Secondly, They fly out and are suspended in the air. Thirdly, they hang or jut over. Fourthly, they are supported above the ground.

NOTE.

These terms are to be understood, as chastely applying only to this sort of Bridge in particular, as it differs wholly from the ancient military flying Bridges, which were constructed of pontons, leather boats, beams, hollow casks, blown bladders, and the like, commonly called pont volant, or pons ductarius.

PROP. 2.

PRINCIPLES. 1st, The principles of this Bridge, as a whole, are founded on the Lever, No. 1.

SCHOLIUM.

Each half Bridge, before it is united in the centre, is to be considered one body; then the fulcrum, or prop, if it were intended to move, would be between the weight, which is the abutment, and the power, which is the projecting arm of the half Bridge.

COROLLARY.

Therefore the abutment, on all occasions, must be of such weight as will be more than sufficient to counterpoise the said projecting arm while building, and also all the men and materials employed in the erection of the same.