

membrane cells were exposed in an artificially dusted wind,
 a graphic record might be obtained by first painting all the
 parts with glycerine. The same might be done on a smaller scale
 but more accurately with artificially created currents in the
 laboratory.

It is a fact long since observed that the wings of in-
 sects, notably those of the bee flies, are usually covered
 on both surfaces with very minute hairs. I do not know that
 it has been experimentally proved what the function of these
 hairs is.

The hairs have their apices directed outward 100°.

distally, though toward the inner margin of the wing they are
 directed somewhat backward, using this term to indicate a

direction at right angles to the principal vein of the wing.
 It is perfectly obvious that that wing will be most

effective that will throw the air furthest. I more than sus-
 pect that the hairs on the surfaces of insect wings have the

function of enabling the wing to get a better "grip" on the air
 or to better "soak" and direct the air, so as to throw it as

far as possible. It might be thought that these minute struc-
 es would be too fine for this purpose, but it must not be for-

gotten that an insect's wings in action are sometimes moving in
 a rarified medium, the rarefaction being due to their own

action. It might be a good idea to test on rapidly moving blades
 of air propellers the effect of surfaces similar to those on

these insect wings. If it is desired to do this there are nat-

ural vegetable surfaces that could be annexed on propellers
 blades. Thus the surface of the sheath of certain grasses, and
 those of some varieties of water lilies prove suitable.