should not be worded "Put Up By" (U. S. Food Laws), but use the word "Distributor" under your name. To illustrate, I buy honey of you, and sell in other packages, labeled "Pure Honey, N. E. France, Distributor, Piatteville, Wis."

BEES AND HORTICULTURE—THEIR RELATIONS MUTUAL.

The purpose of these clippings is to put into condensed form, for the use of Bee-Keepers and Fruit-Growers, such information as is at hand, derived from experience and recent investigations, relating to the economy of Nature in plant and insect life, and to show their mutual interdependence.

RELATION OF BEES TO HORTICULTURE.

There is in plants or flowers what answers to sex in animals. Sometimes both sexes exist in the same flower, sometimes in different flowers of the same plant, sometimes in separate plants. But whatever the plan of growth, fruitfulness depends upon the fertilization or pollination of the pistil by the grains of pollen produced on the stamen. The stigma, generally the upper part of the pistil, is a part neunded of the epidermis, touched with a viscid (sticky) substance, and when the proper pollen adheres to this part,, the pollen puts forth pollen-tubes which lengthen till they reach the ovules, which completes fertilization and causes fruit or seed to grow.

Pollen and honey are necessary for the preservation of certain forms of insect life, and the distribution of pollen by insects seems to be essential to the best development of the plants visited by them. Honey-bees are the most important of all the pollen-distributing insects. They ap-

pear in greater numbers early in the season, and their great activity renders them more potent in this field of usefulness than any other species. It is now quite well understood that insects are absolutely necessary to a crop of cucumbers, melons or squashes, and bees are kept for the purpose of pollinating them when grown on a large scale, if there is no apiary in the neighborhood.

BEES AS POLLEN DISTRIBUTORS.

The honey-bee as a pollen-distributor is perhaps of greater value to this country than the crop of honey produced. It has of late years occurred to scientists that the honey-bee is of more benefit for distributing pollen than all other sources combined. That we are largely indebted to the honey-bee for both quantity and quality of our fine fruits there is but little doubt. Not only fruits, but vegetables and cereals commonly grown on the farm.

The honey-bee is a general pollen-gatherer wherever pollen is to be found, and thus works an extensive territory. Bees thoroughly canvass several miles in diameter in search of both pollen and honey, and are always pollen-distributors whether they are engaged in gathering honey or pollen.

Who has not seen the cornfields with their heavy laden tassels of pollen swarming with honey-bees? Also the clover fields, the buckwheat fields, the orchards, the vegetable fields, and almost every wild flower that produces either fruit or seed is daily visited by the busy bees, perhaps every hour in the day, thus distributing pollen from flower to flower, industriously performing the work that Nature intended them to do.

Fruit-growers of the present have awakened to the fact that the honey-bee is their best friend, and that bees and fruit-growing must be closely combined. So it is all along the line of this immense field of labor depending upon the honey-bee principally for successful returns. That there are not enough bees to supply thoroughly this want there is little doubt; many neighborhoods have but a few colonies of bees. In support of this I would refer you to the State of California, which is the most extensive bee-keeping State in the Union, and also the same in the production of fruit.—National Rural.

VALUE OF BEES IN CROSS POLLINATION.

One of the ways by which the benefits of crossing are insured to plants is through their sterility to their own pollen. Some fifty or more species of plants are already known to be more or less completely fruitless when only pollen from the same plant is applied to their flowers, although the same plants mature fruits and seeds when pollen from another plant is used.

The nectar in pear-blossoms is secreted copiously in the disk, often filling the cup with a large drop, and serves to attract bees and other insects, as does also the pollen. The white, showy petals are a guide to the insects, and as the flowers grow in clusters, and the clusters are numerous, a tree in full bloom attracts insects from long distances. When a bee alights on the flower, the stigma brushes from its hairy coat some of the pollen which adhered to it in previous visits to other trees, and, if these trees were of a different variety, the flowers are thus cross-pollinated. The pistils mature two or three days before the stamens of

the same flower, and the fully expanded stigma often protrudes through the petals before they are open, thus being pollinated from some earlier-opening flower before the pollen of its own flower is ready—another means by which cross-pollination takes place.

The apples resulting from some of the experiments were collected and studied, and the results were found to be paralleled with those obtained in the experiments with pears, the crosses being larger, more highly colored, and better supplied with seed. For example, the hand-crossed Baldwin apples were highly colored, well matured, and contained abundant seeds, while the self-fertilized fruits were only slightly colored, were but one-fourth or two-thirds the regular size, and seedless. The crosses were, in other words, like the better specimens of apples, not bagged, from the same tree, and the self-fertilized fruits corresponded with the undersized, poorly-colored specimens.

The number of insect visitors in any orchard determines, to a great extent, the amount of cross-pollination carried on. The pollen of the pear and the apple is not produced in sufficient quantity, nor is it of the right consistency to be carried by the wind, and the pollination of these trees is therefore dependent on the activity of the insects. In an ordinary spring there is usually an abundance of these insects to cross-pollinate orchards of a few hundred trees thoroughly, but in the case of large commercial orchards, especially where several are close to each other, there is not a sufficient number of insects for cross pollination when the main body of trees is in bloom, if there is no apiary in the neighborhood. Therefore, each large orchardist should keep a number of colonies of bees. Honey-bees, and other members of the bee-family are the best workers in cross-pollination.

Be sure there are sufficient bees in the neighborhood, or at least within two or three miles, to visit the blossoms properly. When possible, endeavor to favor the bees by selecting sheltered situations for the orchard, or by planting wind-breaks.—Prof. M. B. Waite, in Year Book, Department of Agriculture, for 1898.

SOME FRUITS ARE SELF-STERILE.

Careful experiments by entomologists have shown that bees are not guilty of cutting open grapes and other fruits, as their mandibles are too weak, and are not designed for such work. It is, of course, true that after fruits have been torn open by wasps, birds, etc., the bees feed on the pulp and juice.—Prof. Hunter, of Kansas, before the American Nurserymen at Chicago, June 14, 1899.

Bees are also very useful to the horticulturist, as they are able to carry pollen from one flower to another and thus fertilize the flowers. As many of our fruits are self-sterile, they could not fruit without this help from the bees.

INSECTS NECESSARY.

If bees are kept from fruit-blossoms by netting or other artificial means, the amount of fruit set is little or none. It not infrequently happens that inclement weather prevents or hinders the flying of bees during the period when flowers are receptive. A fruit-tree, half of which was subject to a continuous spray of water during the flowering period, produced no fruit upon the sprayed portion, but an abundance upon the

other. A failure due to the above-mentioned cause can not well be prevented, but may be modified by having bees near at hand to utilize the short favorable periods which do occur.

An insufficient supply of bees will hinder the setting of fruit, and while other insects may take part in the carrying of pollen, the fruit-raiser must rely chiefly on honey-bees. Experience shows that, though the hungry bees may fly two or three miles, hives should be within a mile of the orchard or small-fruit patch.—Press Bulletin No. 8, of the Kansas Experiment Station.

VALUE OF BEES UNDERESTIMATED.

The value of the honey-bee to the horticulturist is hardly realized by many who are engaged in fruit-growing. The setting of fruit that will stay on the tree depends chiefly upon proper pollination, and in this work the bee is largely instrumental. There are, of course, other instrumentalities, but none perhaps so effective. Experiments at the Oregon station with the peach, throw a good deal of light on this subject. A number of peach trees were forced into bloom under glass in November, and a colony of bees was placed in the house as soon as the bloom began. For several days a heavy fog prevented the bees from working, but on the first bright day that came, the bees went to work and continued at it as long as there was anything on the trees to work on. The result was that at the stoning season, the time when unfertilized fruit drops, not a peach fell from the trees, and the crop was so heavy that it had to be severely thinned. As a check test one tree was so protected that the bees could not get at it, and from this tree all the fruit dropped at the stoning period. Insects, and especially bees, which have nectar-secreting instinct as a motive for labor and bloom, are an aid to pollination for which Nature seems to have provided no adequate substitute. Their office is to distribute pollen from flower to flower, and from tree to tree. Much of the complaint about fruit falling would cease if horticulturists kept bees in the orchard. For the protection of bees the horticulturist should never spray while the trees are in bloom. He owes that much to these valuable assistants in his work.—Green's Fruit Grower.

Apple and pear are among those trees which need some insect agency to secure a proper fertilization of the blossoms. When men plead that bees injure fruit by taking away the saccharine matter secreted for and needed by the fruit in its development, they but show their ignorance, as did those men a quarter of a century or more ago, when they passed a law in a certain township in Massachusetts, banishing bees from that town. The result was that little or no fruit developed in the interior of the township, while all along the boundary fruit was as plentiful as ever. After this experience regarding their folly, they were glad to welcome the bees back again.—G. M. Doolittle.

FLOWERS WAIT FOR BEES.

In Bienen-Vater are given results of experiments in which netting was put over branches of trees at time of blooming. The time of blooming of blossoms on such covered limbs was prolonged as if the blossoms were waiting for the bees to fertilize them. On apple-trees the time of such blossoms was prolonged one to three days more than the time of blossoms

uncovered. Pear-blossoms were prolonged four to five days; plum, four to seven days. No fruit set on the covered apple branches.—American Bee Journal.

BEES NECESSARY UNDER GLASS.

The director of the School of Horticulture, at Villorde, France, placed a colony of bees at the disposal of the peach-trees, under glass, at the time of blooming in February. The crop, previously scant, was now unreasonably heavy.—*La Progress Apicole*.—(Gleanings.)

HE IS CONVINCED.

Four years ago, when I rented one of the orchards which I am now running, the owner had a large cherry orchard, and told me that for eight years he did not get a cherry. He was about to dig up the trees when some one advised him to try bees, which he did. The result was, that for three or four years after he got the bees he sold his cherry crop in Chicago and New York for about \$4,000. His idea in keeping bees was only to fertilize the fruit-bloom.

I shall increase to one hundred colonies, as I have 140 acres of trees for them to work on.—F. L. Morrill, of California, in *Gleanings*, June 1, 1899.

BEES NECESSARY IN SQUASH FIELDS.

Mr. Gregory, of Massachusetts, proved conclusively that the honey secreted in the squash flower was of no value whatever, except to entice insects. He says, the female blossoms of the squash are so covered and hidden by the tall leaves, that it is evident that the fertilizing pollen must be conveyed to them by the bees, to whom the squash-field appears to be a rich harvest-field. All of the crossing or mixing of squashes is caused by the pollen from the male flower of one variety being carried by the bees to the female flower of another variety. He further states that, if the bees are kept from these female blossoms by means of netting or otherwise, the embryo squash, at their base, will always turn yellow and die, unless pollen is carried by man from male to female blossoms, as is done in the hybridizing of squashes to produce different varieties. The primary reason why a squash grows is to protect and afford nutriment to the seed, the use of it as food being a secondary matter. Why is honey placed in the flowers? To attract insects that the blossoms may be properly fertilized, primarily; and, secondly, for food for these insects. The same is true of cucumbers, melons, peas, pumpkins and tomatoes.

BEES AID THE FRUIT INDUSTRY.

In seven localities in Austria, last year, experiments on the fertilizing of fruit-blossoms were conducted according to a concerted plan on a variety of trees and shrubs, but were all too few, and fortunately the social bees were brought along with the fruits. Even the social native insect, like the social wasps and bumble-bees, are very few in spring when the fruit blooms, and so are absolutely inadequate to pollinate our orchard trees. The non-seeding of red clover for the early first crop is because the bumble-bees are too few to cross-pollinate the bloom properly. It is possible that in this case the flowers are fertile to the pollen of other red clover blossoms, but not to their own.

The orchardist then must have the bees. To drive them away would be to kill the goose that lays the golden egg.

Again, bees never attack sound fruit. They only come when bird, wasp, or sultry weather, combined with over-ripeness, break the rind and cause the juice to exude. Possibly bees could bite open the skin of the fruit, but positively they never do. Yet let the juice once ooze, and the bees quickly hie to tree or drying-tray, and leave the little behind to show what was once there.

