

BEE CULTURE FOR MEDICINAL PURPOSES.



Food probably does not follow the use of insects as a cure for disease. Nevertheless, the theory of the rheumatism-relieving power of the bee is one of long standing, especially in some country districts. Scientists have, on the whole, been very skeptical of the value of this discovery, and of late years little has been heard about it. Recently, however, the subject has been revived, thanks to judicious advertising by bee-raisers. Its recrudescence has been such that a large firm of manufacturing chemists of Philadelphia, so the fable runs, is buying up bee stings, with the noble intention of eventually cornering the supply.

An apiarist of Philadelphia, who has placed a collection of bee-hives on the roof of his place of business, imagines that bee stings can be sold with profit at \$10 a thousand.

The method of obtaining the stings presents the only real difficulty, the supply being practically unlimited. This genius proposes to make use of the bees' well-known aversion from the odor of a horse. He thinks that the insects will considerately shoot their darts into a rubber cloth which has been rubbed upon a horse, and that they will thus supply him with a million stings a week.

To ascertain the rapidity with which the stings could be removed from the insect, the apiarist allowed the bees to sting his arm, which ordeal he endured with true scientific fortitude. He found that the stings could be collected in this manner at the rate of one in two seconds. He cherishes the popular delusion that while the bee dies when the dart is removed, the latter remains very much alive apparently, and bores its way

of tissue taken from the body of the insect with the dart. Very often this is sufficient to cause death; but if the sting be broken off close to the body, no permanent harm to the bee itself will result, save that the sting is not restored.

Prof. Benton considers it impracticable to obtain any great number of stings by the means suggested by the Philadelphian experimenter. To illustrate how futile it would be to undertake to monopolize



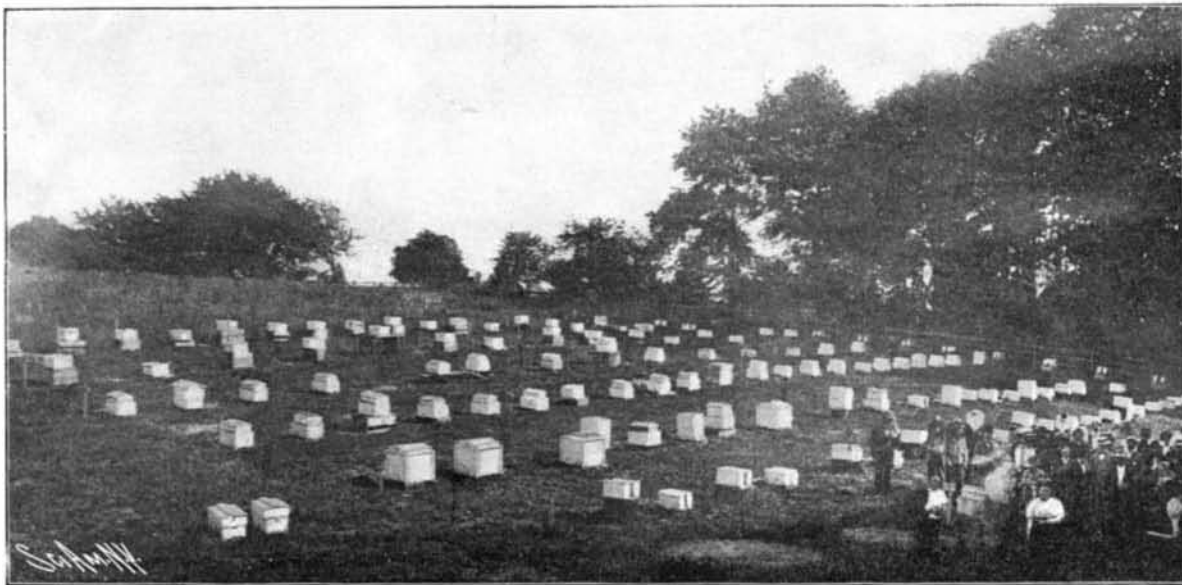
A Quick Downward Jerk Precipitates the Bees on the Roof.

the sale of bee stings or the poison therefrom, he stated that a hive or colony of bees ordinarily contained 30,000 to 60,000 insects. There are many apiaries in the United States, varying from a very small number to a large number of colonies. For instance, one in California has 1,200 colonies; one in

Radio-Active Minerals.

