

United States Rifle Model of 1917

From --- "Soldier's Handbook of the Rifle and Score Book for Special Course C Arranged for the United States Rifle Model of 1917 - Army War College, Corrected to May 1, 1918"

"The flight of the bullet through the air may be likened to that of a baseball thrown by hand. Over short distances the bullet has practically no drop, and the barrel may be pointed directly at the object it is desired to hit, just as the pitcher throws directly at the catcher's mitt. For long distances, however, it is necessary to point the muzzle of the rifle slightly up into the air in order that the bullet may carry the necessary distance, just as the ballplayer throws the baseball high up in the air in throwing to home plate from center field. If the soldier will elevate the slide on the leaf of the rear sight as far as it will go, to the mark " 1G," and then aim at the object, seeing the front sight and object in line through the peephole, he will notice that his barrel is slightly pointed up into the air. This is to allow for the drop of the bullet. The path which the bullet takes through the air is a curved line, just as the path of a baseball thrown to any distance is a curved line. This curved line or path is called the "trajectory." Figure 4 shows this trajectory when the battle sight is used, the battle sight (peep sight seen in position when the leaf is laid down) being adjusted for a range of 400 yards. It will be noticed that the bullet, leaving the muzzle, flies above the line of aim through almost its whole course, and only drops back to the line of aim, and strikes the point aimed at, at that range to which the sights are adjusted. Thus, in figure 4, if the aim be taken at the silhouette the bullet will strike high at 100, 200, and 300 yards and will strike the point of aim at 400 yards. To strike an object at any distance it is necessary, either to set the sights for the exact range and aim where one wishes to hit, or else, if the sights be not set for the correct distance, to make an allowance in the aim. Thus, with the sights set for 400 yards, if one wishes to strike a certain point at a shorter distance he must aim a little below the point."

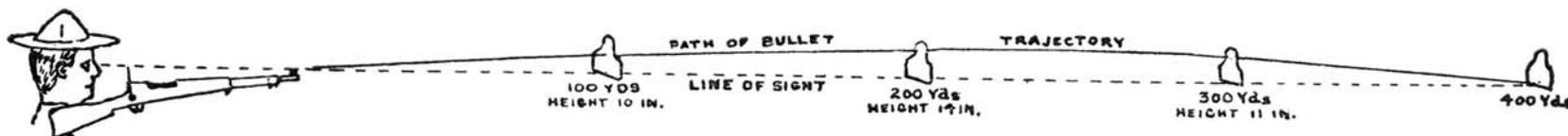


FIG. 4.—Line of sight and trajectory at 400 yards. Sights set at 400 yards and aim taken at the bottom of the figure.