When we remember that nearly 90 per cent of the ripe fruit is juice, and that the bees take this, we see that little would be left. The juice often oozes from very ripe fruit, and so bees are often in the vineyard to the great annoyance of those who would gather in the vintage. Fruit on the trays in the drying-yard has the skin removed, or is cut open, and so the bees may take most of it unless repelled by sulphuring, which is now generally done. We see, then, that bees are a disturbance at times, and annoy the orchardist greatly. Then must the apiarist be driven off. Not so say the European pomologists. They want the bees, and there is no quarrel between the two industries. Not so, say the most intelligent fruit-men of our State and country, for we must have the bees to aid us in time of bloom. What then? It may be wise to move the bees temporarily on rare occasions when the annoyance is most severe. If so, who should bear the expense? Surely, not the bee-keeper, for he was the pioneer in the region, and has a first, or at least an equal right. The removal is for the fruit-man, and he should bear the most, if not all, of the expense. But each should know all the facts, that bees are never harmful to flowers, but always necessary to best success, and they are only injurious to wounded fruit; that if they are temporarily removed it is for the good of the fruit-man, and he should bear the expense. The harm is usually not great, and the annoyance usually almost nothing, so that if the bee-men and the fruit-men donate the one to the other of their choicest products, and cultivate the good-feeling, and not enmity, each may be a tremendous blessing to the other, and all the best of neighbors.—Prof. A. J. Cook, Los Angeles County, California.

THE POLLINATION OF CLOVER.

Prof. Chas. W. Burkett, last year, covered patches of clover heads six feet square with mosquito netting. He gives the results as follows:

The result showing the number of seeds in each 100 head was as follows: First crop, covered, 0; uncovered, 10. Second crop, covered, 2; uncovered, 612. Near bumble-bees' nest, 2,300. Of course, all insects were excluded, but the experiment proves that insects are necessary and we know that bumble-bees are the principal workers in the pollination of clover blossoms.

The careful experiments of Prof. Waite and others at the experiment stations show that the honey-bee is in the clover fields. In Germany the humble-bee is protected by legal enactments. With us every nest is destroyed at once after discovery.—Prof. J. L. Budd, Horticulturist, Iowa Agricultural College.

CROSS-POLLINATION ADVANTAGEOUS.

One of the laws of Nature is that the crossing of races produces off-

spring with greater vigor, endurance, and faculty of reproduction

Fruits succeed better when the pollen, which fertilizes the pistil, comes from some other blossom; and the insects are entrusted with the mission of transporting this pollen from one blossom to another, while gathering it for their own use. In some plants, fertilization would have been impossible without the aid of insects. For instance, some plants, such as willows are deciduous, having their male organs on one tree and their female organs on another.

If those horticulturists who regard the bee as any enemy, could exterminate the race, they would act with as little wisdom as those who attempt to banish from their inhospitable premises every insectivorous bird which helps itself to a small part of the abundance it has aided in producing.—Langsroth on the Honey-Bee," as revised by Dadant.

Prof. A. J. Cook's careful experiment in Michigan. In each particular case an equal number of blossoms were selected from adjacent branches. One lot was marked with a tag, the other surrounded by cheese-cloth. I can not enter into details, but these are the results:

	Blooms.	Covered Fruits.	Uncovered Fruits.
Apple	40	0	15
Apple	75	0	3
Crab Apple	200	0	3
Apple	160	2	9
Pear	140	0	7
Cherry	300	9	119
Strawberries	60	9	27
"	212	80	104
"	123	20	36
Raspberries	184	9	160
Clover (red)	10 h'ds	0	191
Clover (white)	10 h'ds	0	541

Again, in 1894, since his removal to California, Prof. Cook made similar experiments with plums, cherries, and pears. Following is the result:

	Covered.	Bees Enclosed.	Not Covered.
Plums	0	3	8
"	0	5	5
Cherry	0	5	7
Pears	0	6	8
"	0	8	11

In one experiment with the plum, Prof. Cook covered a branch, and when it was in bloom, and the bees working on the trees, he removed the sack, and keeping watch, marked the blossoms on which he saw bees work. When he ceased watching, the branch was recovered, and at length the four blossoms alone, on which he saw bees alight, developed into plums.

GOOSEBERRIES.

Among the small fruits gooseberries are absolutely dependent on insects. The failure of this crop is not so uniformly the result, as some suppose, of frost; cold weather at the critical time, keeping the bees within, often being the chief cause.—Prof. Frank Cheshire, an English author of recognized scientific standing.

The same is true of raspberries, blackberries and currants.

BEEES IN ORCHARDS—VALUABLE.

Albert Lane of Vorden, California, engaged in beekeeping and fruit. Has bees for sale, all his apiaries located in his orchards of peaches, cherries, and apricots. So eager are neighbors to have his bees visit their fruit trees that they furnish him all the locations he wants. One orchardist makes stands for him to place hives on. Another furnishes stands and a well made shed. In another orchard a large barn is given to his use. Another apiary had hives painted various colors under a good shed. The orchardist, furnished the paint and shed, to make it ornamental as well as useful. All along the Sacramento valley fruit growers realize that to get crops of early fruit, they must have the aid of honey bees.—(Gleanings.)

In Wisconsin, several times one of its most extensive apple growers has attended the Wisconsin State Beekeepers' Convention, offering any beekeeper free location for an apiary in his orchards, and offering steady work for owner if he wished. All this to get direct benefit of the bees in his fruit bloom. Cold or stormy time during open bloom, he said, and one-half day of good weather during open bloom, and bees located near by, might tell the story of a crop of apples, or failure if bees could not get out.

All the larger bearing orchards in Wisconsin now have an apiary in the orchard or near by. Spray before and after open bloom.

GEORGIA HORTICULTURAL REPORT 27TH—(By W. Newell.)

"The wind may to some extent distribute pollen, but the most important agency is that of insects. Various wasps, beetles, butterflies, and bees visit the blossoms in quest of nectar, and carry the grains of pollen from one to another. However, no insect so effectually accomplishes this distribution of the pollen as the honey bee, and by various students this insect is regarded as of more importance in this respect than all others combined. The more honey bees there are in the vicinity of the orchard the more thorough will be the pollination. Many fruit growers state positively, that the fruit yield has been materially increased after the introduction of several colonies of bees into their orchards.

POLLINATION OF THE APPLE.

By C. I. Lewis and C. C. Vincent, of the Oregon Agricultural College Experiment Station, Bulletin No. 104 February, 1909.

5. Out of 87 varieties of apples worked with, 59 varieties were found to be self-sterile; 15 varieties self-fertile; and 13 varieties partially self-fertile.

18. Wind is a poor agent in transferring pollen from tree to tree. Bees and insects appear to be the principal pollen distributors.

19. The floral envelope serves to attract the attention of the bees. They will, however, to a certain degree, visit blossoms in which the floral envelope has been removed.

To verify our last experiment the following work was carried on. A 7-year-old tree, containing 1,500 blossoms, was emasculated and left exposed to the wind and insect visitation. The object of this experiment was two-fold:—First, to determine if pollen was transmitted through the air in sufficient quantities to insure cross-pollination; second, to determine if removing the floral part of the blossom would affect the visits of insects. The tree operated upon was located about twenty feet from another tree that blossomed profusely. It is generally conceded by many experimenters that the honey bee is attracted to the blossom by the inflorescence. The results obtained will be a fair index to the truth of this statement. Out of the 1,500 blossoms emasculated only five set fruit. During the whole period that the pistils of these blossoms remained receptive, only eight bees visited the tree. More than twice that number was seen in one half hour on the tree twenty feet away. Since only a small portion of the emasculated blossoms set fruit, it is manifest that pollen is not transmitted through the air in sufficient quantities to insure cross-pollination. While this experiment demonstrated the fact that bees will visit trees when the floral part of the blossom is removed, they are not attracted in sufficient numbers to insure perfect pollination. It is apparent that the showy petals of the blossoms aid materially in attracting the bees. The blossom is well supplied with nectar, and the open character of nectar makes it accessible to almost all insects. The bees, in trying to reach the nectar, brush against the anthers and carry away with them, on their hairy legs and abdomen, large quantities of pollen. The insects in visiting other blossoms transfer some of the foreign pollen to these pistils. Since the wind aids so little in cross-pollination it is evident that the various insects, especially the bees, are carriers of pollen from one variety to another.

As the assurance of a crop depends upon insects as distributors of the pollen, it is necessary that apiaries be established in the different fruit sections. With favorable climatic conditions and proper planting of varieties the bees would insure pollination.

Eighty-seven varieties of apple bloom were selected. The blossom buds were covered with paper bags to keep bees and insects away until the bloom was closed or set. Out of this great number of bags protecting the bloom, 4,800 bags failed to have one set fruit. And but a few set where the blossoms were hand-treated. The pollen being placed with fine camel's hair brush, each variety having its own brush. This Bulletin also has a large picture of an apiary in an orchard recommending bees as necessary to insure pollination.

BEES DO NOT PUNCTURE SOUND FRUIT.

Case—Utter & Utter at Goshen, N. Y., 1901.

Two brothers in court against each other. One claiming his brother's bees ate and destroyed his peaches, claiming damages. In the lower court the justice decides against the beekeeper, fining him \$25 and costs. The National Beekeepers Association took the case before the high court, with assistance of valuable witnesses, Mr. Frank Benton of Washington, D. C., O. L. Hershiser of Buffalo, N. Y., A. I. and E. R. Root of Medina, Ohio, and W. F. Marks, Chapinville, N. Y. Thirty witnesses had been

examined, on both sides, when the jury gave a verdict, unanimous to the effect **BEES DO NOT PUNCTURE SOUND FRUIT**. Mr. Benton showed that the honeybee had a soft pliable tongue and could not puncture sound fruit. The inner tongue is spoon-shaped, covered with hairs. It can not become rigid. The bee laps its food, called nectar. Its fellers are soft and can not pierce anything, being organs of touch and smell. Birds and other insects do the puncturing, then bees may suck the wasting juices.

BEES AND GRAPES.

Bees have been accused of puncturing grapes and damaging same for the market. As in the case above, the honeybee is unable to perform such work. Cape May warblers, Baltimore orioles, and some wasps will pierce the skin of sound grapes, leaving small pinholes which later are visited by bees (if scarcity of honey from flowers), sucking out the wasting juices and sometimes leaving a shriveled skin. In many such cases the beekeeper can, in large degree, check the trouble by outside feeding of honey or sugar syrup, being careful that the bees can not get the feed very fast, just so as to keep them from the punctured decaying fruit. Again, doors should be screened where fruit is stored, or where fruit-canning is being done. City fruit stands should have mosquito-netting or glass over them.

BEES DO NOT INJURE SOUND FRUIT.

Several times complaints have been charged against bees as injuring fruit, and each time the National Bee-Keepers' Association has investigated the case, and satisfied the court the charges were not true. As a witness of such testimony, after the honey season, when the bees would take any sweets left exposed, I cut bunches of ripe, sound grapes, of six varieties, hung said bunches one day exposed in my home apiary of 150 colonies, and not a grape was injured. I then hung the grapes in an upper hive-body, over a strong colony, one day with the same results. Then I took the same bunches and punctured the skin of ten grapes in each bunch, left them another day to find the bees had not injured a sound grape. This was repeated every other day until all the grapes were opened by me, and in return the bees had saved the wasting juice. Bees do not puncture sound fruit, but some kinds of wasps and birds will puncture all kinds of fruit, and when punctured are not and never will be good fruit. So what the bees save is the better for all. A similar series of experiments I have proven with various tree and shrub fruit.—N. E. France, Platteville, Wis.

Three-story observation hive; fruit in upper hive.

One of the exhibits of bees at the Grange Fair in Wilmington, Delaware,
Held in September, 1908.

An exhibit at Wilmington, Dela., 1909, showing bees do not puncture sound fruit. In the case above hangs sound grapes, a pear and a peach. A card on lower side of upper hive states, "Bees do not injure sound fruit."

In districts of California where raisin growing is a business, also along the southern shore of Lake Erie, where grape growing is among the prominent farm crops, the complaints of bees damaging grapes, in years favorable for overripe fruit bursting the skins, or punctured by other parties, has been quite general, so long as no honey-yielding flowers were open. At such times the beekeeper can abate the trouble greatly by feeding a little outside, but not so bees get the feed very fast.

