get one as it will soon pay for itself; the wax is of superior quality.

The question was asked at the convention at Chicago last fall, "What is the cause of so many of the queens sent out proving worthless," or something to that effect. I have come to the conclusion one of the causes is having queens raised from larvae instead of the egg. I find some of the breeders that are using the Doolittle plan, are sending out inferior queens to what they did before they adopted that method. I think the trouble is in trying to get a colony to raise too many queen cells or using too old larvae. I want my queen cells started from the egg to produce the best queens. Our queen breeders, I am afraid, are sacrificing quality for the sake of producing cheap queens, yet I believe they are unconscious of it.

C. D. DUVALL.

Spencerville, Md., June 1894.

AN INNOVATION.

G. JOURDAIN.

An innovation which appears to us to be a happy one has been wrought out lately, in the construction of hives.

The practical man is beginning to understand that strong colonies are a primary condition of success, and he has utilized the fecundity of several queen bees to obtain colonies composed of nearly 100,000 bees.

At first the twin-hive was invented. The word itself defines the thing; it is a single hive containing two brood-nests; in it are lodged separately two families up to the end of April or during May, at which time the poorer queen is suppressed and the two colonies reunited.

Does this system really present any advantages?

Practically this is what we have:

(1) A better method of wintering because the two colonies mutually warm each other through the thin partition which separates them:

(2) An advanced development of the brood favored by the temperature of the hive and by the economy of provisions which is a consequence of it:

(3) A double force of workers for the honey flow since a part of the nurses are no longer occupied in raising brood.

The twin-hive has been much extolled by the distinguished apiculturist M. Devauchelle. For two or three years it has been growing in favor in widely scattered localities and many apiaries are now furnished with good and beautiful double hives. The Bulletin of the Apicultural Society of the Somme has several times published results obtained by Mr. Devauchelle. These results show clearly the advantages to be derived from the new system.

The double hive has also been tried in Belgium. In place of dividing the strong colony obtained by the suppression of one of the queens in May, some of the Belgian apiarists prefer to add a small colony in July to the double hive. This puts them in possession of an enormous colony for the honey flow succeeding.

An English apiculturist makes use of a metal partition which does not allow the bees to pass but assures to each hive the same odor. He thus avoids any disturbance at the entrance of the hive.

In some double hives the partition is never raised. Each hive works on its own side. But above the two brood chambers is placed one common super. When the honey flow is greatest the bees of the two colonies put their honey in the common super. A perforated metal partition (queen excluder) allows the workers to pass but not the queens or drones. This makes a combination to which we are not partial. The simple twin hive is certainly better.

To resume, the double hive marks an important progress in apiculture. It is a little heavy for manipulation but this is more than offset by the good results obtained from its use.