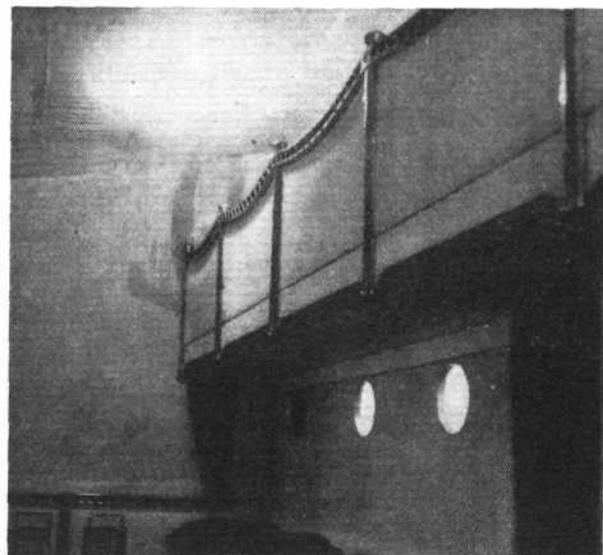
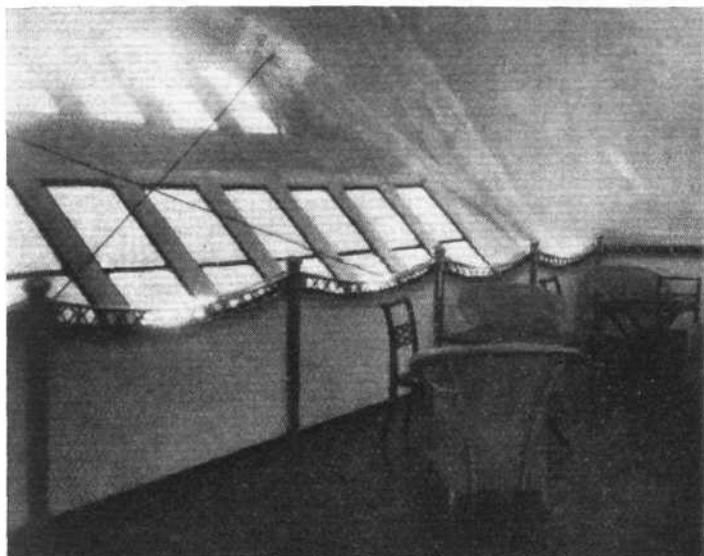


As a matter of fact there is a clearance of 8 ft. on each side and a total vertical clearance of 8 ft. When the ship is walked out, she will probably be held as low as possible so as to give the greater clearance at the top. The clearance is just enough, but an absolutely calm day will be necessary for walking the ship out.

In the shed it was impossible to appreciate that R 100 is shorter than R 101, but one could distinctly see the different effect produced by the absence of the intermediate reefing



The left-hand picture shows the lower balcony which opens off the saloon. The upper balcony, which is on the top deck, is shown in the right-hand picture. The line of chairs on the lower balcony is continued from the left-hand to the right-hand picture. (FLIGHT Photos.)

booms, and the concave surface of some of the panels where they were drawn in by the internal tapes and wires. It was explained that wind tunnel tests had shown that a considerable portion of the cover is subject to suction when flying, and that this drawing-in would counteract the suction.