Again, at fairs where an apiary is located near by, and bees are working at stands of sweets, or waste material back of eating houses, a little feeding of the bees a few days will abate the trouble. Screen such places.

POISON SPRAYING KILLING BEES.

(See Ohio Bulletin 68, pages 48 to 53).

A mixture of Paris green, 4 oz. to 50 gal. of water, sprayed on a Lombard plum tree, in full bloom, at 2 p. m. The tree was then enclosed with cloth and netting. A hive bees was set inside enclosure. By night several hundred bees were either dead or dying. Analysis were made of same and arsenic found present in each, even after the bodies were washed before testing, the poison being inside of abdomens. The second experiment was made on apple trees May 4, 5 and 6; dead bees under the trees were pick-up, with similar analysis. These experiments were greatly hindered by frequent rains, but concludes the report thus:

"In summing up the matter I can see no other conclusion that can be drawn from the results of my experiments than that the bees are liable to be poisoned by spraying the bloom of fruit trees, and that all bloom must have fallen from the trees before the danger will have ceased. We now have conclusive proof of the effect on bees of the use of arsenical poisons in orchards while the trees are in bloom."

POISON SPRAYING OF OPEN BLOOM KILLS THE FRUIT.

(Green's Fruit Grower).

Still more recent investigations show that it is not necessary to spray for the codling moth when the trees are in bloom, but that it is a POSITIVE DETRIMENT to the fruit to spray at such time. Professor Beach of the New York Experimental Station experimented in two orchards in Ontario county and two in Niagara county. He sprayed some trees in all the orchards and left two others contiguous without spraying. All the trees were full of bloom. On the trees sprayed but few apples set, a large proportion of the blossoms falling before the fruit set, while on those not sprayed, a very large crop of fruit grew. To make this more conclusive, he selected trees full of blossoms alike on both sides and sprayed one side of each tree. Result: On the sides sprayed the fruit set very sparingly, while on the opposite side not sprayed, a heavy burden of fruit grew. He concludes that where you fairly hit an apple blossom with Paris green strong enough to kill insects it will certainly kill the blossom.

In the Vermont Experimental Station report No. 12, page 205, F. A. Waugh states:

"Furthermore, it may be said that spraying, when trees are in bloom, is entirely useless. It is a waste of time and spraying material. It may be directly injurious to the blossoms and it may kill the bees. There is everything against it, and nothing in its favor. **SPRAY BEFORE BLOSSOMING** and after the petals fall, but **NEVER WHILE THE BLOSSOMS ARE OPEN.**"

MORE ABOUT THAT CASE WHERE 300 COLONIES WERE POISONED FROM THE SPRAYING OF FRUIT TREES WHILE IN BLOOM.

Five yards here are located within a radius of one and a half miles of the orchard where the spray was used, and they all went down at that time, and no other yards in the valley showed any symptoms. That was proof enough for me; but I realize that definite facts are needed, and I should have liked to have an analysis of the poison. What facts I can give are as follows:

The man who sprayed his trees used 2 lbs. arsenate of lead to a barrel of water. He sprayed just before the last blooms dropped the petals. Five days after the spraying I noted that all was not well, but did not look into the hives until on the seventh day, when I found 14 dead colonies and took note that three-fourths of the strong hives had dwindled to about the strength of a weak three-frame nucleus. In others I found only the queen and fifty to one hundred workers alive. In all cases the queens seemed to live right up to the last. I concluded that, since the queen is fed predigested food, only bees not yet poisoned lived long enough to feed the queen. Finally she probably ate some of the poisoned honey, for I caged about ten of these queens, which I found left with only a few bees, and took them off to another yard to put in some three-frame nuclei I had at the time, and half of them were dead when I got there; and of the five introduced, only one lived.

On the tenth day some of the hives which had been as strong as three-frame nuclei had dwindled so as to have almost no living brood, and about enough bees to make a one-frame nucleus. I took the queens from these and used them with perfect success to re-queen three-frame nuclei in other yards. To their bees I gave virgins and cells, and in that way made good use of them as queen-raising nuclei. Since the poison hit out queen-raising yard it set us back with our queens, and we noted that many of the cells which were being sealed at that time did not hatch, and showed evidence of the poison when cut open later.

In regard to distance, the bees seem to have died almost as much at a distance of one and one-half miles as those located only a few hundred yards from the orchard.

O. B. METCALFE.

Mesilla Park, New Mexico, June 20.

DANGEROUS PRACTICE.

Spraying fruit trees while in bloom (page 48) with arsenical mixtures is dangerous, and in fair weather is liable not only to kill the bees that

frequent the bloom, but also to destroy the young brood that are being fed at that time. Spraying should not be done until all the bloom has fallen.—Prof. F. M. Webster, Bulletin 68, Ohio Agricultural Experiment Station.

Fruit trees should never be sprayed when in bloom, on account of the liability of poisoning honey bees or other insects useful as cross-fertilizers.—Farmers' Bulletin No. 19, United States Department of Agriculture, by C. L. Marlott, M. S.

INJURY TO BLOSSOMS.

The trees should not be sprayed while in blossom, for the spray may injure the delicate parts of the flower, and the poison may kill the bees and other insects that play an important part in fertilizing the blossoms.—Bulletin No. 86, New Series, New York Agricultural Experiment Station, by S. A. Beach and W. Paddock.

Never spray a fruit tree while it is in bloom. You may injure the delicate stigma, and prevent pollination, and there is also danger of killing the bees.—Bulletin No. 36, Missouri Agricultural Station, by I. M. Stedman.

IT SHOULD BE A MISDEMEANOR.

Spraying fruit trees in early spring to prevent the ravages of various insects is becoming very common. Spraying trees while in bloom is very likely to poison the nectar and destroy the honey-bee. This has been done in several cases. Not only have the matured bees been poisoned, but the brood has also been destroyed. The fact is very apparent that fruit-growers are nearly, or quite, as much interested in the presence of bees as are the bee-keepers. Pomologists then may well join hands with the apiarist in demanding and securing a law making it a grave misdemeanor to spray fruit trees while they are in bloom.—Bulletin No. 26, Division of Entomology, United States Department of Agriculture.

Prof. L. H. Bailey of Cornell University says: "The grower himself must decide when and how often to spray, because he should know what enemies he desires to reach. If he has bud-moth he should spray with the first swelling of the buds, and if he has plum scale he should spray in the winter. But, leaving the special insects aside, it is safe to say that for the two staple enemies—the apple-scab and the codling-moth—at least two sprayings should be given. I am not yet convinced that spraying when the tree is dormant has any appreciable effect in destroying the apple-scab fungus. As a general statement I should say, spray twice upon apples and pears—once just as the fruit buds and breaks open, but before the flowers expand, and again just as the last blossoms fall. In both cases I should use a combination of Bordeaux mixture and Paris green. The first spraying is for the scab fungus in particular, and for this Bordeaux is used; but the Paris green will most likely be of service in destroying various leaf-eating insects.—Bulletin 101, Cornell University Agricultural Experiment Station, by L. H. Bailey."

UNITED STATES DEPARTMENT OF INSECT INVESTIGATION.

A. L. Quaintanee, insect investigator, Washington, D. C., writes the following letter March 8, 1909:

"I think there is no shadow of doubt but that this practice will result in the death of the bees visiting flowers. The extent of the injury to neighboring hives will depend somewhat upon the character of the weather, as influencing the activity of the bees. Several experiments have been made on this subject, and it is the accumulated experience of practical bee-keepers generally that spraying in bloom does not poison bees. I refer you to *Insect Life*, vol. 7, p. 132; *American Bee Journal*, 1897, No. 14, pp. 211-212; also Geneva, N. Y., experiments. There is, however, but little if any necessity for spraying fruit trees in bloom. With the exception of canker worms, there are no insects at present known to me which can not as well or better be treated by application of arsenicals immediately before blossoming or after the petals have fallen."

LAWS ON POISON SPRAYING.

Several states have laws upon poison spraying on open fruit bloom I give some of same:

LAWS OF NEW YORK.

Became a law March 22, 1900, with the approval of the Governor. Passed, three-fifths being present.

Sec. 1. Any person who shall spray with, or apply in any way poison or any poisonous substance, to fruit trees while the same are in blossom, is guilty of a misdemeanor, punishable by a fine of not less than ten dollars nor more than fifty dollars; provided, however, that nothing in this section shall prevent the directors of the experimental stations at Ithaca and Geneva from conducting experiments in the application of poison and spraying mixtures to fruit trees while in blossom.

Sec. 2. This act shall take effect immediately.

LAWS OF MICHIGAN.

Act of 1895. Approved May 4.

Sec. 1. That it shall be the duty of every owner, possessor or occupier of an orchard, nursery or vineyard, or of land where fruit trees or vines are grown within this state, to spray with a poisonous solution as disinfectant, and of sufficient strength to destroy such injurious insects or contagious disease, all fruit trees or vines grown on such lands which may be infected with any contagious disease known to be injurious to fruit or fruit trees or vines; provided, that if such trees or vines are infested with the San Jose or other scale insects, such trees or vines shall be either effectually sprayed or destroyed. Provided also, that no such spraying shall be done while said fruit trees or vines are in blossom, except in case of canker worm.

LAWS OF COLORADO.

Chapter 55. Laws of 1897.

Sec. 8. It shall be unlawful for any person or persons to spray fruit trees while in bloom with any substance injurious to bees.

Sec. 9. Any person violating any of the provisions of this Act shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by imprisonment in the county jail for a period of not less than 10 days nor more than 100 days, or by a fine of not less than \$10 nor more than \$100. Any justice of the peace, or district or county courts of the respective counties, shall have jurisdiction to try any case arising under the provisions of this Act.

SPRAYING FRUIT TREES IN BLOOM ILLEGAL IN CANADA.

This practice is prohibited by an Act of Parliament assented to in 1892, the provisions of which are as follows:

Sec. 1. No person in spraying or sprinkling fruit trees during the period within which such trees are in full bloom shall use, or cause to be used, any mixture containing Paris green or any other poisonous substance injurious to bees.

Sec. 2. Any person contravening the provisions of this Act shall, on summary conviction thereof, before a justice of the peace, be subject to a penalty of not less than \$1 or more than \$5 with or without costs of prosecution, and in case of a fine or a fine and costs being awarded, and of the same being upon conviction forthwith paid, the justice may commit the offender to the common jail, there to be imprisoned for any term not exceeding thirty days, unless the fine and costs are sooner paid.

The best fruit growers consider spraying, during the period of full bloom, as a useless waste of material, and harmful to the setting of fruit. It is universally condemned by entomologists in every part of America. The recommended formulas as sent out by both the Federal and Provincial Departments of Agriculture state distinctly to spray apple orchards with Bordeaux and Paris green: (1) Just as leaf buds are expanding; (2) just before blossoms open; (3) just after blossoms fall; (4) every ten days later if required.

Bee-keepers and fruit growers are both urged to see that this harmful practice is stopped.

PEAR BLIGHT.

The Cause of Pear Blight; Some Varieties Immune to It; The Opinion of An Extensive Fruit Grower.

In the first place, I have an orchard of 1,800 fruit trees, just coming in bearing of which 900 are pear trees. I have 13 colonies of bees, and am on a deal for 16 more. Now, we have had a very wet season, and, only for a dry winter and spring, crops would not have been planted. Nearly all pear trees near here on black soil are badly blighted. My pear orchard is on high clay land; and, although some of the trees were white

with blossoms, I have no blight whatever. I have only such varieties as are not subject to blight—Keiffer, Garber, Duchess; and now to have good fruit of any kind we must have bees or some insects to mix pollen. Take away bees and other insects, and we should have practically no good fruit. Major Holsinger of Kansas has Kieffer and Leconte pear trees, planted 15 years, side by side. Bees have hummed from one tree to the other. Result: Leconte trees are all dead from blight; Keiffer are sound, and bearing heavily every year. Now, if men will plant the right varieties on suitable land they need not worry about trees or blight. Too rich soil will cause blight to any variety; but some varieties are more proof against it than others.

Before I planted a commercial orchard, I read everything I could find on pear culture, and asked many questions through different papers, some being answered by professors in horticulture. I also visited many orchards, large and small.

