

Fig. 15. For both spacings, and for all sections, the loads on rivet No. 2 are less than on either Nos. 1 or 3. In the case where the cover plates are $\frac{1}{4}$ the area of the main plate, the load on rivet No. 3 is less than on No. 1; where the cover plates are of the same area as the main plate the loads on these two rivets are equal; where the cover plates are three times the area of the main plate, the load on rivet No. 3 is much greater than on rivet No. 1. The effect of the increase in spacing is to increase the inequality of loading on rivets Nos. 2 and 3 with respect to rivet No. 1, in the

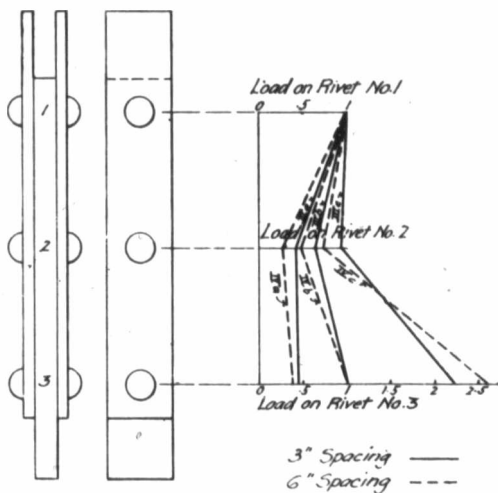


Fig. 15

first and third cases, while in the second case the load on rivet No. 2 is decreased, and the load on rivet No. 3 left equal to that on rivet No. 1.

With these facts, and the discussion of the diagram Fig. 8 before us, we may make the following generalizations with respect to joints of the type shown in Fig. 9, the rivet-spacing being uniform.

(1) The more rigid the material, and the greater the sections of both main plate and cover plates, the more nearly are the rivets stressed equally.

(2) An increase of sectional area of the two cover plates relatively to the sectional area of the main plate causes an increase in the proportion of the stress which the bottom rivets (see Fig. 9) carry, while a decrease causes an increase in the proportion of the stress which the top rivets carry.