

Correspondence.

PADUA,
August 14th, 1927

To THE INSTITUTION OF AERONAUTICAL ENGINEERS, LONDON

DEAR SIRs,

Mr Baumhauer, Vice-Director of the Government Aeronautical Laboratory in Amsterdam, has given a lecture at the Institution of Aeronautical Engineers in which he has proved himself to be a long way behind in the science of the dynamics of fluids

He says that the behaviour of a perfect gas and of an actual gas is different in the case of severance of contact, and that while vortices are not formed in the first case, they are formed in the second case

Everyone knows that liquids behave like gases, and a proof of this is to be found in the fact that in the case of the Italian Military Dirigible, the wooden model was tested in water in a tank, just like a vessel

The behaviour of different actual gases, and therefore of a perfect gas and an actual gas, is, with all the more reason, the same

The differences are differences not in the form of the phenomenon, but only in the degree

The same phenomenon occurs at different velocities in the case of a curved surface

In the case of an angle, the vortex is produced at all velocities, whatever the fluid may be

It is true that the effect of an obstacle on the whole aggregate is great, even in the case of a small obstacle, as Baumhauer says, provided that it is transversally extensive, but the effect on the whole aggregate is very small in the event of the obstacle being large and of inconsiderable transverse development, as is the case with the accessory parts of aeroplanes

Yours faithfully,

(Signed) GIUSEPPE CANDIANI