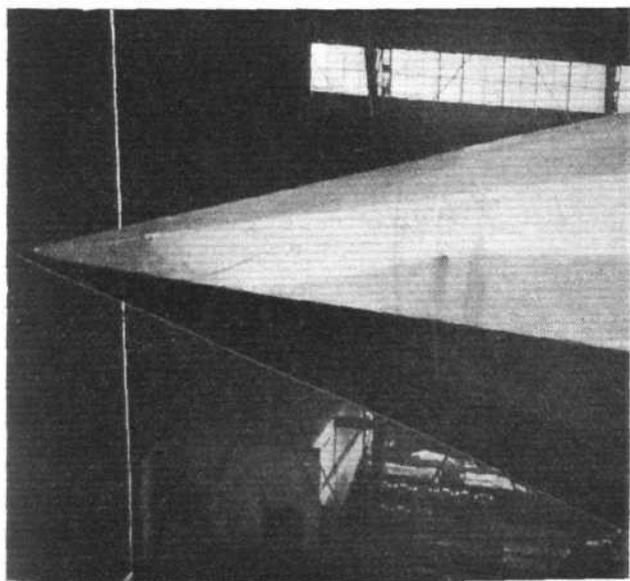
Along the under side of the cover are a number of oblong openings covered with wire gauze. These are intended to increase the internal air pressure on the cover when the ship descends into a denser atmosphere. They are so situated that they will not cause resistance when the ship is flying ahead.

The Engine Cars

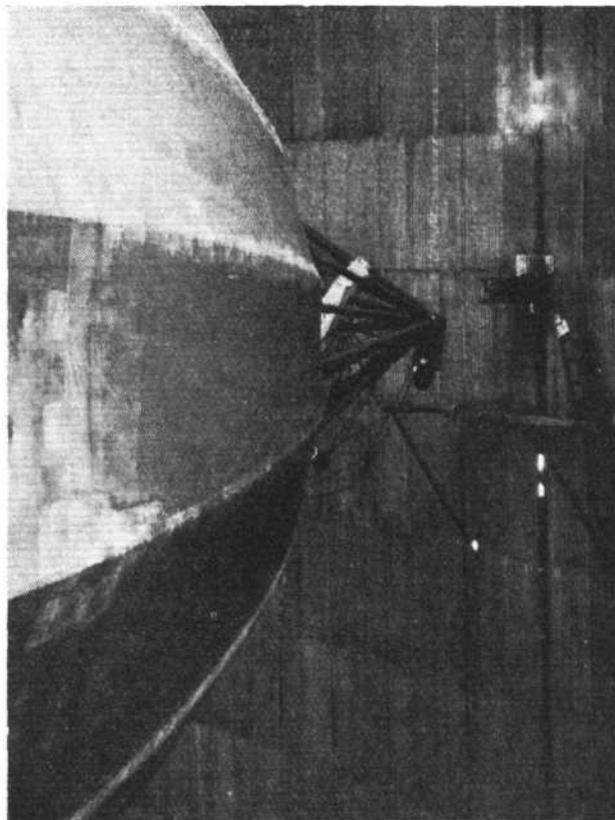
The engine cars next attracted attention. Fitted with air scoops to cool the exhausts, they do not present a perfectly streamlined appearance. Each car is made in three sections. The centre section is slung to the ship's hull. The other two sections each contain one Condor, and they are detachable. Provision has been made for fitting a two-legged derrick in the centre section. From this either of the engine sections can be lowered to the ground while the airship is moored to the tower. This device is an ingenious novelty, which it is hoped will prove a success in practice. The forward section with engine weighs about $\frac{3}{4}$ ton, while the rear section with engine and gear box weighs a little over one ton.

Another feature of the cars, which seems a very good device and ought to be standardised, is a ladder protected by a streamlined fairing from each car to the hull. Airmen may make light of climbing down an open ladder in a wind of 70 m.p.h., but it is better to give them protection when possible. The propellers, by the way, are of wood, and were produced by Vickers Aviation, Ltd. The pitch is not variable, and when the pushers are reversed they will run with trailing edge first. There are, however, three of them, and they ought to be able to give all the reverse control which is needed during mooring operations.

Though the pusher propellers lose efficiency when running in the slipstream of the tractors, it is calculated that to have six single engines in six separate cars would cause at least



The sharp pointed tail of R 100. (FLIGHT Photo.)



The nose of R 100. The movable mooring coupling, colloquially known as the "dew drop," is seen dangling in front of the pyramid of girders. (FLIGHT Photo.)