

mile. In all reports, officers should state distinctly what parts of the information they contain rest upon their own personal examination of the objects in question, and what upon the authority of others, and in the latter case, they should mention the source of their information.

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**MEANS OF ASCERTAINING HEIGHT AND DISTANCES OF VISIBLE OBJECTS.**

In the absence of the requisite mathematical instruments, means must be taken to ascertain the height and distance of remote objects by the eye-sight, by sound, by pickets, and by whatever convertible article may be at hand.

*By means of pickets.*—Take two pickets of unequal length, drive the shortest into the ground, say close to the edge of a river; measure some paces back from it and drive in the other, till you find, by looking over the tops of both, that your sight cuts the opposite bank. Pull up the first picket, measure the same distance from the second in any direction the most horizontal, and drive it as deep in the ground as before. Then, if you look over them again, and observe where the line of sight falls or terminates, you will have the distance required. This method is only applicable to short distances.

*By means of the peak (visor) of a cap.*—To measure the breadth of a river, place yourself at the edge of one bank and lower the peak of your cap till you find the edge of it cut the other bank; then steady your head by placing your hand under your chin, and turn round gently to some level spot of ground, on your side of the river, and observe where your eyes and the edge of the peak again meet the ground, measure the distance by pacing; which will be nearly the breadth of the river.

*By eye-sight.*—Good eye-sight recognizes masses of troops at one thousand seven hundred yards; beyond this distance the glitter of arms may be observed. At one thousand three hundred yards infantry may be distinguished from cavalry and the movement of troops may be seen; the horses of cavalry are not, however, quite distinct, but that the men are on horseback is quite clear. A single individual detached from the rest of the corps may be seen at one thousand