

WHAT FARMERS OWE to the BEE



Colonies of honey makers necessary to fruit raising because they are the chief fertilizing agent: : And there can be nothing more tempting than hot biscuit and honey for breakfast on a crisp winter morning

By ROBERT H. MOULTON.

FARMERS in this country are just coming to realize the debt which they owe to the honey bee. It has long been understood, of course, that this busy little insect fertilizes the blossoms of apple and other fruit trees and so helps to increase the crop, yet the bee has seldom been credited with doing so much good as is actually the case. Indeed, in times past some fruit growers have sought to get rid of the bees on the ground that they damage the ripe fruit. The crop so quickly decreased in size, however, that the fruit men were glad enough to have the bees back again. There is a well-established belief that bees puncture grapes in order to extract the sweet juice, but the fallacy of this belief has been proved beyond a doubt. Ripe fruit has been placed inside a beehive, with thousands of the insects present, but it has not been molested. It is true that if hornets or birds make holes in grapes, pears or other ripe fruit, the bees will feed on the juice which is exuded. In point of fact, the jaws of the honey bee are so made that it would be unable to bite into or otherwise make holes in fruit, even if it had a will to do so.

Orchards in which bees are present in large numbers are almost always much more productive than those in which only a few bees are to be found and many apple growers are now establishing apiaries in or near their orchards. It is not necessary to have the hives actually under the trees and it may be better to have them in an adjoining field if the orchard is to be cultivated, as otherwise the hives might be in the way and the horses stung. Bees seem to have an instinctive dislike for horses and will even attack the beekeeper sometimes if he starts to work in the bee yard when the odor of horses is upon his clothing. Beekeeping is not to be recommended to hostlers.

To the orchardist the honey and wax which he gets from his bees are merely by-products. An extra yield in fruit is what he is after. And he gets it, as may be judged from an instance cited by one of the state experiment stations. It seems that two orchards situated in the same part of the country were cultivated in exactly the same manner and had the same kinds of trees. Yet one was prolific and the other a failure. When the experiment station was appealed to, the trouble was diagnosed as a lack of bees to pollinate the flowers. "You are wrong," the answer was flashed back, "for there are no bees in either orchard."

The inspector was not convinced, however, and after a search he found a very strong colony of bees in a fallen log in one corner of the bearing orchard. Bees were immediately installed in the other orchard by the owner, and as a result he netted nearly \$4,000 the next season—pretty good interest on an investment of \$15 or \$20 in bees. Most people do not know that an apple blossom requires to be fertilized several times in order to produce the best fruit, but this is a fact. Moreover, the blossoms of some trees must be pollinated from another source if fruit is to be set. The work is done largely by honey bees, although wild bees and other insects help out to some extent. Once, as a test case, 2,581 apple blossoms were covered in order to keep the bees away, and only three apples matured. Of course, the bee does not pollinate the blossoms purposely. She is in search



IOWA STATE INSPECTOR OF APARIES EXAMINING BEES



EXPERT HANDLER RARELY STUNG



CATCHES QUEEN, SAVES SWARM



BEEKEEPERS AT A STATE APARY DEMONSTRATION

sive to be feasible. It has to be done in greenhouses where strawberries are grown, for when bees are used the fruit is always misshapen, but the winter strawberries sell for a dollar or two a pint!

Perhaps it may be said without getting anybody into trouble that the free use of water by spraying makes possible some of the remarkable exhibitions which bees occasionally give. Water is not always used, by any means, but when it is the bees are rendered surprisingly tractable and docile. There are no bee tamers, however, who are not stung at times. Indeed, they may be stung very often, but they are inured to the experience and do not even wince. And, of course, an experienced beekeeper learns how to handle bees without making them angry. Furthermore, some bees are much gentler than others. Many times it is a good plan to kill the queen in a cross colony and replace her with a young queen from a quiet colony. Yet the cross bees are likely to be among the best honey producers in the apiary.

Many farmers fail to succeed with bees simply because they neglect to learn anything about their management. It is true that bees do not require a great amount of attention and do best when left alone most of the time. Yet there are certain things which have to be done just at the right time and in just the right way. These are the few things that the farmer should know about. In early spring, for example, the bees may easily starve to death for lack of stores, although they may have come through the winter safely. In that event they must be fed on sugar sirup if no honey is available. Equal amounts of sugar and water may be used and it is best to have the water warmed, but the sugar should never be melted on the stove, as it is likely to be burned. The sirup may be given in one of several different kinds of feeders, but few are better than a shallow pan from the ten-cent store with a little excelsior in it for the bees to walk on. If this pan filled with sirup is placed on top of the frames of the hives the bees will quickly take the liquid down and be tided over the period of famine.

