

"THE GREATEST POSSIBLE GOOD TO THE GREATEST POSSIBLE NUMBER."

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## BEETON, ONT., JANUARY 5,1887

WHOLE No 93

## THE DEFENCE FUND.

E shall keep standing in type the names of those who have aided in the best interests of bee-keeping by subscribing to the defence fund in the "McIntosh-Harrison" case. There is no time to be lost. Our action must be prompt and decisive.

A. I. Root, Medina, O.....

J. K. Darling, Almonte	5
Jones, Macpherson & Co., Beeton	5
A. L. Swinson, Goldsboro, N.C	
M. B. Holmes, Delta	
G. A. Deadman, Brussels	
J. B. Wrightson, Willow Creek	2
R. F. Holtermann, Brantford	I
Aspinwall & Treadwell, Barrytown	5
D. L. Wilson, Newmarket	5
Josiah Reaman, Carville	2
J. V. Battram, Bridgen	I
H. A. Scultz, Clontart, Ont	I

FOR THE CANADIAN BEE JOURNAL.

## FERTILE WORKERS VS. STERILE QUEENS

SOME INTERESTING FACTS IN THIS CONNECTION FROM A. L. SWINSON.

N reply to Mr. G, M. Doolittle's query, page 713, C. B. J., "Will Mr. S. explain what a "fertile-layer" is? I shall say that the term "fertile-layer" would properly apply to any queen which was properly fecundated, after she began laying and so long as her eggs were fertile and no longer, as after a queen's eggs prove unfertile, she would then be an unfertile layer and not a fertile-layer.

The term fertile-layer as used by me in my answer to my own query, No. 117, in the C.B.J.,

is a misnomer, by a failure to prefix the "un." The query itself is correctly asked. I desire to say to Mr. G. M. D. that I agree with him in his answer to my query No. 117, in that part of it where he says: "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." My practical experience and personal observation during the past few years, bear me out in substantiating Mr. G. M. Doolittle's assertion as quoted above. Queens which will early become unfertile or sterile layers are often produced by insufficient heat or warmth of the larvæ, after the cells are capped over, when or after they are distributed in the nucleus colonies or lamp nurseries to hatch out. Insufficient heat or too much heat will very seriously affect the developments of queens while they are still in cells, even a few hours before they are hatched out. I take this to be the greater cause of inferiorly developed queens, those which soon die, are poor layers, soon become sterile and have to be replaced, are but seldom of much profit to the purchaser after he gets them, rather then the fact that they are bred out of the natural swarming season, as G. M. D. would have us to think. The very best of cells built under and during the "natural swarming season," may and will produce the very poorest of queens, if not given the proper attention, so as to have the required warmth and heat up to the very hour of hatching out, just as much so as those built after the "natural swarming season" is over, would under identically the same treatment and conditions two days previous to their hatching—or even twenty hours previous to their hatching out.

Everyone who answers my query in reference