Some growers said that, if I had never planted a Bartlett, Idaho or Leconte, I would never have been bothered with the blight, or at least not so soon. I arrived at these conclusions:

1. That pear blight is a contagious disease, and when once started in an orchard it will spread if not cut out very promptly.

2. That it is a disease of the sap, and that lots of supposed blight is death to the tree only from overbearing and other causes.

Pear trees are rapid growers and the wood is very sappy. If I cut off a limb from any healthy pear tree in June or July and lay it in the sun, it will turn nearly coal black, so that even experienced pear-growers would say blight when there was no blight.

When I planted only such varieties as are not subject to blight, I did not mean that they were entirely proof against the disease. I have also had Lincoln and some others, but did not wish to confuse a beginner with too many varieties. These three are the best. I found where Kieffers blighted on clay land, they had nearly always been heavily fertilized, and from many other observations which are too long to discuss here. I finally decided that, if I planted only such varieties on high clay land as are not so apt to blight, give them no manure, nor cultivate them late in the season, and not plant any varieties that are bad blighters, I should not get the blight started; or if it did start I could control it better. So far my orchard proves I am right.

This has been the worst year for blight I have ever seen; have today examined my orchard of nine hundred trees, and now make this offer if Mr. Gray doubts statements concerning it: I will deposit money in the bank at Williamsfield, sufficient to pay his fare to and from that place, meet him at the station, and show him my orchard; and if he can find one single twig on any of my nine hundred trees blighted, then I will pay all his expenses; but if he finds them all entirely free from blight, then he pays his own expenses. I can also take him to an orchard of several hundred trees only a mile from Williamsfield, on rich black soil, nearly ruined this year by blight. I make this offer in good faith.

Many made the mistake of planting all kinds at high prices—among them a few Lecontes or Bartletts, which started blight and gave it to others. I planted only one-year two-foot trees, as they will, I believe, make healthier trees than larger ones.

If we had not bees or other insects, we could not raise pears successfully. "Why blame the bees?"

The pear, being a very rapid grower on only moderately fertile soils, if stimulated by barn yard manure or any fertilizer containing an abundance of nitrogen, it will cause the tree to produce an unnatural growth, and render it subject to inoculation by said bacteria or germs. By so stimulating year trees, especially of bad blighting varieties, these same germs will originate without any inoculation whatever. This I have proven to my own satisfaction and by my own experience; and have my orchard free from blight, though blight was all around me, to prove my theory correct so far.

After having read carefully all I can find on blight bacteria, I have yet to see a single case where a bee has been examined and found to carry bacteria. So, let us not pass judgment on the bee until all the evidence is in, both pro and con. So far, all evidence against it is purely circumstantial and light in weight as experience shows; for in a season of fine dry weather, when the bees are permitted to work on blossoms all through bloom, and if weather continues dry, blight seldom spreads at all; but in wet seasons like last year, when the bees are prevented from visiting the blossoms, much blight may be expected.

J. E. JOHNSON.

Williamsfield, Ill.

I do not believe that bees scatter the blight, for many trees blight and die long before they bloom. My observations lead me to believe the blight is a sap disease, not caused by bees or any other kind of insects.

Atwood, Ill.

J. W. C. GRAY.

The very fact that young trees that have never been in bloom, and which bees have never visited or been near, are just as badly blighted as the old trees, goes to show that the sources of the disease are due to some agency outside of the bees. As ants are very numerous in warm countries it is reasonable to assume they play a very important part in the spread of pear blight in California.

E. R. ROOT.

ADDITIONAL PROOF THAT BEES HAVE NOTHING TO DO WITH PEAR BLIGHT.

It appears strange that an intelligent community of pear growers should accuse honey-bees of disseminating the blight. That the all-wise Creator would create so useful an insect, and let it be the means of spreading disease and death while pollenizing the bloom to insure the setting of the fruit, is incredible. If bees spread the disease, why do trees die with it that have never bloomed?

About twenty-five years ago, every pear tree in this vicinity blighted, and many died. One morning I was admiring a fine pear tree. Its leaves were green and shiny. At noon I was surprised to see its branches black and withering. No one knew whence the blight came or whither it went; for, like an Arab, it silently folded its tent and departed, and has not appeared here since. We had a Flemish-Beauty pear tree that was killed to the ground with blight; but a sprout came up above the graft, and bore four bushels of lovely pears this year.

About ten years ago, while traveling through Northwest Florida, I

greatly admired the pear orchards—row upon row of fine trees without a break. The blight came and destroyed them. A grower told the writer that, whether trees were cultivated or uncultivated, mulched or irrigated, they died all the same. I had in Florida a row of four Leconte pear trees and one Keiffer. The Lecontes were blighted, killed to the ground. Two sent up very strong shoots. The others were entirely dead. I had fertilized these trees abundantly, and they made great growth, and bore heavily—that is the Lecontes; but the Keiffer grew slowly, and bore heavily. If the bees carry blight, why didn't they carry it from the Lecontes to the Keiffers?

In the future I'll not cultivate nor disturb the soil under my pear trees, for I noticed trees growing in yards, that were tramped around, never cultivated or fertilized, didn't blight. I may spread under them ashes and lime, or a coating of decayed leaves, and turn them over to the care of the Almighty.

Peoria, Ill., October, 1902.

MRS. L. HARRISON.

THE BEE AND PEAR BLIGHT; THE SITUATION IN CALIFORNIA.

Trouble arose in 1902 between the pear growers on the one side and the bee men on the other, in the vicinity of Hanford, Cal., a great fruit-growing region near the center of the state. The first mentioned alleged that the blight that was killing the trees was scattered by the bees, because the microbes causing the disease, and which they claimed was in the nectaries of the flowers of affected trees, were scattered by the bees to the nectaries of flowers of healthy trees.

As a member of the National Bee-Keepers' Association, I appeared at the scene of the trouble, in behalf of the bee-keepers. The result of our meeting was that a compromise was agreed on, by which, for the purpose of experiment, all bees in a given vicinity were to be removed by the bee-men voluntarily for one season, to determine whether the spread of pear blight could be mitigated.

When I left, there was good feeling.

I was assured, while on the ground, that pear blight is something that comes and goes in spite of the bees. This admission was made by some of the fair-minded pear men. If that be the case, the terrible blight that has devastated the vicinity of some of the best bearing trees will disappear of its own accord, and in the course of a few years these conflicting relations between the two industries will be forgotten.

It will be remembered that the bee and fruit men were preparing for a conflict; that the latter averred that they would set out poison if the bee men did not remove their bees from the vicinity of the pear trees; and the National Bee-Keepers' Association was appealed to, and, as an officer of that association, the writer appeared on the field to see what sort of compromise could be effected. The result of this visit was that a truce was declared, and the bee-keepers for experimental purposes, decided to remove their bees from the infected regions—at least during the time the trees were in bloom; but in spite of the fact that the majority of bee-keepers kept this agreement in good faith, there would be an occasional bee-keeper, even among the fruit growers, who would still leave his bees in the old

location. It was evident that, unless everyone complied with the proposition, no benefit would accrue.

One of the largest pear growers in California told me that the pear men themselves were largely responsible for the spreading of the disease.

It is evident that all the fruit growers will have to take unusual precaution to examine every twig in their orchards, and cut out the diseased portions. The failure of one pear grower will put in jeopardy the interest of all the growers in his vicinity, to say nothing of the fearful damage among his own trees.

I omitted to mention that Dr. Waite says that the pruning-knife or shears must be dipped in some disinfecting medium every time it cuts off a limb of a tree. It would be monstrous foolishness to scatter the blight from tree to tree in the very act of preventing such spread.

Of course, Dr. Waite's new plan may not prove to be entirely effective, from want of perfect co-operation and thoroughness. If they fail to take the means at hand, then the bee men can hardly be held accountable before the courts.

E. R. ROOT.

F. E. Brown, secretary of the Central California Bee-Keepers' Association, immediately made an investigation and reported his findings. He visited the Downing orchards and several others in that vicinity. True several of the large trees were protected by the netting so that no bees could get at the blossoms; and there is plenty of blight and no more fruit upon these trees than on the trees not protected. The reason is, the fruit was not pollenized, and the blossom with the stem dropped off.

ALFALFA

TROUBLE BETWEEN BEE MEN AND ALFALFA GROWERS IN NEVADA.

It is a well-known fact that Nevada produces many carloads of fine alfalfa honey. So much of it is shipped out of the state that the alfalfa-growers and the cattle-men are getting their heads together, arguing that all this sweetness is just so much saccharine matter taken out of their hay. One of the largest ranchers is a representative in the legislature of Nevada, and it appears that efforts are on foot to get a law passed at the next session of the legislature, prohibiting bee-keepers from locating beeyards within sight of the alfalfa fields. This would practically mean the wiping out of all bee-keeping interests in a very important honey-producing state, and, besides setting a dangerous precedent for other states. The argument made by the cattle-men and ranchers is this: Carload after carload of alfalfa honey is being shipped out of the state. The best hay is the first cutting, and the first crop of blossoms is also the best for the bee-keeper. They argue "that a ton of honey probably represents the essence of 200 tons of alfalfa, and that the hay is just that much poorer in sacchine matter. * * * It stands to reason that you cannot take all of this honey out of the hay, and still have it as rich in saccharine matter." In this day of progress and scientific investigation, it is staggering to hear

such talk. Of course, the bee-keepers are ridiculing such sheer nonsense, for it cannot be based on anything else than consummate ignorance and prejudice. It is a well-known fact that red-clover hay will not develop properly unless there are honey-bees or humble-bees in the vicinity; that attempts were made to grow the plant in Australia, but it failed miserably until bumble-bees were introduced. Exactly the same thing will apply in growing alfalfa. While it would be too much to claim that this kind of hay cannot be grown without bees, yet it is safe to say that a much poorer crop would be the result without them. We can also assert, without fear of successful contradiction, that the best scientific men in the world, as well as professors in all the agriculture colleges, can show that the assertion of the cattle-men is utterly without foundation.

The animus of the whole thing is evidently jealousy. Whenever one class of citizens make a little money, there are plenty of people who will be envious of them.

I do not know what the National Association is doing or has done about the matter; but I do not believe that its 1,500 members will allow any such foolish and ignorant legislation to come to pass without a vigorous fight. Like the other case reported in these columns, the whole thing is so ridiculous that I think the bee-keepers will be easily able to thwart any efforts that may be made to pass a law of this kind. But we must not be overconfident. We must be alert, and ready to know what the opposition proposes to do, and meet them half way.

E. R. ROOT.

H. W. SMITHKONS, North Amherst, Ohio.

You speak of the butterflies on alfalfa, and say you were told they "eat the blossom." If you had stopped to remember that butterflies have no mouth-parts to eat, like grasshoppers, which often eat off clover blossoms, but that they have a tiny slender tongue for licking or sucking up sweets, I don't think you would have believed that report.

YELLOW BUTTERFLIES NOT ENEMIES OF THE ALFALFA PLANT.

Mr. Root:—The yellow butterflies (species of *colias*) never injure clover of any kind, nor any plants. They sip nectar from flowers, and may and do aid some in pollination. The caterpillars do at times eat from the clovers; but so far as I have ever observed, they are never abundant enough to do any considerable harm. I know of only two serious enemies of alfalfa—gophers and goldthread, or dodder.

A. J. COOK.

Claremont, Calif.

(It was probably a mistake in supposing that the yellow butterflies had any blighting effect on the blossoms of alfalfa. The fact that they swarmed over the fields in countless thousands, so that the air was yellow with them over the fields shows that they were after the nectar as well as the bees, and to the extent that they robbed the bees of just so much honey, to that extent they were an enemy to the bee-keeper. We are obliged to Professor Cook and others for the correction.

E. R. ROOT.

HOW BUTTERFLIES INDIRECTLY DO DAMAGE TO ALFALFA.

While the butterflies themselves probably do a great deal of damage by sucking the nectar from the blossoms, thus depriving the bees of large quantities of honey, the worst damage is done by the worms which hatch from the eggs laid by the butterflies. They are something like a web worm, and are very destructive here some seasons, not only eating practically all the blossoms, and so destroying all chances of a seed crop, but they also do much damage to the hay crop by eating a large proportion of the leaves.