It is a mistake for any farmer to try to keep bees in the old-fashioned box hives, for they cannot be managed so well and getting the honey out is likely to be a painful as well as exciting process. Likewise, thousands of bees are needlessly sacrificed, and the hives are almost sure to be neglected. Modern hives cost but little, yet may be taken entirely to pieces and the bees looked over without the loss of a single one. And taking honey out is no trouble at all, when a bee escape is used, for the bees do not even know what is going on.

The best way to begin beekeeping is to buy a colony or two from some up-to-date apiarist in the neighborhood, but a hive full of bees can be shipped by express or the insects may be bought by the pound if one already has an empty hive. Indeed, this is a practice which is becoming very common, for even experienced beekeepers often invest in one, two or three-pound packages of bees in order to build up weak colonies. It is not an unusual thing for bees to be shipped all the way from Texas to Canada.

Sometimes wild bees may be captured in the woods and brought home. Although called wild bees, these honey makers which are found in logs and hollow trees have escaped from captivity at some time, for there were no honey bees in this country until they were brought here by the Pilgrim Fathers.

If the farmer owns more than half a dozen colonies of bees it will pay him to get an extractor. This is a simple device for separating the honey from the combs, the latter being placed in a frame which revolves at a high rate of speed, the liquid honey being thrown out of the wax cells by centrifugal force, just as cream is separated from milk. Then the combs may be put back in the hives for the bees to fill again. The farmer can usually get more honey this way and will have less swarming.

lying on the Pacific coast of South America (like the states of California, Oregon and Washington, on the Pacific slope of the United States), covering an area of nearly 300,000 square miles, or more than that of Texas, and directly tributary to the Panama canal, bought and sold in foreign commerce products valued at nearly \$202,000,000.

Advantages of the Telephone.

Evan B. Stotsenburg, attorney general, tells a story concerning the early days of the telephone in New Albany.

A character of the town, who operated an office in rooms just above the livery stable, was impressed with the benefits of the telephone and had one placed in his office.

Meanwhile the new-fangled instrument also went into the livery stable. Then the town character sat down and waited for someone to take advantage of the new instrument. No one did.

One day the telephone bell in the livery stable, however, rang with all its might.

"Hello," yelled the livery stable proprietor.

"Hello, yourself," answered the voice of the town character, upstairs.

"Just pass me the broom up through the front windows, will you?" said the voice.—Indianapolis News.

Seventy per cent of the world's cork supply is said to be produced in Spain and Portugal.

IN THE LIMELIGHT

"THE REBEL CAPTAIN"



John M. Parker of New Orleans, "The Rebel Captain," as Victor Muddock styled him at the Progressive convention at Chicago, is a fire-eater by taste and instinct. Trouble is his element. He dearly loves it when he thinks he is in the right, and doesn't fear it on other occasions. Puss-footing is not his line. As he himself says, he "hires a hall," advertises the fact, and goes to it.

As a national figure, John M. Parker is not as well known as he deserves to be, perhaps. But up New York state, at Anandale, they know him. It was up there in his young manhood that he put his foot down on puss-footing for the first time in public. As a result, there was scandalous excitement.

Parker was a student at St. Stephen's college in 1881. Among his cronies was a young man from New York city, who played second to John in matters appertaining to larks and frolics. Somehow the faculty never failed to receive word about this particular student's shortcomings. As a consequence, he spent much time in the "jug," and suffered heavy loss in free time as punishment.

Parker in some way learned who it was that had told on his friend. He lined up half a dozen or more of his cronies and arranged plans for retribution. That evening in the refectory he gave the command. The students detailed to assist him surrounded the table at which the members of the faculty were gathered. Parker laid hands on the offending student and set him on his feet. The learned gentlemen were kept in their chairs. Then John addressed them and his fellow students. He recited the crime of the student under arrest. The man had betrayed a classmate. No punishment could be too severe for him.

FOCH OF FRANCE

Perhaps greatest of the generals the war has produced in France is Foch, now commanding the forces of the republic in the Somme drive. Says one who knows him: "He has intuition and the power of divination. He is great in his instant grasp of a situation, his perception of the needs, his vision of the next hour. General Joffre is his warmest admirer."

General Foch, like General Joffre, comes from the Pyrenees. He is a gallant, picturesque figure. He is not tall, five feet six inches in height, but you do not see that until afterward. What you see first is his eye. He has a large, well-shaped head, rather thin iron-gray hair and a broad, high forehead. His gray eyes, set wide apart, bore through you and burn you up and smile on you, all at the same time. His nose is large, his mouth wide and straight, and his fiercely benevolent iron-gray mustache first comes down over the corners of his mouth and then points straight up at his eyes. His chin is massive from any point of view.

