

Firearms in Europe.

Historians are not agreed as to where and when artillery was first employed. It is now believed, upon good authority, that gunpowder and guns were used in China fifteen centuries before they were known in Europe. The first artillery consisted merely of small iron tubes, which discharged leaden bullets armed with iron tubes, and shaped like pyramids, each having a square base. These tubes were usually mounted upon a carriage, and the gunners who operated them were protected with iron shields. At the beginning of the fifteenth century, the use of firearms became general in the armies of Europe and several of the Asiatic nations; and at the present day, when we make much ado about cannon throwing one hundred and twenty pound shot, and consider these missiles very large, we forget that much larger shot were used three centuries ago. The scale of calibres in the early days of gunnery ranged from thirty two to the pound up to bombards throwing stone balls of one thousand pounds. Bolts, burning arrows, fireballs, granades, shells, case-shot filled with balls (shrapnell,) and incendiary or burning balls, were all used in days of old. Small firearms were employed in castles and cities for defense before they were used in field warfare. Large cannon were made of cast-iron; also of wrought iron, welded together and hooped; and also cylinders of iron hooped with rings. At the battle of Tongres, in France, in 1408, it is related that three cannon were used of such great size that they threw stone balls weighing three hundred and five hundred pounds. At the siege of Cæn, in 1450, twenty-four mortars were fired, and the bore of each was so large that a man could sit upright in it. At the great siege of Constantinople, when taken from the Greeks by Mohamet the Second, there was one cannon which threw six-hundred pound stone balls. In 1641, cartridges were first employed in the armies of Gustavus Adolphus. The first muskets were called "matchlocks," because the charge was ignited by a match; their barrels were about six feet long, and required a rest. The iron soldiers of Cromwell carried matchlocks; the flintlock was introduced into England in the reign of Charles the Second. The inventor of the percussion lock was the Rev. Alexander Forsyth, a Presbyterian clergyman, who secured a patent for it April 11, 1807. The percussion powder was fed into the touch-hole by a self-acting rod.