E. S. WEBSTER.

Hutchinson, Kan., February 27.

LAWS

WISCONSIN.

The Governor may appoint for a term of two years a State Inspector of Apiaries. Said inspector shall, when notified of existence of disease known as Foul Brood among apiaries, examine all such as are reported, and all others in the same locality, and ascertain whether or not such disease exists, and if satisfied of its existence shall give the owner or person who has care of such apiaries full instructions as to manner of treating them.

Within a reasonable time after making such examination, the inspector shall make another examination thereof, and if the condition of any of them is such as in his judgment renders it necessary, he may burn all the colonies of bees and all the comb necessary to prevent the spread of the disease.

Such inspector shall, before such burning, give the notice provided for in and otherwise proceed pursuant to the provisions of section 1492, b. The inspector shall make, at the close of each calendar year, a report to the Governor, stating the number of apiaries visited, the number of those diseased and treated, the number of colonies of bees destroyed and of the expense incurred in the performance of his duties. Said inspector shall receive four dollars for each day actually and necessarily spent in the performance of his duties and be reimbursed the money expended by him in defraying expenses; provided, that total expenditures for such purposes shall not exceed seven hundred dollars per year.

Sale of a Diseased Apiary, Etc. Vol. 2, Chap. 187, Section 4605a.—Any owner of a diseased apiary of honey made or taken from such an apiary, or appliances taken from such an apiary, who shall sell, barter or give away any such apiary, honey or appliances, or bees from such an apiary, expose other bees to the dangers of contracting such disease, or refuse to allow the inspector of apiaries to inspect such apiary, honey or appliances shall be fined not less than fifty dollars nor more than one hundred dollars, or be imprisoned in the county jail not less than one month nor more than two months.—Sec. 4, chapter 150, 1897.

NEW YORK.

Sec. 80.—The prevention of Disease Among Bees.—No person shall keep in his apiary any colony of bees affected with a contagious malady known as foul brood or black brood; and every bee-keeper when he becomes aware of the existence of either of such disease among his bees, shall immediately notify the commissioner of agriculture of the existence of such disease.

Sec. 81.—Duties of the Commissioner.—The commissioner of agriculture shall immediately upon receiving notice of the existence of foul brood or black brood among the bees in any locality, send some competent person or persons to examine the apiary or apiaries reported to him as being affected, and all the other apiaries in the immediate locality of the apiary or apiaries so reported; if foul brood or black brood is found to exist in them, the person or persons so sent by the commissioner of agriculture shall give the owners or caretakers of the diseased apiary or apiaries full instructions how to treat said cases. The commissioner of agriculture shall cause said apiary or apiaries to be visited from time to time as he may deem best and if after proper treatment, the said bees shall not be cured of the disease known as foul brood or black brood then he may cause the same to be destroyed in such manner as may be necessary to prevent the spread of the said disease. For the purpose of enforcing this act the commissioner of agriculture, his agents, employes, appointees or counsel, shall have access, ingress and egress to all places where bees or honey or appliances used in apiaries may be, which it is believed are in any way affected with the said disease of foul brood or black brood or where it is believed any commodity is offered or exposed for sale in violation of the provisions of this act. No owner or caretaker of a diseased apiary, honey or appliances shall sell, barter or give away any bees, honey or appliances from said diseased apiary, which shall expose other bees to the danger of said diseases, nor refuse to allow the said commissioner of agriculture, or the person or persons appointed by him to inspect said apiary, honey, or appliances, and do such things as the said commissioner of agriculture or the person or persons appointed by him shall deem necessary for the eradication of said diseases. Any person who disregards or violates any of the provisions of this section is guilty of a misdemeanor and shall be punished by a fine of not less than thirty dollars nor more than one hundred dollars, or by imprisonment in the county jail for not less than one month nor more than two months, or by both fine and imprisonment.

AGENTS—BEE INSPECTION WORK.

Appointed under the provisions of chapter 33 of the General Laws, as amended by chapter 223 of the Laws of 1899 and chapter 214 of the Laws of 1902.

First Division—Wheeler D. Wright, agent, Altamont, N. Y.

Second Division—N. D. West, agent, Middleburg, N. Y.

Third Division—Charles Stewart, agent, Sammons ville, N. Y.

Fourth Division—Mortimer Stevens, Pennellville, N. Y.

MICHIGAN.

(Act No. 66, Public Acts, 1901.

Section 1. The Dairy and Food Commission upon receipt of a certified

copy of the record of the Michigan State Bee-Keepers 'Association, by the secretary of said association, showing that a majority of the members of said association recommended the appointment of an inspector of apiaries, shall appoint a State inspector of apiaries. Said inspector shall be responsible to the Dairy and Food Commissioner and shall comply with such rules and regulation as the Dairy and Food Commissioner shall from time to time prescribe for the carrying out of the work of said State inspector.

Sec. 2. The Dairy and Food Commissioner shall, when notified in writing by the owner of an apiary or by three disinterested taxpayers in the vicinity of the apiary, cause the inspector to examine such apiaries as are reported and all others in the same locality not reported, and ascertain whether or not the disease known as foul brood or other contagious disease exists in such apiaries, and if satisfied of the existence of foul brood, he shall give the owner or care-taker of the diseased apiaries full instructions how to treat said case as in the inspector's judgment seems best.

Sec. 3. The inspector who shall be the sole judge may visit all diseased apiaries a second time and if need be burn all colonies of bees and combs that may be found not cured of foul brood or other contagious diseases.

Sec. 4. If the owner of a diseased apiary, honey or appliances shall knowingly or willfully sell, barter, or give away any bees, honey or appliances, or expose other bees to the danger of said disease or refuse to allow said inspector to inspect such apiary, honey or appliances, said owners shall on conviction before a justice of the peace, be liable to a fine of not less than fifty dollars nor more than one hundred dollars or not less than one month's imprisonment in the county jail, nor more than two months' imprisonment.

Sec. 5. In addition to such individual reports as are required under this act by the inspector of apiaries, he shall make an annual report to the Dairy and Food Commissioner, giving the number of the apiaries visited, the number of diseased apiaries found, the number of colonies treated, also the number of colonies destroyed by fire, and an itemized account of his transportation expenses with affidavit annexed thereto.

Sec. 6. There is hereby appropriated out of any moneys in the State treasury not otherwise appropriated a sum not exceeding five hundred dollars per year for the suppression of foul brood among bees in Michigan. The inspector shall receive five dollars per day and actual transportation expenses for actual time served, which sum shall not exceed the money hereby appropriated, to be paid by the State treasurer upon warrants drawn by the Auditor General and approved by the Dairy and Food Commissioner.

MISSOURI.

APIARIES—INSPECTION.

AN ACT to provide for the appointment of a state inspector of apiaries, and to regulate the duties thereof; providing a penalty for disposing of, or importing into this state diseased honey or bees, or for hindering the inspector in the fulfillment of his duties, with an emergency clause.

Section 1. Inspector of bees—appointment—term—qualification.

Sec. 2. Duty of inspector.

Sec. 3. May enter premises to perform duty.

Sec. 4. Report, to whom made—to contain what?

Sec. 5. Salary.

Sec. 6. Owner of diseased bees not to sell.

Sec. 7. Emergency.

Be it Enacted by the General Assembly of the State of Missouri, as follows:

Section 1. The state board of agriculture of the State of Missouri shall appoint a state inspector of apiaries to aid and assist in the development and protection of the honey industry in the State of Missouri, and for the prevention and suppression of contagious or infectious diseases among honey bees, such as foul brood, black brood, paralysis, etc., which is said to exist at the present time among some of the apiaries of the state. Said inspector of apiaries shall be a practical apiarist, and shall give to the said board of agriculture, before his appointment, satisfactory evidence of his practical knowledge of handling bees and of their diseases, and shall hold his office for the term of two years, unless removed for cause.

Sec. 2. Said inspector shall, when notified of the existence of the disease known as foul brood, or other infectious disease among apiaries, examine such reported apiaries and all others, in the same locality, and if satisfied of the existence of foul brood, or any other infectious disease, shall give to the owner or person having charge of any such apiary full instructions as to the manner of treating them. Within a reasonable time after making the first examination, the inspector shall make a second examination, and if the conditions of any of the colonies affected is such as, in his judgment, renders it necessary, he may personally treat the disease, or, if in his opinion, it is necessary to prevent further spread of the disease, and the owner refuses to treat them according to the instructions of said inspector, then the inspector may burn or otherwise destroy such diseased bees, comb or other material that might cause the spread of the infection.

Sec. 3. Said inspector shall have the right to enter any premises where bees are kept, for the performance of his duties.

Sec. 4. The inspector shall make a full report to the secretary of the board of agriculture at least once each year, stating the number of apiaries inspected, the number found to be diseased, and the number treated, and such other information as he may deem important. The secretary of the board of agriculture shall publish, in his annual report, or otherwise, such of the information as he deems of importance to the apiarists of the state.

Sec. 5. Said inspector shall receive four dollars for each day actually and necessarily spent in the performance of his duties, and shall be reimbursed for the money expended by him in defraying necessary traveling expenses: Provided, the total expenditure for such purposes shall not exceed one thousand dollars in any one year: Provided further, that the said inspector shall render to the board of agriculture an itemized account of his per diem and expenses, and upon approval of the same by the executive committee of the board of agriculture, the president and secretary of the board are instructed to draw a warrant upon any available funds for the amounts allowed.

Sec. 6. Any owner of a diseased apiary, or any person, persons, company or corporation who shall knowingly sell, barter, give away or import into this state any colony or colonies of bees, honey or other article infected with disease, or expose other bees to the danger of contracting such disease, or refuse to allow the apiary inspector to inspect or treat such apiary, honey or other articles so infected, or shall resist, impede or hin-

der him in any way in the discharge of his duties, under the provisions of this act, shall be guilty of a misdemeanor, and shall be fined not less than ten nor more than twenty-five dollars for each offense.

Sec. 7. It being necessary to treat the diseases herein provided for in the spring or summer, in order that satisfactory results may be obtained, creates an emergency within the meaning of the Constitution, and this act shall go into force and effect upon its passage and approval.

Approved March 8, 1907.

NEBRASKA.

(a) Laws of Nebraska (Chap. 3, Act 1885, Chap. 8a, Ann'd Stat. Neb. 1901), makes it unlawful for anyone to keep or have in possession in this state, any honey bees, brood comb, or honey known to possess or to be infected with the disease known as foul brood, or with any other infectious or contagious disease peculiar to bees or honey, or to keep or have in possession any bee hive or other receptacle in which any foul brood, diseased bees, or infected honey is known to have been kept.

(b) Destruction, Penalty.—Any honey bees, brood comb, or honey owned or kept or found in this state, known to be affected or infected; and any bee hive or other receptacle in which any bees, brood comb, or honey shall have been kept, known to be, or have been infected as set out in section (a), shall be destroyed immediately and completely by burning. Any person who shall be the owner, possessor, or care-taker thereof, who refuses or neglects to immediately cause the same to be destroyed, as provided herein, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall pay a fine of not less than ten nor more than one hundred dollars, or be imprisoned in jail not more than 30 days for each offense.

(c) Inspection.—Every person owning or keeping honey bees in this state shall cause the same to be inspected at his own expense, at least once a year in infected districts. This includes each and every brood or colony of bees, brood comb, and honey in his possession or under his control, and the procuring of a certificate of such inspection showing the true condition of each and every one of the above named articles in his possession as to the existence of foul brood or other infections or contagious diseases in duplicate, one of which duplicates shall be left with such person, and the other filed in the county clerk's office, where such bees or honey or brood comb is kept.

(d) Treatment.—If, upon inspection, the disease of foul brood or other disease or infection or contagion shall be found to exist, and the inspector shall be of the opinion that, by proper treatment, such disease, contagion or infection may be removed, he shall so certify officially in his certificate of inspection, and the owner or keeper of such bees shall be entitled to keep such bees for the period of six months for treatment; and if not eradicated at the expiration of such time, such bees shall be destroyed as herein before described; and any person having in possession any brood comb, bee hive, honey or apparatus used in connection with bee culture, found in like manner to be infected, such person shall be allowed thirty days in which to disinfect the same; and if said disinfection shall not have been completed at the expiration of thirty days, such brood comb, bee hive, honey or apparatus shall be burned as hereinafter provided.

