

EDITORIAL COMMENT.

The Future of the Dirigible.

Have we become so obsessed by the marvellously rapid development of the aeroplane that we are in danger of losing our sense of proportion, and dangerously neglecting the possibilities of the dirigible? The question is suggested by an interview published recently by the *Paris Matin*, in which Count Henry de la Vaulx states that the Germans have apparently overcome all the difficulties that seemed to beset the problem of the "rigid" type of airship. A year ago, he says, the Zeppelins could not rise high enough to be dangerous, but now the type can ascend to 2,000 metres, carrying a much greater weight than the non-rigid French balloons. It has a radius of action of over six hundred miles; and ascent and descent can be regulated with the greatest nicety. Count de la Vaulx draws a moving picture of a German dirigible fleet sailing calmly over France, dropping explosives on railway bridges and fortifications, spreading panic in towns and villages, and transmitting valuable information to headquarters by means of powerful wireless telegraphic installations.

No one would dream of questioning the authority of Count de la Vaulx, whose name is a household word in aeronautic circles, not only in France but wherever the science of aerial flight is studied; but we cannot help thinking that in the expression of his opinions he has been guided to some extent by his well-known devotion to ballooning as opposed to dynamic flight. Not that those opinions are to be lightly dismissed as chimerical or far-fetched, but the reply to his picture is best made by the enquiry:—What would the French aeroplane fleet be doing while the German dirigibles were spreading death and destruction through the length and breadth of France? That, however, is scarcely the question we desire to discuss at any length just now. The real point at issue is that contained in the query with which this article commences. In England, whatever may be the case elsewhere, the big dirigible is certainly resting under a cloud at the moment, and we are bound to say, deservedly so. We have seen the "Clement-Bayard," a non-rigid vessel, arrive after a successful voyage from France, albeit months overdue, and vanish at once into obscurity. Then followed the semi-rigid "Lebaudy," which met with even worse luck, and wrecked herself almost the first time it was attempted to fly with her. Next we had the crowning catastrophe of the rigid Naval airship at Barrow. Here we have had object lessons, and expensive ones at that, in what is to be anticipated from each of the three types, rigid, semi-rigid, and non-rigid, as we know them to-day and if that was all there is to be considered there would be a great deal of reason for the condemnation of the dirigible and for concentrating our efforts solely on the development of the heavier-than-air machine. It has to be remembered, too, that the first practical navigable balloon ante-dated the first successful aeroplane by a good many years, so we easily arrive at the conclusion that the development of the one has not been at all commensurate with that of the other, time for time. Taking everything into consideration, the case against the big dirigible seems, on the face of it, a convincing one. That being so we are not setting out to argue against that case, but at the same time it is well to remember that even though progress has not been anything like as rapid as in the case of the aeroplane, still a great deal of progress has been made, and it would be foolish to lay down the dictum that the dirigible is incapable of still further

development. In the light of our present knowledge it is exceedingly difficult to suggest along precisely what lines that future development may take shape—that is a matter which the future alone can make clear—but it is far safer to assume that progressive improvement—we think with the smaller type—will be achieved than to dismiss the navigable balloon as a failure for all time. Indeed, Count de la Vaulx tells us in unmistakable terms that the Germans have improved the Zeppelin type out of all knowledge, which argues that this progress is actually in being.

Now what of the British attitude towards the dirigibles? In the past we have been counted among the most mordant critics of the Government policy of spending money in playing with dirigibles, and now that the lesson which we and others prophesied would be learnt has been driven home and assimilated, it would ill become us to start out on the advocacy of a great building of dirigibles for the Navy and Army. That we certainly do not intend to recommend, but we run no risk of stultifying ourselves by saying that even though the experience of the two Services with these vessels has been so disastrous, it will still be well to keep a very close and watchful eye on development. That we believe is actually being done, for it is a fairly open secret that in spite of everything, there is a section of military opinion which inclines towards the lighter-than-air vessel in preference to the aeroplane. But more than watching should be done. If possible it would be an admirable plan to have a separate money grant, altogether distinct from the aeroplane expenditure with which to carry on this work. We suggest a separate fund in order to avoid the possibility of being misunderstood in our advocacy of dirigible development. We firmly believe that the Government has no right to allow any branch of aeronautics to be held in abeyance. On the other hand it is far more important to develop the aeroplane for military purposes just at present than the dirigible and we should be particularly sorry to see any other branch of aeronautics be the means of withdrawing the money that it is so necessary to use in this particular section. It seems to us that there are two separate policies required for dealing with the two branches of aerial navigation, if we may put it thus. The careful development of the dirigible is already outlined, and in the case of the aeroplane, immediate and active work on such a scale as is necessary to put us on something at least approaching equality with our rivals. It is necessary, we think, that the case should be thus outlined, lest at some time we have the realisation rudely thrust upon us that the answer to our initial query is in a decided affirmative.



The Dawn of Another Year.

We should be less than human if we let slip this, the first opportunity of another year, to wish our many friends and readers a season of happiness and prosperity during 1912. What the new year has in store for us none of us know, and possibly it would not be good for us to know. Therefore, let us forbear to speculate on what will emerge from the mist of the future and content ourselves with the simple expression of good-will which is so clearly if conventionally expressed by the orthodox wish of the season, A happy and a prosperous New Year to all. And in this we are but reciprocating the great batch of greetings received from readers in all parts of the world.