flying from the hive into the freezing air, resulting in the death of all bees that take wing. I was forced to stop up the outside entrance whenever I flew the bees under glass.

I think I should practise this method of flying bees under glass now, if I only owned a few colonies, but it would be too costly and laborious if used in as large an apiary as mine now is.

Although not using glass over bees in winter now, the use of it several years ago, gave me my first idea of the use of two of the most important in my apiary, viz.: chaff hives, and the fixtures Solar Wax Extractor; in fact the same identical box and window sash that I first used with chaff packing and glass over bees in winter, was used in the following summer in testing the plan of rendering wax by the heat of the sun.

It seems almost useless to now detail these almost forgotten experiments of so many years ago, but your suggestions called the matter up and what I have written may save others from going over the same ground I spent so much thought and labor in going over.

O. O. POPPLETON.

Williamstown Iowa, June 26th, 1886.

We thank you friend P. for the ably written and interesting article. By the way, would not this same reflector remove sufficient moisture from colonies badly diseased with dysentery to assist them through till spring?

For The Canadian Bee Journal.

THE HIVE TEMPERER.

I SEE you are calling for contrivances for heating and ventilating the bee hive. I have thought that ventilation from the bottom could easily be secured by means of a small tin tube affixed to a corner and reaching from the bottom to the top of the hive and the opening at the top divided by a couple of pieces of tin crossing each other at right angles and having a width of half inch or inch.

Such an application was put on the ceiling of one of the Toledo churches and it certainly gave them fresh air, too much of it in fact, as the air was poured down on the heads of the audience somewhat like a douche bath.

The inventor of this method of ventilating could give no reason for the operation of the instrument. The simple fact was found to be that the division of the orifice caused currents of air to ascend and descend at the same time.

Any one can test the matter an at any time by having the pieces of tin made to fit the top of a fruit jar. Then lighting a small piece of candle and putting it in the bottom of the jar, when it will soon go out for want of air. Re-light, fill the jar with air and put in the candle, let it burn till nearly out then put on the tin and if ventilation takes place, the down drafts occasioned by the divisions of the mouth will at once revive the candle.

J. W. MARGRAVE.

Hiawatha, Kan.

We do not understand exactly how *one* tube could carry off foul and bring down fresh air at the same time. A double tube, we think, could be used succes fully. What we wanted was to get heat into the hive, and to keep it there as long as possible.

INCREASE.

IN a letter from Mr. Samuel Cushman a few days since, he says: "After reading the article by G. M. Doolittle, 'Production of Wax' page 166; that by W. Z. Hutchinson on 'Empty frames, combs or foundation,' page 249; and what Allen Pringle says against 'Dividing' page 266, I wish very much that you would reproduce the article on 'Increase' in the *American Apiculturist*, May, 1884, by L. Stachelhausen, of Selina, Texas. It is one of the best articles I ever saw on the subject." We have pleasure in acceding to friend C's request:

"A very important part of the management of the apiary is the increase of the colonies, and on this point the most prominent apiarists are by no means of the same opinion. The very question, if the number of colonies is to be increased, in order to get the greatest possible quantity of honey, is met with more or less conflicting answers. Neither is there any harmony concerning the point, whether natural or artificial increase is preferable; and it is even controverted, whether the increase should be attempted before, during, or after, the height of the season.

Generally, the rule is adopted, that 'one strong colony, if not allowed to swarm, will gather more honey than the same colony and its increase would gather, if a swarm were allowed to issue.' But this will only prove true, in cases where the honey flow is short and early without any fall harvest. The contrary will take place, whenever the main honey flow is an extensive one, and followed by a fall harvest. We may see this confirmed by many reports which are made by beginners, of good honey harvests, together with a strong increase, and these results become considerably larger, when we can reduce at the right time in the fall, by uniting the colonies to the normal figure. Concerning this question, every apiarist ought to consider what Demaree says in this Journal: 'Each apiarist must study and fully understand his location and work square up to its requirements, if he would obtain the best results.'