(e) Penalty.—Every person neglecting or refusing to cause all such bees to be duly inspected as provided herein, shall be deemed guilty of a

misdemeanor and shall pay a fine of not less than ten nor more than one hundred dollars for each offense upon conviction thereof.

(f) Inspection, Pay.—Upon the application of the Nebraska Bee-Keepers' Association, or other person or persons interested in bee culture residing in any county of the state, the Governor may appoint a suitable resident inspector of bees and honey of said county, whose sworn duty it is to inspect all bees, brood comb and honey, within said county, when requested and shall receive two dollars per day for his services, to be paid by the owner, agent, or lessee in whose possession such bees, brood comb or honey may be when inspected. Such inspector shall make certificates in duplicate as provided in section (c).

COLORADO.

(a) Laws of Colorado, approved April 16, 1891, (Laws 1891, p. 41), provide for the appointment by the county court, upon application of the Colorado Bee-Keepers' Association, or of any five actual bee-keepers resident in any county, of a competent, actual bee-keeper, resident of said county, to be county inspector of bees. Application shall be based upon information and belief that the disease known as foul brood, or any other contagious or infectious disease, exists, and must name the actual bee-keepers of the county, so far as known to the applicants.

(b) Oath of Office.—The person so appointed shall within five days, file with the Clerk of the Court his acceptance of the office, and the usual oath of office. The inspector shall hold office during the pleasure of the court and until his successor is appointed and qualified.

(c) Bee-keepers give Notice of Foul Brood—Penalty.—A bee-keeper or other person aware of the existence of foul brood, either in his own apiary or elsewhere shall immediately notify the county inspector, if there be one; if not, the secretary of the Colorado Bee-Keepers' Association, of the existence of such disease, and in default of so doing he shall, on summary conviction before a justice, be liable to a fine of five dollars and costs.

(d) Duty of Inspector; Owners; Treatment.—On receiving notice from any source of the existence of the aforesaid disease, the inspector shall forthwith inspect each colony of bees and all hives, implements and apparatus, honey and supplies used in connection with such apiary, and mark those he believes to be infected, and notify the owner or agent thereof and the latter shall, within five days, faithfully apply and carry out such treatment of the diseased colonies as may have been prescribed by the State Bee-Keepers' Association for such cases, and thoroughly disinfect, to the satisfaction of the inspector, all hives, houses, combs, honey and apparatus used in connection with any such diseased colonies; or the owner or agent may elect within the same time, to destroy said bees, hives, comb, comb houses and apparatus by fire or burial.

It is the duty of the inspector and his assistants, after inspecting hives or fixtures, or handling diseased bees before leaving the premises and proceeding to another apiary, to thoroughly disinfect their person and clothing.

(e) Box Hives—Transfer.—The inspector may, in his discretion, order any owner or possessor of bees dwelling in box hives in apiaries where the disease exists (being mere boxes without frames), to transfer such bees to movable-frame hives within a specified time, and, in default of such transfer, the inspector may destroy or order the destruction of such hives and the bees therein.

(f) **Penalty for Selling Diseased Bees or Infected Appliances.**—Any one who knowingly sells, barter, or gives away, moves, or allows to be moved, a diseased colony or colonies of bees, be they queen or workers, or infected appliances, he shall, on conviction before any justice, be liable to a fine not less than \$50 nor more than \$100, or to county jail imprisonment for a term not exceeding two months.

(g) **Selling Infected Property: Exposing Infected Things—Penalty.**—Any person whose bees have been destroyed or treated for foul brood, who sells or offers for sale any bees, hives, or appurtenances after such destruction or treatment, before being authorized by the inspector to do so, or exposes in his bee-yard or elsewhere any infected comb honey or other infected thing, or conceals the fact that said disease exists among his bees shall, on conviction, be liable to a fine of not less than \$20 nor more than \$50 or imprisonment in the county jail not less than one nor more than two months.

(h) **Disobedience, and Resistance to Inspector—Seizure.**—When an owner or possessor of bees disobeys the direction of the inspector, or offers resistance or obstructs said inspector in his duty, the latter may apply to a justice for special constable to proceed with him to the premises of such owner, and assist the inspector to seize all the diseased colonies and infected appurtenances, and burn them forthwith, and if necessary, cause the arrest of the said owner or possessor, and have him dealt with according to the provisions of section (g).

(i) **Inspector Must Read or Deliver Copy of Act.**—The inspector shall read over to such person the provisions of this act, or shall cause a copy thereof to be delivered to him, before proceeding against him for its violation.

(j) **Annual Report.**—The said inspector shall include in his annual report to the president of the Colorado State Bee-Keepers' Association a statement of his work during the preceding year, the number of colonies inspected, the number diseased, the number destroyed by fire or otherwise; the names of the owners, and the localities where found, and the amount paid to him for his services and expenses for the year.

(k) **Compensation—Payment by County.**—The county inspector of bees receives four dollars per day, and two dollars for each half day necessarily and actually employed, together with his necessary and actual expenses while so employed, payable by the county as other claims against the county are audited and paid.

CALIFORNIA.

(a) **County Inspection of Apiaries.**—Laws of California (Laws of 1901, Chap. XXIV., Stat. 1901), provide that, upon petition of ten or more resident property-holders and possessors of an apiary or place where bees are kept, to the board of supervisors of any county, stating that certain or all apiaries within the county are infected with the disease known as foul brood, or any other disease infectious or contagious, and injurious to bees, their eggs, or larvae, that an inspector be appointed by them to supervise the treatment of said bees and apiaries, the said board shall, within twenty days, appoint a suitable person, who shall be a skilled bee-keeper, inspector of apiaries. Upon petition of a like number of resident property holders and possessor of an apiary, the board may remove said inspector for cause, after a hearing.

(b) Duties of Inspector.—It shall be the duty of the inspector in each county to cause an inspection to be made when he deems it necessary; and if any foul brood, infectious or contagious disease injurious to bees or their eggs or larvae be found, he shall notify the owner or person in charge of said apiaries or place where bees are kept, and he shall require such persons to eradicate and remove such disease or cause of contagion within a certain time to be specified. Notice may be served by an inspector or by deputy or after the manner of a summons in a civil action. Any and all apiaries or places where bees are kept, etc., found infected with disease are declared to be a nuisance; and neglect or refusal of the owner or agent to abate the nuisance within the time specified, it shall be the duty of the inspector to abate the same by treatment or destroying the infected hives, bees and comb. The expense thereof shall be allowed by the board of supervisors, and paid out of the general fund of the county.

(c) Salary.—The salary of the county inspector of apiaries shall be three dollars a day when actually engaged in the performance of his duties.

(d) The act of 1883, approved March 30, providing for inspection of apiaries, etc., is hereby repealed.

UTAH.

(a) Bee Inspection; Inspector.—Laws of Utah (Rev. Stat. 1898 Sec. 139 to 143 inclusive) provide for the appointment of the county commissioners of one or more qualified persons inspectors of bees for their respective counties. Such inspectors shall hold office for two years, qualify and give bond. No appointment is made except on petition of a majority of the-keepers of said county.

(b) Pay of Inspectors; Tax on Bees.—Inspectors shall be paid out of the county treasury for services actually rendered, at such rate per day as the board of county commissioners may fix. Each colony of bees is assessed, and taxed in the same manner as other property is assessed and taxed, and collected by the county.

(c) Duties and Powers of Inspector.—All hives of bees in each county shall be carefully inspected at least once each year by a county or district inspector, where such inspector has been appointed; and at any time upon complaint that disease exists among the bees of any person, the inspector to whom the complaint is made shall immediately inspect the bees said to be infected. He shall have authority to take charge and control of diseased bees and their hives, and tools and implements used in connection therewith for treatment; or to destroy such bees, broods, or hives and their contents, or implements, as may be affected. The owner may question a decision of the inspector concerning the presence of disease, and may appeal to three arbitrators selected from among bee-keepers of the county, one each by the owner and inspector, and the third by the two chosen, whose decision, concurred in by two of the number, shall be conclusive as to the condition of the bees at the time of such examination.

(d) Obstructing Inspector—Penalty.—Any person who obstructs or hinders an inspector in the performance of his duty shall, on conviction thereof, be deemed guilty of a misdemeanor, and fined for the first offense not less than five nor more than twenty-five dollars; and for additional offense, any sum not exceeding fifty dollars.

NEW MEXICO.

CHAPTER 30.—AN ACT relative to the inspection of bees and creating the office of inspector of bees. H. B. No. 105; Approved March 16, 1907.

Be it enacted by the Legislative Assembly of the Territory of New Mexico:

Section 1.—Upon the written application, under oath, of any five actual bee-keepers, residing in any precinct in this Territory, alleged upon information and belief, that the disease known as foul brood, or any other contagious or infectious disease, exists among the bees in said precinct, or that infected articles are kept in said precinct, and that there is danger that such disease will spread to other apiaries, being made to the chairman of the board of county commissioners of the county in which said precinct is located, the said board, appoint some competent, actual bee-keeper, residing in said precinct, to be precinct inspector of bees; and the applicants shall state, in this application, the names of the actual bee-keepers of the precinct, so far as known to them.

Sec. 2. The person so appointed shall, within five days after his appointment, file with the clerk of such board, his written acceptance of the office, and the usual oath of office; or, in the default thereof, the board shall, in the same manner, make new appointments until the said office is filled. The inspector shall hold his office during the pleasure of the board and until his successor is appointed and qualified.

Sec. 3. Every bee-keeper or other person who shall be aware of the existence of foul brood, either in his own apiary or elsewhere, shall immediately notify the inspector of bees, if there be one, of the existence of such disease, and in default of so doing shall, on summary conviction before a justice of the peace, be liable to a fine of five dollars and costs.

Sec. 4. On receiving notice from any source of the existence, in any apiary in his precinct, of the disease known as foul brood, or any other infectious or contagious disease of bees, the inspector of bees shall forthwith inspect each colony of bees and all hives, implements and apparatus, honey and supplies on hand or used in connection with such apiary, or otherwise distinctly designate each colony and apiary which he believes infected, and notify the owner or person in charge of said bees thereof, in writing or otherwise, and the owners of said bees, or the person in charge thereof, in writing or otherwise, and the owners of said bees, or the person in charge thereof, shall, within five days thereafter, practically and in good faith, apply and thereafter fully and effectually carry out to and upon said diseased colonies, such treatment as may have been prescribed by the inspector for such cases; also thoroughly disinfect to the satisfaction of such inspector all hives, bee-houses, combs, honey and apparatus that have been used in connection with any such diseased colonies; or, at his election, the said owner or person in charge of such bees may, within the same time, utterly and completely destroy said bees, house, comb honey, honey and apparatus, by fire, or bury the same in the ground, with a covering of not less than two feet of earth.

Sec. 5. After inspecting infected hives or fixtures, or handling diseased bees, the inspector shall, before leaving the premises or proceeding to any other apiary, thoroughly disinfect his own person and clothing, and shall see that any assistant or assistants with him have also thoroughly disinfected their person and clothing.

Sec. 6. The inspector shall have full power, in his discretion, to order

any owner or possessor of bees dwelling in box hives in apiaries where the disease exists (being mere boxes without frames) to transfer such bees to movable-frame hives within a specific time, and in default of such transfer, the inspector may destroy or order the destruction of such box hives and the bees dwelling therein.

Sec. 7. Should the owner or possessor of diseased colonies of bees, or any portion of said colonies, be they queens or workers, or of any affected appliances of bee-keeping, knowingly sell or barter, or give away, or move or allow to be moved, such diseased colonies or portion of colonies, or infected appliances, he shall, on conviction before any justice of the peace, be liable to a fine of not less than fifty dollars (\$50) nor more than one hundred dollars (\$100), or to imprisonment in the county jail for any term not exceeding two months.

