

gave them the necessary initial velocity by literally throwing them into the air.

The plan was obviously a difficult one to adopt on the full-sized machine which weighed over 800 lbs., but Prof. Langley would not depart from his former plan and here it was that Prof. Langley's practical sense failed.

On both occasions on which a launching was attempted the aerodrome caught on the launching ways and was precipitated into the water. While uninjured by the plunge the machine was partially wrecked by the over zealous efforts of a tug-boat's crew to rescue it and although repaired was never again given another trial.

To the public Langley's aerodrome, nicknamed the "buzzard" was an absolute failure, but the truth of the matter is that it was never tried. The launching apparatus, it is true, did fail but not the aerodrome as this was never launched.

The difficulty Langley met with in increasing the dimensions of his successful model without sacrificing either lightness or strength revived an old argument against heavier-than-air flight.

As early as 1872 Helmholtz showed that, while a small model of a heavier-than-air machine might easily be made it was much more difficult to build a large one.

This view was generally accepted by scientific men but in 1891 Prof. Simon Newcomb in an article entitled "Is the Airship Coming" went so far as to say that,