

CAUSE OF UNFERTILE QUEENS.

QUERY No. 117.—What causes the most unfertile queens among those reared and sold to customers? Answer, I find that the greater number is caused by being *chilled* until fully benumbed while in transit or in the mailing cages. A queen which once gets *fully chilled*, and is afterwards revived and introduced, is more apt to be *ever afterwards* a "fertile-layer," I have notice of many such instances. Some few queens are prone to produce young queens which are more than half of them "fertile-layers," I have had more than one of these two years ago.—ABBOTT L. SWINSON, Goldsboro, N. C.

DR. A. B. MASON, WAGON WORKS, OHIO.—Have had no experience with unfertile queens.

J. E. POND, FOXBORO, MASS.—Queen rearing is not at all in my line. This question can only be answered correctly (if it can be answered correctly at all) by practical queen breeders of large experience.

ALLEN PRINGLE, SELBY, ONT.—I cannot properly see through this query, and must give it up—no doubt owing to obtuseness or sleepiness, as it is very late.

DR. DUNCAN, EMBRO, ONT.—The above answer is most likely to be the cause, or else they might be mated by a poor drone from a fertile worker or an unfertile queen.

G. M. DOOLITTLE, BORODINO, N.Y.—Will Mr. S. explain what a "fertile-layer" is. I should call it the opposite of "unfertile queens." The cheap methods employed by some breeders have something to do with poor or unfertile queens as well as the mailing of them, whether chilled or otherwise.

JAS. HEDDON, DOWAGIAC, MICH.—Your idea that chilling will sometimes destroy the fertility of the queen is found in old books on bee culture, I believe. I think it is in Langstroth's work, if not, I am sure it is in old numbers of the *A. B. J.* As I understand the term, good queens are "fertile-layers," but I suppose you mean what we call drone-layers.

DR. C. C. MILLER, MARENGO, ILL.—Glad to see your name to your question. Mr. Swinson, as I like to know to whom I am talking. I don't know half as much as you do about the matter, as I never mailed a queen in my life, but are you

not using the term "fertile-layer" wrong? Is not every good queen as soon as she commences laying a "fertile-layer"? Is not the common term "drone layer," better?

JUDGE ANDREWS, MCKENNY, TEXAS.—This question and my situation in regard to it reminds me of a Sunday school incident. The teacher had a class of large girls making drawings of the city of Jerusalem. After a number of them had progressed considerably, a small boy drew up to the teacher and said to her quite softly, "Miss Lizzie, is any uv'em gittin thar with both feet?" (Now, friend Jones, if any of them get there with either foot please report privately.)

G. W. DEMAREE, CHRISTIANBURG, KY.—I have never had a single queen reported to me, after I had sent her off, as being unfertile. I have bought and exchanged many queens also, and never had one to become unfertile on that account. Sometimes queens are injured by shipping them, but not in that way, so far as my experience goes. What do you mean by a "fertile layer?" All good queens are fertile layers. Perhaps you mean drone producing queens, if so, such queens are known as unfecundated queens.

TIME FOR PUTTING INTO WINTER QUARTERS.

QUERY No. 118.—When should bees be put into clamps, (where clamp wintering is practised) and in bee-houses or cellars, when the latter method of wintering is pursued?

G. M. DOOLITTLE, BORODINO, N.Y.—For this latitude about Nov. 10th to 15th.

JAS. HEDDON, DOWAGIAC, MICH.—This query is answered under head of query 121.

J. E. POND, FOXBORO, MASS.—I don't know, as I winter wholly on summer stands.

H. D. CUTTING, CLINTON, MICH.—No experience with clamps. In cellar when heavy frosts or snow come.

DR. A. B. MASON, WAGON WORKS, OHIO.—When settled cold weather arrives. In this latitude, usually about the middle of November.

JUDGE ANDREWS, MCKENNY, TEXAS.—I never saw a clamp, nor a bee-house, except those of friend Jones, on one occasion, and hence, have no experience.

DR. DUNCAN, EMBRO, ONT.—Bees may be put in clamp any time when the nights begin to get cold, say in November, in bee-houses or cellars; leave them out until cold weather sets in.