

Artillery can be as great as possible, as is consistent with the service likely to be demanded of it; if the ordinary roads are good; a large proportion of Artillery can be employed; as it will be able to move itself without any extraordinary strain being thrown upon it; but should there be neither railways or good roads, and instead there should be nothing but the wretched cart tracks, miscalled roads so prevalent in this country, the work of moving a large force of Artillery would be most difficult. The roads bad at the commencement, under heavy traffic, caused not only by the moving of the Artillery, but also by the immense trains of wagons necessary to supply the Infantry and Cavalry with food, forage, ammunition, and other supplies, rapidly become so bad as to be almost impassable. Whether the campaign is to be of an offensive or defensive character determines to a great extent the proportion of the Field Artillery. If a long march has to be made into an enemy's country, the remarks previously made, regarding means of transport, such as the state of roads, etc., suggest the advisability of taking as little impedimenta as possible, on the other hand, if the army is acting on the defensive solely, a much larger proportion of Artillery could be used, as no long marches have to be made, and it could be brought almost to where it would be required, long before the time of its use in action commenced.

Another principle upon which the proportion of Artillery to Infantry depends, is the state or condition of the Infantry itself, if the latter is well equipped, and disciplined, a smaller proportion of Artillery will be required, if poorly, a larger.

Before actually determining the proportion of guns to men required, it would be well to see what the opinions of competent authorities are upon this subject. Major Le G. Geary, R. A., in a lecture delivered at the Royal Artillery Institution, Woolwich, 3rd January, 1873, says, "it is proposed that a *corps d'armée* consisting of 12,000 men should have altogether 48 guns, 12 guns to accompany each division of Infantry 5,000 strong, 12 to be attached to the Cavalry Brigade, and 12 to be in reserve, thus giving 4 guns per 1,000 men. This seems to have been determined upon after the Crimean War, for at the Alma, we had only 60 guns to about 29,000 men, a little over 2 guns per 1,000 men, while at Waterloo we had less than 2 guns per 1,000 men. I have extracted from the official account of the Franco-