Sec. 8. Should any person whose bees have been destroyed or treated for foul brood sell, or offer for sale, any bees, hives or appurtenances of any kind, after such destruction or treatment, and before authorized by the inspector to do so, or should he expose, in his bee-yard or elsewhere, any infected comb honey, or other infected thing, or conceal the fact that such disease exists among his bees, he shall, on conviction before a justice of the peace, be liable to a fine of not less than twenty dollars (\$20) nor more than fifty dollars (\$50), or to imprisonment in the county jail for a term not exceeding two months and not less than one month.

Sec. 9. When an owner or possessor of bees shall disobey the directions of the said inspector, a justice of the peace may, upon the complaint of the said inspector, cause a sufficient number of special constables to be sworn in and such special constables shall proceed to such owner or possessor and assist the inspector to seize all diseased colonies and affected appurtenances, and burn them forthwith; and, if necessary, the said constables may arrest the said owner or possessor and bring him before a justice of the peace to be dealt with according to the provisions of the proceeding section of this act.

Sec. 10. Before proceeding against any person before any justice of the peace, the said inspector shall read over to such person the provisions of this act or shall cause a copy thereof to be delivered to such person.

Sec. 11. The said inspector shall include in his annual report to the board a statement of his work during the preceding year, which statement shall include: First, the number of colonies inspected; second, the number of colonies diseased; third, the number of colonies destroyed by fire or otherwise; fourth, the names of the owners and the localities where found; fifth, the amount paid him for his service, and expenses for the preceding year.

Sec. 12. All acts and parts of acts in conflict with this act are hereby repealed.

Sec. 13. In the opinion of the Legislative Assembly an emergency exists and this act shall take effect from and after its passage.

SOUTH DAKOTA.

CHAPTER 221.

(S. B. 134)

AN ACT Entitled: An Act to Prevent Disease Among Bees, and to Provide for the Inspection Thereof.

Be it Enacted by the Legislature of the State of South Dakota:

Section 1. That for the purpose of this act state shall be divided into two districts. All that part of the state lying east of the Missouri river shall be known as District No. 1, and all that portion of the state lying west of said river shall be known as District No. 2. On petition of ten or more bee-keepers, residents therein, the governor shall appoint for each district an inspector of bees, who shall hold his office for a term of two years, or until his successor is appointed and qualified; and said inspector shall have the power to appoint a deputy.

Sec. 2. It shall be the duty of such inspector, when notified in writing by at least three bee-keepers in any locality, of the existence, or suspected existence, of the disease known as foul brood among the apiaries of such locality, to at once thoroughly examine such apiaries as are reported to be diseased, and all other apiaries in the same locality, and thus ascertain whether such disease exists. If the bees in any apiary are in such place or condition as to prevent a thorough examination by the inspector, he may order the same to be put into a proper place or condition for such examination. If such order is not complied with, and the inspector has reason for believing such bees to be diseased, he may cause them to be destroyed. If upon examination the inspector is satisfied of the existence of such disease, he shall give the owner or person in charge of such apiary full instructions as to the manner of treating the same. Within a reasonable time after such examination the inspector shall, without other notice, make further examination of such apiaries, and if the condition of any of them is such as his judgment renders it necessary, he may burn, or cause to be burned, all the infected colonies of bees in any apiary, together with all the combs and hives in order to prevent the further spread of the disease.

Sec. 3. The inspector shall make a yearly report to the governor stating the number of apiaries visited, the number of these diseased and treated, and the number of colonies of bees destroyed. Such report shall also show the expense incurred by the inspector while in the discharge of his duties, under the provisions of this act.

Sec. 4. Any one who knowingly sells, barter, or gives away, moves or allows to be moved, a diseased colony or colonies of bees, be they queen or workers; or infected appliances; or who exposes any infected honey to bees without the consent of the inspector, shall be deemed guilty of a misdemeanor and be liable, on conviction before any justice of the peace of the county, to a fine of not less than twenty-five dollars, not more than one hundred dollars, or to imprisonment in the county jail not exceeding thirty days.

Sec. 6. Any owner or possessor of bees who disobeys the direction of the inspector, or offers resistance to, or obstructs said inspector in the performance of his duty, shall be deemed guilty of a misdemeanor and, on conviction thereof before any justice of the peace of the county, shall be fined not exceeding the sum of fifty dollars, or by imprisonment in the county jail not exceeding thirty days.

Sec. 7. Such inspector shall receive as compensation the sum of three dollars per day for each day actually and necessarily employed in the discharge of his duty as herein provided, together with his expenses actually and necessarily incurred while so employed; provided, that the amount to be paid on account of such expenses shall in no event exceed the sum of three hundred dollars for any one year.

Sec. 8. For the purposes of a fund to aid in the inspection of bees in this state, and to prevent disease among bees as in this act provided, every apiarist or owner of bees shall pay a tax of ten cents for each colony of bees owned by him in said county on the first day of May of each year.

Sec. 9. An emergency is hereby declared to exist, and this act shall be in force and effect from and after its passage and approval.

Approved March 5, 1909.

CANADA.

BILL.

(No. 223. 1906).

AN ACT for the Suppression of Foul Brood Among Bees.

His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

Section 1. Short Title.—This act may be known as "The Foul Brood Act."

Sec. 2. Appointment of Inspector of Apiaries.—The lieutenant-governor in council upon the recommendation of the minister of agriculture may from time to time appoint one or more inspectors of apiaries to enforce this act, and the inspector shall, if so required, produce the certificate of his appointment on entering upon any premises in the discharge of his duties. And the minister shall instruct and control each inspector in the carrying out of the provisions of this act. The remuneration to be paid to any inspector under this act shall be determined by order of the lieutenant-governor in council.

(In 1909 fourteen inspectors were appointed, for 24 days each, between May 15 and August 15.)

Sec. 3. Duties of Inspectors.—The inspector shall, whenever so directed by the minister of agriculture, visit without necessary delay any locality in the Province of Ontario and there examine any apiary or apiaries to which the said minister may direct him, and ascertain whether or not the disease known as foul brood exists in such apiary or apiaries, and wherever the said inspector is satisfied of the existence of foul brood in its virulent or malignant type, it shall be the duty of the inspector to order all colonies so affected, together with the hives occupied by them, and the contents of such hives, and all tainted appurtenances that cannot be disinfected, to be immediately destroyed by fire under the personal direction and superintendence of the said inspector; but where the inspector, who shall be the sole judge thereof, is satisfied that the disease exists, but only in milder types and in its incipient stages, and is being or may be treated successfully, and the inspector has reason to believe that it may be entirely cured, then the inspector may, in his discretion, omit to destroy or order the destruction of the colonies and hives in which the disease exists. 53 V., c. 66, s. 3.

Sec. 4. Box-hives.—The inspector shall have full power, in his discretion, to order any owner or possessor of bees dwelling in box-hives, in apiaries where the disease exists (being mere boxes without frames), to transfer such bees to movable-frame hives within a specified time, and in default of such transfer, the inspector may destroy, or order the destruction of, such box-hives and the bees dwelling therein. 53 V., c. 66, s. 4.

Sec. 5. Penalty for Disposing of Infected Bees or Appliances.—Any owner or possessor of diseased colonies of bees, or of any infected appliances for bee-keeping, who knowingly sells or barter or gives away such diseased colonies or infected appliances shall, on conviction thereof before any justice of the peace, be liable to a fine of not less than \$50 or more than \$100, or to imprisonment for any term not exceeding two months. 53 V., c. 66, s. 5.

Sec. 6. Selling Bees after Treatment, or Exposing Infected Appliances.—Any person whose bees have been destroyed or treated for foul brood, who sells or offers for sale any bees, hives or appurtenances of any kind, after such destruction or treatment, and before being authorized by the inspector so to do, or who exposes in his bee-yard, or elsewhere, any infected comb honey, or other infected thing, or conceals the fact that said disease exists among his bees, shall, on conviction before a justice of the peace, be liable to a fine of not less than \$20 and not more than \$50, or to imprisonment for a term not exceeding two months and not less than one month. 53 V., c. 66, s. 6.

Sec. 7. Penalty for Obstructing Inspector.—Any owner or possessor of bees who refuses to allow the inspector to freely examine said bees or the premises in which they are kept, or who refuses to destroy the infected bees and appurtenances, or to permit them to be destroyed when so directed by the inspector, may, on the complaint of the inspector, be summoned before a justice of the peace, and, on conviction, shall be liable to a fine of not less than \$25 and not more than \$50 for the first offense, and not less than \$50 and not more than \$100 for the second and any subsequent offense, and the said justice of the peace shall make an order directing the said owner and possessor forthwith to carry out the directions of the inspector. 53 V., c. 66, s. 7.

Sec. 8. Special Constables may be Sworn in to Assist Inspector.—Where an owner or possessor of bees disobeys the directions of the said inspector, or offers resistance to, or obstructs said inspector, a justice of the peace may, upon the complaint of the said inspector, cause a sufficient number of special constables to be sworn in, and such special constables shall, under the directions of the inspector, proceed to the premises of such owner or possessor and assist the inspector to seize all the diseased colonies and infected appurtenances and burn them forthwith, and, if necessary, the said inspector or constables may arrest the said owner or possessor and bring him before a justice of the peace to be dealt with according to the provisions of the preceding section of this act. 53 V., c. 66, s. 8.

Sec. 9. Inspector to Inform Offender of Provisions of Act.—Before proceeding against any person before a justice of the peace, the said inspector shall read over to such person the provisions of this act or shall cause a copy thereof to be delivered to such person. 53 V., c. 66, s. 9.

Sec. 10. Person Aware of Disease to Notify Minister.—Every bee-keeper or other person who is aware of the existence of foul brood, either in his own apiary or elsewhere shall immediately notify the minister of the existence of such disease, and in default of so doing shall on summary conviction before a justice of the peace be liable to a fine of \$5 and costs. 53 V., c. 66, s. 10.

Gal. 11. Inspectors to Report to Minister.—Each inspector shall report to the minister as to the inspection of any apiary in such form and manner as the minister may direct, and all reports shall be filed in the

department of agriculture, and shall be made public as the minister may direct or upon order of the legislative assembly.

WASHINGTON.

(No. 119).

Be it Enacted by the Legislature of the State of Washington:

Section 1. Whenever a petition is presented to the board of county commissioners of any county, signed by ten or more persons, each of whom is a property holder resident of the county, and possessor of an apiary or place where bees are kept, stating that certain or all apiaries within the county are infected with the disease known as foul brood, or any other disease which is infectious or contagious in its nature, and injurious to the bees, their eggs or larvae, and praying that an inspector by them, whose duty it shall be to supervise the treatment of said bees and apiaries as herein provided, the board of county commissioners shall, within twenty days thereafter, appoint a suitable person, who shall be a skilled bee-keeper, inspector of apiaries. The said board of county commissioners may remove said inspector at any time for cause.

Sec. 2. It shall be the duty of the inspector in each county to cause an inspection to be made, when he deems it necessary, of any or every apiary, or other place within his jurisdiction in which bees are kept, and if found infected with foul brood, or any infectious or contagious disease injurious to the bees, or their eggs or larvae, he shall notify the owner or owners, person or persons in charge, or in possession of said apiaries or places where bees are kept, that the same are infected with foul brood, or any other disease infectious or contagious in its nature, and injurious to bees, their eggs or larvae, and he shall require such person or persons to eradicate such disease or cause of contagion within a certain time to be specified. Said notice may be served upon the person or persons, or either of them, owning or having charge, or having possession of such infected apiaries, or places where bees are kept, by an inspector, or by any person deputed by the said inspector for that purpose, or they may be served in the same manner as a summons in a civil action. Any and all such apiaries, or places where bees are kept, found infected with foul brood, or any other infectious or contagious disease, are hereby adjudged and declared to be a public nuisance; and when ever any such nuisance exist at any place within his jurisdiction, or on the property of any non-resident, or on any property the owner or owners of which cannot be found by the inspector, after diligent search, within the county, or upon the property of any owner or owners upon whom notice aforesaid has been served, and who shall refuse or neglect to abate the same within the time specified, it shall be the duty of the inspector to abate the same, either by treating the disease, or by destroying the infected hives, together with their combs and bees therein. The expense thereof shall be a county charge and the board of county commissioners shall allow and pay the same out of the genral fund of the county.

