division, how many times one will go into the other.

But it may be asked, Can the precise load which is coming upon any structure be exactly fixed? are not the circumstances under which bridges are loaded very different? Bridges in different localities are certainly subjected to very different loads, and under very different conditions; but the proper loads to be provided for have been fixed by the best authority for all cases within narrow enough limits for all practical purposes. Few persons are aware of the weight of a closely packed crowd of people. Mr. Stoney of Dublin, one of the best authorities, packed 30 persons upon an area of a little less than 30 square feet; and at another time he placed 58 persons upon an area of 57 square feet, the resulting load in the two cases