

It developed that while the lifting power of winged cells was markedly inferior to the same surfaces arranged horizontally, a structure composed of multitudinous winged cells possessed the important quality of automatic stability, which was lacking in structures employing horizontal surfaces.

In comparing these different arrangements of winged cells efficiency is not the only consideration involved, nor indeed the main consideration at all. I have no doubt that from the point of view of efficiency horizontal surfaces are superior to oblique, but they are very unstable in the air.

Automatic stability is the great feature of the pure tetrahedral construction, so that I feel that this feature must not be sacrificed for any other consideration.

Mr. Baldwin and I seem to look at the matter from two^o different points of view which is a good thing for the development of true and just conclusions.

He desires to secure what would be technically termed the most efficient structure; that is, the structure in which the ratio of lift to drift is greatest (pp. 35-37).

While I am equally anxious to secure this point, I consider it only of secondary importance, stability, to my mind, being of the first consequence. I quite agree with all of Mr. Baldwin's conclusions provided that proposed modifications of the structure in the interests of efficiency, ease of construction, repair and inspection, etc., do not interfere with the demonstrated quality of stability possessed by the Cygnet construction (type A).