NOTES
IN CORRECTION AND EXPLANATION OF THE
ORIGINAL TEXT.

No 1: [on Page 7.] A weight applied directly or indirectly at the upper end of a brace, (as aw, F.2, P.7;) produces a crushing tendency from end to end of the brace, and also, a tendency to depress, or carry down the upper end. But if the brace be confined between two vertical walls, one at the foot and one at the head, so as to prevent a change of inclination, (the lower end being prevented from descending at the same time,) the brace will exert a horizontal pressure, called horizontal thrust, (or by abbreviation, — hor. thr.,) against each of those walls, directly as the weight sustained and the horizontal reach, ac, of the brace, and inversely, as the vertical reach, or difference of elevation between the two ends of the brace.

This follows from one of the fundamental principles of Statics, namely, that when three forces whose lines of direction meet at a single point, are in equilibrio, the forces are to one-another respectively, as the sides of a triangle formed by lines coinciding or parallel with such lines of direction.

Now, the directions of three forces in equilibrio,