Curving the Path of Bullets - A Hypothetical Case Study of Applications of Bernoulli's Principle

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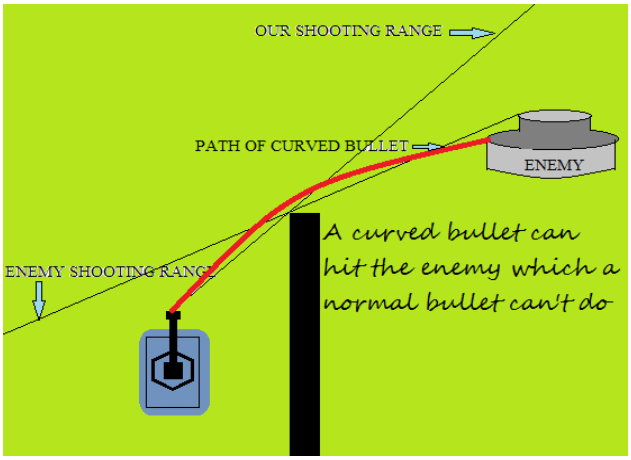
Abstract: ***This article describes a very effective and useful technique of curving bullets. The model is designed to improve our country's weaponry and revolutionize defense against enemy countries. Special designing of bullet has been done by using curved blades to ensure its target accuracy.***

Keywords: Shooting range, Curved blades, director, barrel, and groove.

1. Introduction

There are many advantages in curving bullets. An example is shown below.

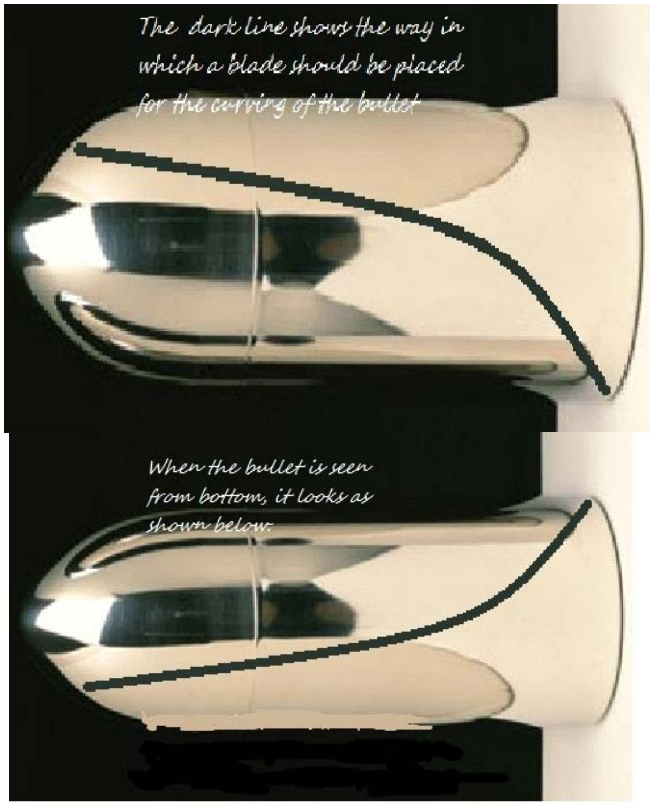


Thus we can attack our enemies without being attacked by our enemies. Do you think it's really possible? Physics says yes, but how? Here is the answer-we can curve a bullet by making some modification in the barrel and the bullet. The main principle involved is the [1], [2] Bernoulli's Principle.

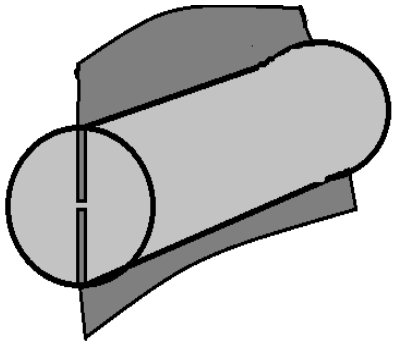
For curving a bullet we have to tackle two problems:

1. It must deviate from a straight line and move in a prescribed curve.
2. It must be oriented in the right direction after passing through.

