drawn from his watering places all the water necesary for brood-rearing.

This enormous quantity of water which is indispensable to each hive makes clear the fact that the gathering of it must be one of the principal causes of spring dwindling when it is either too far from the apiary or is too cold.

It is wise then to have water placed out for the bees and to have it as warm as possible, at any rate not cooler than 113° or 122° Fahr.

SMALL OR LARGE BROOD CHAMBERS—WHICH?

By R. C. Aiken.

On page 267 of the "Canadian Bee Journal," Mr. F. P. Adams discusses the subject of contracted brood-nests for comb honey. I wish to say that he has almost identically my ideas of the subject. It is not so much a question of contracting the nest as it is of having strong colonies. A contracted chamber will very often get surplus from weak colonies that otherwise would not touch the super, but that is just about all that can be said in favor of the plan. The great fault is in allowing the bees to swarm when they ought to be in the supers, and, having swarmed, the very thing we want, surplus honey, is defeated. Better double colonies until we do get the necessary strength; therein lies the secret of securing the best results in honey.

The control of swarming is the great stumbling-block in bee-keeping. Get that settled and you will then be master of the situation with but a fair general knowledge of the business. I see that nearly all writers on the subject of forced swarming (so many persist in calling it "shook" swarming) advocate frequent examinations to determine if the colony is preparing to swarm, making the swarm only when they have already begun preparations for natural swarming. This is wrong and too fussy. And, what is more, if these colonies are forced at such time only it often is too early or too late—may come in the midst of a flow, when the colony should be right in the very best of regular work. It is not at all uncommon for a large percent of the colonies to swarm before they are strong enough to do the best work in storing surplus, yet most people hive these swarms into an ordinary-sized chamber and expect them to do super work, and it seems many do the same thing with forced swarms. The proper time to swarm is just when the flow starts, and no waiting for natural swarming or preparations to swarm. It is for the control of swarming that we make the froced swarms, because, as indicated above, the natural swarming weakens the colony too much for surplus honey, yet if we attempt to keep them together by ordinary methods, or by the milder methods of coaxing by shade, room, etc., we have too much tinkering and too much interference with the work of the colony, then fail to get the thing sought for—control. We must use more harsh or decided methods; swarming is nature, and we must put the bees in somewhat of the condition nature would have them in. These natural conditions are a lot of bees of all ages, together with a queen, but not having either brood or honey, and, better, no comb. In these respects a swarm is a swarm, whether forced or natural, but when we force them we make them just as big as we want them, large or small, depending on the work desired from them. You see, it may be a baby nucleus, a small swarm that will just nicely work a brood chamber, or a rousing big one that will do business in both brood chamber and in supers.

I do not believe there is any method