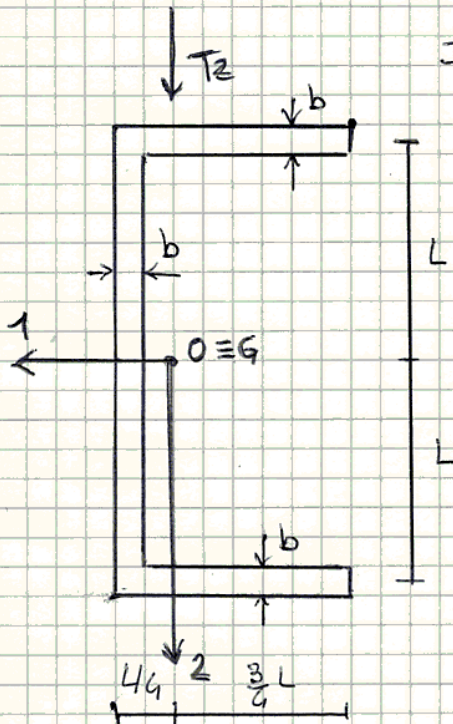


$$I_1 = \frac{1}{12} b(2L)^3 + 2 \left[bLL + \frac{1}{12} Lb^3 \right] = \left(\frac{8}{12} + 2 \right) bL^3 = \frac{8}{3} bL^3$$

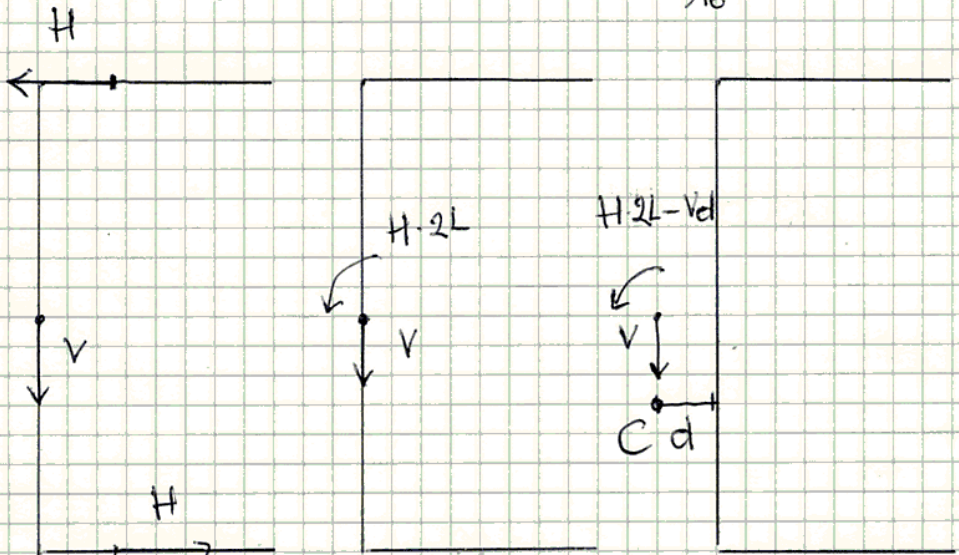
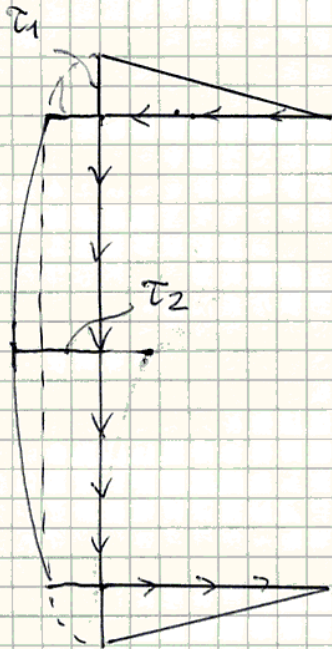


$$\tau_1 = \frac{3}{8} \frac{T_2}{bL^3} \frac{1}{b} bL^2 = \frac{3}{8} \frac{T_2}{bL}$$

$$\tau_2 = \frac{3}{8} \frac{T_2}{bL} + \frac{3}{8} \frac{T_2}{bL^3} \frac{1}{b} bL \frac{L}{2} = \frac{3}{8} \frac{3}{2} \frac{T_2}{bL} = \frac{9}{16} \frac{T_2}{bL}$$

$$H = \frac{1}{2} \tau_1 L b = \frac{3}{16} T_2$$

$$V = \tau_2 2Lb - 2 \cdot \frac{1}{2} \cdot \frac{3}{16} \frac{T_2}{bL} Lb = \left(\frac{18}{16} - \frac{2}{16} \right) T_2 = \frac{16}{16} T_2 = T_2 (!)$$



$$H \cdot 2L = Vd$$

$$\frac{3}{16} T_2 \cdot 2L = T_2 d$$

$$\rightarrow d = \frac{3}{8} L$$