S. M. Losanitsch, in examining a number of minerals from Servia, found that the minerals containing mercury from the districts of Avala and Bara showed strongly-marked radio-active properties. After continuing his examination upon minerals from different countries, he found only those coming from Idria (Austria) to be radio-active. The author is of the opinion that the active portion of these minerals is formed of an element which is different from radium, which he designates as radio-mercury. It has a smaller active power than radium, and unlike the latter is easily volatilized, seeing that after heating the mineral it fails to show any more radio-activity. A new mineral has recently been discovered in Ceylon among the specimens which were examined by the Mineral Survey together with technical section of the Imperial Institute. At first the specimens in question were taken for monazite and uranite. Samples were sent to the Institute for analysis. The first of these was found to be thorite or silicate of thorium, and not monazite as was supposed. As to the mineral which was thought to be uranite, this was found to be a new variety and was named thorianite. It is said that the thorianite contains the highest percentage of thorium of any mineral which has yet been discovered. This may be of importance for the region, seeing that thorium is now coming into use for incandescent lighting. Besides, the new mineral is radio-active and may perhaps prove a source of radium. In this connection we

may mention the recent experiments of Himstedt, relating to an emanation which he finds to come from spring water and also from petroleum. Ordinary water which has air passed through it does not act upon this air and cause it to become a conductor of electricity, but it is quite the contrary in the case



A Pennsylvania Apiary.

deeper into the skin through some reflex muscular action. The expert advanced the fanciful opinion that the poison of the honey bee is a neutralizer, attacking the irritant and relieving the pain by neutralizing the acid in the blood.

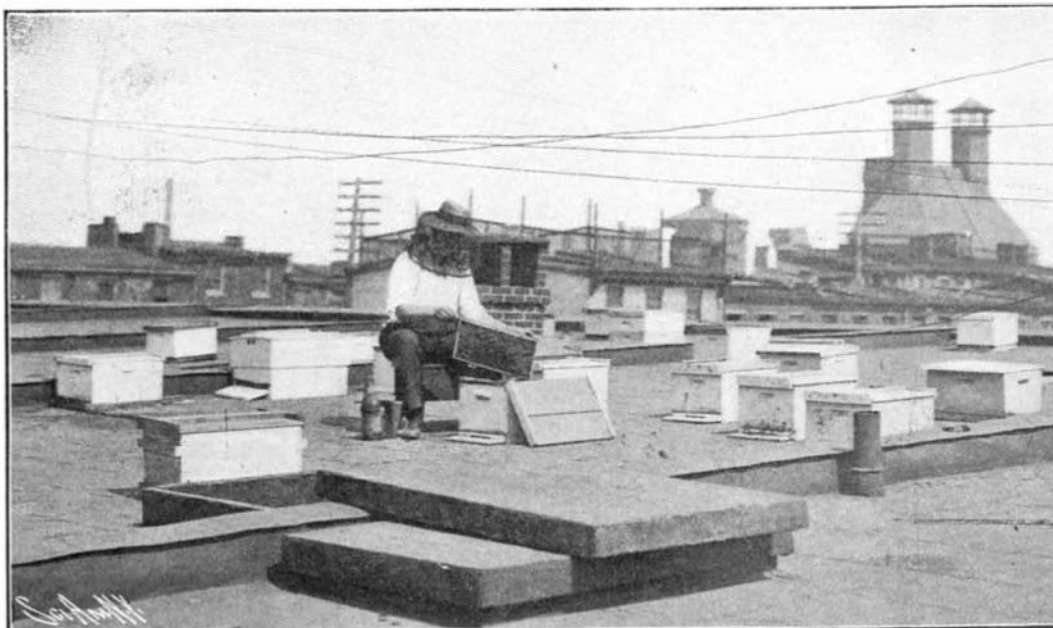
Prof. Benton, the bee expert of the Entomological Division of the Agricultural Department, when consulted on this subject, by no means agreed with the sting-collector. While not denying the remote possibility that the poison of the bee may be efficacious in some rheumatic cases, it has no effect in most. He himself has rheumatism at certain times of the year, although he has been stung by bees many thousand times. At his own suggestion, he took a honey bee, and holding it by its wings, allowed the insect to sting his hand, and then separated the body from the sting. This, however, the bee is able to do by its own strength. Then the sting, by a convulsive muscular action, forced its way still deeper into the flesh, as explained before. But the separation of the sting from the body of the bee by no means kills the bee. That result depends upon the amount

Texas, the same number; one in Arizona, 1,100; one near Albany, N. Y., 725; one at some other point in New York State, 1,700. Taking the number of bees in a colony as 50,000, and multiplying it by 1,700, one may see the absurdity of attempting to monopolize the business.



Removing a Bee That Has Stung the Bee-Keeper.

of water and crude oil which is taken directly from a spring or well. Inversely, a current of radio-active air which is sent through an inactive liquid makes the latter active. It seems that there is a tendency to establish a kind of equilibrium between the liquid and the gas like that which is characteristic of gaseous solutions, and there may thus be a certain relation between the quantities of emanations contained in the liquid and the gas. This may explain why we may observe a lessening of the conductivity of the air in a room, when liquids are introduced which absorb some of the emanation. He finds that the emanation condenses between temperatures of -147 and -154 deg. C. It is not destroyed by acids or bases, nor by the electric spark.



A Bee Colony on the Roof of a House

BEE CULTURE FOR MEDICINAL PURPOSES.

A NEW PROPERTY OF RADIUM.
—Prof. Chaveau announced in a recent communication to the Parisian Académie des Sciences that radium emanations have the property of destroying the toxicity of serpent venom. Viper or cobra poison, if submitted to the action of radium, is said to lose its virulence after fifty or sixty hours of exposure.