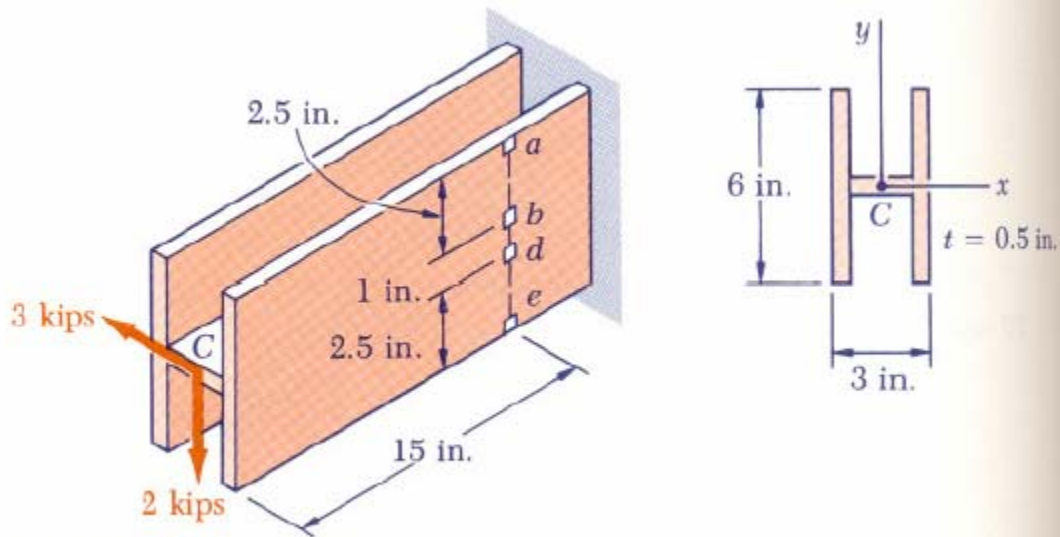


**5.82** Three steel plates, each 0.5 in. thick, are welded together to form a cantilever beam. For the loading shown, determine the normal and shearing stresses at points *a* and *b*. (Given:  $I_x = 18.02 \text{ in}^4$  and  $I_y = 9.83 \text{ in}^4$ .)



**Fig. P5.82**