During a battle General Foch is to be found in the big room at his headquarters. He stands before one of those large scale maps with a pencil in his hand and the telephone receiver at his ear. His staff stands in a semicircle behind him. There is perfect silence, and the only movement is of the general's pencil on the map as he follows the battle and ponders the detail of the district where the fighting is in progress.



WINSLOW'S FAMOUS FEAT



Admiral Cameron McRae Winslow, who retired recently at the statutory age of sixty-two, gained great fame and a boost of five numbers in rank during the war with Spain when as Lieut. C. McR. Winslow he cut the cables in Cienfuegos harbor, Cuba—with the Spaniards firing from a distance of 150 yards.

In this engagement a marine was killed and nine men—including Lieutenant Winslow—wounded. Winslow was wounded in the hand. His promotion came when he was recommended for "extraordinary heroism."

Winslow and his men went out in sail and motor launches. With the big guns on the ship out in the harbor firing at the cable office—they wrecked it before Winslow reached shore—Winslow went into the face of a Spanish bombardment. He got by with it in excellent shape—some casualties reported, but the work done.

At the time of his retirement Winslow was a full admiral, being entitled to that rank by virtue of his command of the Pacific fleet. He served as a member of the Slocum commission when the burning of the New York excursion steamer was investigated.

Winslow was born in Washington in 1854. He was appointed to the naval academy by the president in 1870, and graduated in 1875.

NELSON COULD PRONOUNCE IT

During the call of the calendar in the senate some time ago a bill providing for relief for the owners of a certain steamship was reached. The clerk glanced at the title, read a small part of it and stopped. "Let the clerk read the entire title," suggested a senator.

The clerk, to speak figuratively, courageously backed off and made a fresh start. He succeeded well enough with the first few words, but at length he bumped into "Bruusgard Klosterud Dumpskipaktieselskab," the name of one of the owners of the steamship business. He tried to pronounce it but his best efforts called nothing except to provoke a titter among the solons. Competent authorities are agreed that a thing must be extremely funny to get a laugh in the senate.

At length Senator Nelson, a native Norwegian, went to the clerk's rescue. "Why," he said, "that's easy enough. 'It's pronounced—' and he gave the pronunciation correctly—so far as anyone in the senate knew.



Our Opportunity In Latin America

By JOHN BARRETT, in the Review of Reviews.

These are the times when everybody should be studying the twenty American republics lying south of the United States. These are the days of unprecedented and legitimate opportunity in Latin America for the commercial and financial interests of this country. This present year should be the beginning of a new epoch in the material, social and political relations of North and South America.

The next ten years are going to be "all American" years. All America is to attract the attention of all Americans. This new development is inevitable. The cause is found in the natural wealth, resources and potentialities of Central and South America, their actual commerce and trade, their remarkable progress during recent years, together with the uncensured propaganda of the Pan-American union, which was at first even ridiculed and little appreciated, but is now generally valued and recognized. The occasion of this new interest at this moment is the European war and the emphasis it has placed upon the geographical segregation and commercial solidarity of the nations of the western hemisphere.

Consider Latin America in any phase one prefers, and it is worthy of keen interest. Let us first look at it geographically and physically. We see twenty countries ranging in area from little Salvador, with less than 8,000 square miles, or smaller than Vermont, up to mighty Brazil, with 3,200,000 square miles, or greater than the United States proper with Great Britain thrown in! In

all, they spread over nearly 9,000,000 square miles, or three times the connected area of the United States! They contain mountains higher, rivers longer and more navigable, valleys wider and more fertile, and climates more varied than those of the United States.

Noting the population, we find that Costa Rica starts the small end of the list with 400,000 inhabitants, and Brazil tops it with 20,000,000. All Latin America supports today approximately a population of 75,000,000, which is increasing by reproduction faster than is the population of the United States. When the new emigration from Europe starts in after the war, and when the Panama canal is in full use by the shipping of a peaceful Europe, this total may soon overtake and pass that of the big sister nation of North America.

We are almost astonished by the figures of Latin-American commerce. They make us respect many of the southern republics and peoples, even if some other influences may not be so favorable. Last year the twenty southern neighbors of the United States, through sheer strength and capacity, pushed up the total of their foreign trade to the huge sum of nearly \$3,000,000,000. This was divided almost equally between exports and imports, with the actual balance of trade in their favor. Argentina, for example, with an ambitious, vigorous and prosperous people numbering about nine millions of souls, conducted a foreign commerce valued at the surprising total of \$900,000,000, which makes an average of about \$100 per head. Chile, a land of achievement and promise,