

and give it ease in lighting.

In its flight I had not observed the, to me, extraordinary length of what I have called the spindle which ran from front to rear through the mathematical middle of the triangular framework. This spindle was fully sixty feet long, three-quarters of it abaft and one-quarter of it forward the centre of the aeroplanes. On the stem, as before mentioned, were the propellers. On the tail end were four thin surfaces about five feet long and about two feet wide, two horizontal and two perpendicular, set like the feathers of an arrow. These planes were further extended but were flexible and moved sideways or up and down as a double rudder according to the desire of the steersman.

Probably to prevent vibration, as well as for further strength, this spindle was trussed with wire, and also was firmly affixed by braces to the prismatic aeroplanes. That part of the spindle inside the prism was swollen like a bulb or of torpedo shape, and at its largest diameter measured about two feet through. I could not see into it, but the driver told me that it was cellular inside like a honey-comb, and contained compressed air at a pressure of about four hundred pounds. This compressed air could be supplied either from the power-houses, or, as an auxiliary, a small cylinder of liquid air could be clamped on and utilised. The driving machinery was very simple.

The forward propeller was on a solid shaft that ran right through the bulb from end to end. For about eight feet of its length, inside the bulb, some fifty sets of little flat metal chisel teeth, two inches long, projected like suc-