The solution to the first is introducing **Curved Blades.** The procedure is as shown below



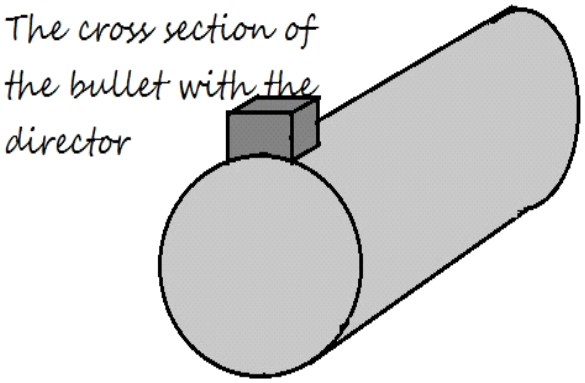
Thus we place two blades which help in curving the bullet. By adjusting the curve of the blade we adjust the path of the bullet.



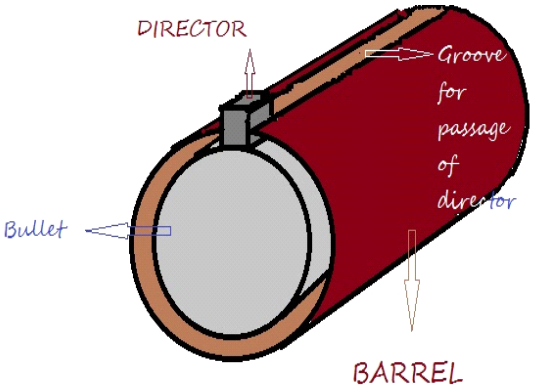
The cross section of the bullet looks like this when blades are placed on the bullet.

To get the right orientation I am introducing a director to the bullet and a groove in the barrel for inserting the director.

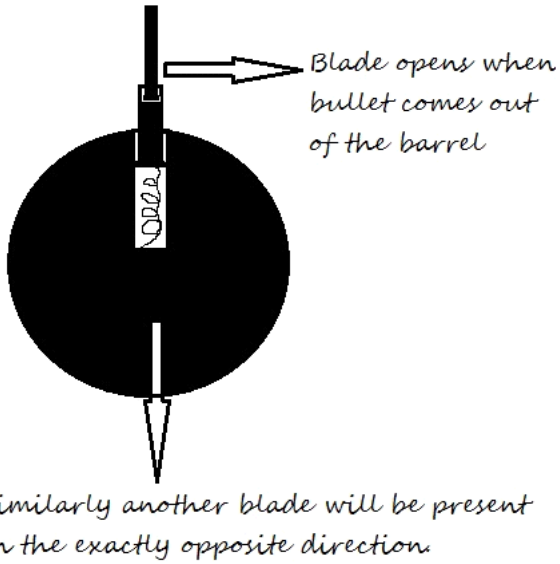
As shown above a director is a rigid and small pointer. To clarify its cross section is shown below.



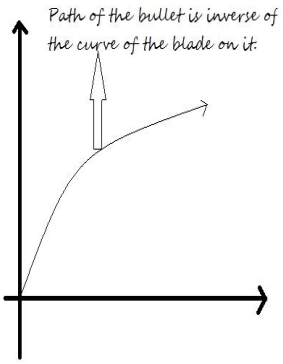
The barrel must be provided with a groove in which the director of the bullet fixes exactly as shown.



The director moves through the groove when the bullet passes through the barrel with the blades compressed inside the bullet. When the bullet comes out of the barrel the blades open out due to spring action and curving begins.



Thus due to [3], [4] pressure difference caused between the sides of blade a horizontal force acts on the bullet which gives rise to the curved path.



2. Conclusion

Thus we can solve the general impracticality by the keen observation of most basic laws of physics and the beautiful use of its boundary conditions.

Note: This article is a physics application. There may be some errors in the practical situation but it is experimentally certified by duplicate models. Thus this is not hypothetical and is possible.

References

[1] Lectures on Physics- R.P. Feynman,
[2] University Physics (Sears and Zemansky's) H.D. Young and R.A. Freedman, Edition-Wiley (2004),
[3] Conceptual Physics-Paul G. Hewitt, Edition-Wesley (1998),
[4] Physics for the inquiring mind-E.M. Rogers, Princeton University Press (1960).

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