

and safe handling of the ^{rearward} exhaust gas would be in order.

The petal design must be so well engineered that accuracy is not impaired. If the long taper in the rear of the bullet doesn't allow enough working area for the gas, a driving band exposing a sharp shoulder of substantial working area followed by a long taper allows closing of the petals.

Ultra high velocity can be obtained by several means.

One of the most successful, the Gerlich principle, was used by the Germans in large bore cannons during WWII. This principle used a tapered bore from breech to near the muzzle. The projectile contained one or more circular fins much larger in diameter than the main body exposing a large working area to the expanding gas.

*Ultra
High
Velocity*

Fig. 9

As the projectile moved toward the muzzle thru the tapered bore the fins folded into recesses attaining a finished bore dimension. During this movement down the tapered bore an exceedingly high velocity was obtained in the neighborhood

Fig. 10
Fig. 11