



R 100 in her shed at Howden. View looking aft. The windows of the balconies of the passengers' quarters on the second and top deck can be seen under the name of the ship. The openings on the underside of the hull are covered with wire gauze, and are intended to admit air so as to increase pressure on the inside of the cover when the ship descends into a denser atmosphere. (FLIGHT Photo.)

HIS MAJESTY'S AIRSHIP R 100

Inspection at Howden

THE programme of airship development in Great Britain is probably unique in that two experimental ships have been built, which, while their dimensions are practically the same, are utterly different in almost every detail of design. The word "detail" comes naturally to the pen, but actually the differences concern also the major points of construction. Two designers have each been given practically a free hand, and each has endeavoured to solve his problems in his own way, and each has shown a complete independence of mind. Col. V. C. Richmond and Mr. B. N. Wallis have hardly one point of common thought. Thus the decision to build two airships, at a time when the technical and commercial success of airships in general was still problematical, has cost the taxpayer some £350,000 more than would have been needed for one experimental ship; but the lessons to be drawn from the comparison of the two may well justify the extra expenditure. Either ship may fail to give satisfaction in some respect, while the other may point the solution of that particular problem. In all probability, neither will prove to be suitable for commercial operation; but the lowest common denominator or the highest common factor of the two may prove clearly that truly commercial airships can be built. It has, in fact, been a very bold experiment, and even if the ultimate results are negative, the taxpayer ought not to grumble at the cost. It would have been extremely unsatisfactory

to have done nothing while the utility of airships remained an unanswered question; and it would have been quite unworthy of this country to have stood aside and merely watched the experiments in Germany and the United States. And, if it was right for us to make the experiment, it was doubly right to make it in a very thorough manner.

It will, however, certainly be difficult to make the man in the street grasp the differences between R 100 and R 101. What will chiefly attract his attention will be the differences in the living quarters in the two airships. Those who are allowed inside both ships will find that R 100 has three decks in one bay, while R 101 has two decks in two bays. Those who only see the ships in flight, especially after dark when the lights in the saloons are lit, will realise that the quarters in R 100 are further forward than those in R 101. More careful observers will note the different positions of the engine cars. R 100 has three cars, each showing two propellers, and all of them are situated well aft. R 101 has five cars, each with only one propeller, two of the cars being situated well up towards the nose of the ship. It is also possible that when R 100 is in the air she may have a pinched appearance because she has 16 longitudinals as against 30 in R 101, and because in the former the fabric of the cover is drawn inwards, giving a concave appearance to several of the panels. But until R 100 actually flies it is difficult to say how far this will be noticeable. The fact that R 101 is