Sec. 3. It shall be the duty of the county inspector of apiaries to keep a record of his official acts and doings, and make report thereof to the board of county commissioners when required by said board.

Sec. 4. The salary of the county inspector of apiaries shall be three dollars per day when actually engaged in the performance of his duties;

provided, that the expenditures under this act in any county shall not exceed the sum of one hundred dollars per annum.

Sec. 5. The inspector of apiaries may, in his discretion, order the owner, or owners, or other person in charge of bees kept in box or other immovable or stationary comb-hives in apiaries infected with foul brood or other infectious or contagious disease, or within a radius of three miles of such diseased apiaries, to transfer such bees to movable-frame hives within a reasonable time, to be specified in such order or notice, and in default of such transfer the owner, or owners, or other persons in charge of such bees, the inspector may destroy, or cause to be destroyed, all such hives, together with their contents, and the expense thereof shall be a county charge, as provided in section two of this act.

Sec. 6. It shall be unlawful for any person owning or controlling bees within this, which are known to be infected with foul brood or other infectious or contagious disease, to remove said bees to a new location, without first giving ten days' notice to the county inspector of apiaries, stating when and where he intends moving said bees. Any person violating the provisions of this section shall be deemed guilty of a misdemeanor.

Sec. 7. Any person or persons whose apiary is infected with foul brood or any other infectious or contagious disease, and who sells, or offers for sale, from such infected apiary any bees, hives, bee fixtures or appurtenances, or who shall expose in his bee yard or elsewhere, any infected comb-honey, bees wax, or other infected thing, or who conceals the fact that his apiary is so infected, shall be deemed guilty of a misdemeanor.

Sec. 8. Any person or persons who shall resist, impede, or hinder in any way, the inspector of apiaries in the discharge of his duties under the provisions of this act, shall be deemed guilty of a misdemeanor.

Sec. 9. An emergency exists and this act shall take effect immediately.

February 1, 1905.

INDIANA BILL.

(No. 144).

Section 4. The state entomologist shall be and is hereby constituted state inspector of apiaries and as such inspector it shall be his duty to aid and assist in the development and protection of the bee and honey industry in this state and to adopt and carry out proper measures for the prevention and suppression of contagious and infectious diseases among bees.

Sec. 5. The state entomologist shall have full power and authority at his discretion to visit and examine any apiaries for the purpose of discovering whether or not any disease may exist among bees in any part of the state. When notified of the existence or the probable existence of foul brood or other contagious or infectious diseases among bees in any apiary in the state he shall visit and examine said apiary so reported and all other apiaries in the same neighborhood that he may be informed about by diligent inquiry or otherwise, for the purpose of determining whether such disease exists or not. Whenever he shall be satisfied of the existence of foul brood or other diseases in their malignant form in any apiary it shall be his duty to order all colonies so affected, together with all hives occupied by them, and the contents of those hives and all tainted appurtenances that cannot be disinfected and that might cause the fur-

National Bee-Keepers Association

— INFORMATION BUREAU No. 15, APRIL 1, 1910 —

GREAT DEMAND FOR HONEY

I have devoted much time to why so many complain of no market for honey. I have asked fifteen wholesale dealers, why honey sales were slow when other foods were ready sale at high prices. Also asked bee-keepers who buy tons of honey besides their own for bottling and also asked many who used to be extensive honey eaters why they have dropped it from their daily food. Almost every one replies with this answer.

Good well ripened honey, sealed by the bees and matured in the hives is always in demand, at fair prices. But this thin stuff extracted before it is ready—before it is well ripened—that will sour—that never has either flavor or body—that is what spoils market for honey. Through Information bureau I had many offers of honey to sell sent me. Several such lots I found sales for and later got word from purchasers the thin honey had no body or flavor, except souring.

If every National Bee-keepers Association member will promise me **ALL HIS HONEY WILL BE RIPE, CAPPED OVER HONEY**, before it leaves his hives he will have a market he never can supply.

Our Association never can brand its members honey until this is done.

—To Sell Also To Buy—

I keep a full list of parties who wish to sell honey, or bees or fixtures another list of those wishing to buy same. Also parties who want to hire out to some beekeeper—or parties wanting help in apiary. This INFORMATION BUREAU is valuable as members use it, and costs members nothing for reply as to above. No published lists mailed to all members as it would cost \$75. each mailing of same.

Please read 1909 report—page 46-47 and 80-81 two valuable articles.

I hope by time members get a honey harvest ready for market to be able to have new patterns of honey labels special to members.

Special Prices to Paid up Members:—

TIN CANS and PAILS

Your No. & Cash with each order to AMERICAN CAN Co. at { 447 west 14th st. New York N. Y.
135 Adams st. Chicago, Ill.
any of the following addresses { San Francisco, California.

SQUARE cans with 1½ screw. F. O. B. Maywood Ill., or Cleveland Ohio.
5 gal. in crates of 50 at 21c each or \$11.25 per crate San Francisco.

5 gal. in boxes of one each 34c box.

5 gal. in boxes of two each 60c box or 75c box San Francisco.

ROUND 5 gal. round, removable wood jackets, raised head with 3 inch screw in center, that drains entire contents, bail handle, 40c each or 37½ in lots of 100. The can as received is ready for filling also ready to ship long distance with honey. I use no other. Try them.
5 gal. round can 3 inch screw, wire link handle, jacket not removable 30c each.

FRICTION TOP CANS and PAILS—Maywood, Ill.

2 lb. cans at \$2.25 per hundred. 2½ lb. at \$2.75, 3 lb. at \$3.00

5 lb. pail at \$5.00 per 100 10 lb. at \$7.00

FLARING LARD PAIL—Chicago, Ill.

3 lb. at \$4.00 per 100. 5 lb at \$5.00. 10 lb. at \$7.50

Yours Truly

N. E. FRANCE.

DON'T BUY SECOND HAND CANS FOR HONEY. WILL NOT PAY TO USE THEM.

ther spread of the disease to be immediately destroyed by fire under his personal supervision and care, but where said entomologist, who shall be the sole judge thereof, shall be satisfied that the disease exists in incipient stages, and is being or may be treated successfully, and he shall have reason to believe that it may be entirely cured, then he may in his discretion omit to destroy or order the destruction of the colonies or hives in which the disease exists.

Whenever the disease shall be found to exist and the treatment for the same shall be ordered by the state entomologist, he shall give to the owner or person in charge of the apiary instructions as to the manner of treatment of such apiary, and to see that such treatment be carried out, and should the said owner or person in charge of said apiary refuse or fail to carry out the said instructions to the complete satisfaction of the state entomologist, he shall destroy or order to be destroyed all said diseased colonies by fire as provided for in case of disease in its malignant form.

Sec. 6. The state entomologist shall have full power in his discretion to order any owner, possessor, or person having charge of bees dwelling in box hives (having mere boxes without frames), in apiaries where disease exists, to transfer such bees to movable frame hives, within a specified time, and in default of such transfer he shall order destroyed or destroy all such box hives and the bees dwelling therein.

Sec. 7. The said state entomologist shall have the right to enter for the performance of his duties upon any premises where bees are kept.

Sec. 8. The state entomologist shall include in his annual report to the governor such information in regard to the work of the apiary inspector and bee culture as he may deem of importance to the state.

Sec. 9. Any owner of any apiary where disease exists or any person or persons, company or corporation who shall sell, barter or give away, or import into this state any colonies or colony of bees or appliances infected with disease, or expose to the danger of other bees any comb, honey, bee hives or appliances or things infected with the disease, or conceal the fact that disease exists among his or their bees when disease is known to exist, or refuses to allow the state entomologist to inspect or treat any apiary or appliances or shall resist hinder or impede him in any way in the discharge of his duties under the provisions of this act, shall be guilty of a misdemeanor and upon conviction shall be fined in any sum not less than ten (\$10) nor more than twenty-five dollars (\$25).

Sec. 10. Every bee-keeper or other person who is aware of the existence of foul brood or other infectious or contagious diseases either in his own apiary or elsewhere, shall immediately notify the state entomologist of the existence of such disease, and in default of so doing shall be guilty of a misdemeanor, and upon conviction shall be fined in any sum not more than ten dollars (\$10).

Sec. 11. Apiaries within the meaning of this act shall be any place where one or more hives, swarm, or colonies of bees shall be kept.

Sec. 12. Whenever as the result of an official inspection, the state entomologist or any of his deputies shall order the treatment or removal of any trees, vines, shrubs or plants, or shall order the treatment or destruction of any bee hives, frames or other appurtenances connected with apiculture he may require that an affidavit shall be filed by the owner or person in charge of the property so affected in which it shall be stated that the treatment ordered has been carried out to the best of the

affiant's ability, and that the work had been effective for the purpose prescribed. Any person making any such affidavit, knowing the same to be false, shall be guilty of perjury.

Sec. 13. The state entomologist shall have the authority to employ such deputies and assistants as the work of the office may require. They shall hold office for such periods of time as the work of the office may require and in their appointment the state entomologist shall consider only their fitness for the work which they will undertake, disregarding entirely all political affiliations. The salary of no deputy shall exceed twelve hundred dollars (\$1200) per annum. The inspector of apiaries shall receive for his services the sum of one thousand dollars (\$1000) per annum in addition to his salary as state entomologist. Such compensation to be paid out of the general appropriation for this act.

Sec. 14. Wherean emergency exists for the immediate taking effect of this act it shall be in full force and effect from and after its passage. March 12, 1909.

GENERAL MANAGER N. E. FRANCE.

The American Bee Journal for February, in giving the new officers of the National Bee-Keepers' Association for 1910, has the following sketch of the general manager, N. E. France:

"The subject of this sketch was born July 24, 1857, on the wild prairies of Iowa, having Indians as neighbors. In 1862 his parents moved to Platteville, Wis., riding all the distance of 230 miles in the fashionable 'automobiles' of the time—a covered wagon and ox team—with a cow tied behind the wagon.

"For some years his father, E. France, had bees in boxes, and by 1857 had succeeded in having all straight combs by the use of melted wax on the underside of the frames without any bottom bars. Later, Langstroth used a frame of wood on all sides.

"In 1865 to 1885 'N. E.' went to school fall and winter, and was at home during the summer on a fruit and bee farm. In 1875 he owned his first six colonies of bees, which gathered a good honey crop, and in the fall filled the hives with honey dew for winter stores. The next spring the bees were all dead, but the bee-keeper's hopes were not frosted. He bought more bees, built up an apiary, and by the fall of 1877 had 75 colonies. He heard of a machine to take the honey out of the comb and save the comb. He drove forty miles, besides going some miles by railroad, to see the first honey-extractor. The whole can and stationary inside fixtures turned. In 1878 he extracted 5,120 pounds of honey, and as it was work in those days to take the honey from the combs, it sold for 30 cents per pound, 5 cents more than comb honey.

"Since that time Mr. France has harvested 30,000 to 50,000 pounds of honey in a single season. In each of three years he sold a carload in one sale. For a number of years he has employed students attending the Normal School at Platteville, to help in caring for his several apiaries.

"Mr. France has held a number of public positions in bee-keeping as well as in public schools, etc. He served as secretary for two years; and as president for four years, of the Southwestern Wisconsin Bee-Keepers' Association; for seven years as general manager of the National Association; and for 13 years as Wisconsin State Inspector of Apiaries. In the last two positions he is still serving.

"Mr. France was principal of the same school for ten years and for six years was a student in the State Normal School located at Platteville. For four years he was Deputy United States mail carrier, and was super-

intendent of the bee and honey display at the Chicago Pure Food Show, in which the National Association won the highest award.

"There is probably not another man who has done more in a general or public way for bee-keeping than has Mr. France; and he has done it all at much sacrifice, and so unselfishly. The general managership of the National Association means a great deal of work, and for very small pay. But Mr. France has done it all because his big heart was in it.

"At the Harrisburg convention of the National Association, in 1907, a gold watch was presented to Mr. France, and a set of silver spoons to Mrs. France, all of which was only a slight token of the esteem in which Mr. France and his good wife are held by the bee-keepers of America."

Members of the National Bee-Keepers' Association must not assume any obligations expecting the Association to reimburse them, without first getting advice and consent of the General Manager.

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