weight must necessarily increase in the same proportion as does the surface. This principle is most important. Interpreted another way it means that an indefinitely large machine will fly equally as well as a small one provided the loads are properly distributed. Each unit cell in this system offers a certain resistance and carries a proportional load; so that if it is possible to make say 1000 of these units carry up a man and an engine it is possible to make 100,000 of them combined in one carry up a hundred men and a hundred engines always provided the men and the engines are not concentrated. Instead of attempting to increase the size of an artificial bird Dr. Bell proposes to combine a flock of artificial birds.

Recent progress in Aviation has been so rapid, and so many have been partially or wholly successful that it is impossible to do more than refer to some of the most notable achievements.

Orville and Wilbur Wright began gliding experiments in 1902 along the general lines laid down by Dr. Chanute. However they quickly developed original features and in their more mechanical principle of control made a great improvement.

Lilienthal, in his gliding experiments, had maintained equilibrium bu shifting the weight of his body. In an unsteady wind this method required a considerable amount of gymnastic skill.

The Wright Broth eradopted the principle suggested by Dr. Chanute of keeping the center of gravity fixed and maintaining equilibrium by changing the angle which their