RIFLES.

A.D.1498. * 1. The invention of rifling has been attributed to Gaspard Zoller, or Zollner of Vienna, about the end of the 15th century.

* 2. The grooves were at first cut straight down the bore, for the purpose, it is supposed, of receiving and decreasing the effect of the fouling. It also tended to increase the accuracy of shooting of the arm, inasmuch as the bullet was directed in a straight line down the barrel. The citizens of Leipzic used rifled barrels with straight grooves at target practice about this period.

A.D.1520. * 3. About the year 1520, Koster of Nuremberg is said to have adopted the spiral form of grooving; whether from fancy, or from understanding the value of the change, does not appear at all certain.

* 4. Rifles were at first used for amusement, and were not employed in warfare until about the middle of the 17th century.

5. A snaphaunce rifled gun, 4 ft. 9 in. in length, of the time of Charles I., is to be found in Sir Samuel Meyrick's collection of arms.

6. In the official catalogue of the Tower armouries it is stated that "rifling barrels commenced about the "beginning of the 17th century," and that the earliest patent preserved in the Patent Office for rifling small arms, is dated 24th June 1635, which reads as follows: —"The gunsmith undertakes to rifle, cutt out, and screwe "barrels as wide, or as close, or as deepe, or as shallowe, "as shall be required, and with great care."

A.D.1610. 7. In the Tower armouries may be seen a tricker wheel-lock rifled birding piece, dated about 1610;—a hunter's wheel-lock rifle, dated 1613, the barrel has seven grooves with double lines between the grooving;—a tricker flint-lock forest rifle, about 1630;—and a German wheel-lock rifle, dated 1797.

A.D.1680. * 8. In 1680 each troop of Life Guards was supplied with eight rifled carbines.

A.D.1800. * 9. In 1800 the 95th Regiment, now the Rifle Brigade, was armed with a rifle known by the name of "Baker's "rifle," which weighed 9½ lbs. The barrel of this rifle was 2½ feet in length; it had 7 grooves, making a quarter turn in the length of the barrel, and its calibre was a 20