Impossible: yet, haply, of thy race,
In future days if malice should abound,
Some one intent on mischief, or inspir'd
With devilish machination, might devise
Like instruments to plague the sons of men,
For sin, on war and mutual slaughter bent.
Forthwith from council to the work they flew;
None arguing stood; innumerable hands
Were ready; in a moment up they turn'd
Wide the celestial soil, and saw beneath
The originals of nature in their crude
Conception. Sulphurous and nitrous foam
They found, they mingled, and, with subtle art,
Concocted and adjusted, they reduc'd
To blackest grain, and into store convey'd:
Part hidden veins digged up (nor hath this earth
Entrails unlike) of mineral and stone,
Whereof to found their engines and their balls
Of missive ruin; part incentive reed
Provide, pernicious with one touch of fire.
So all, ere day-spring, under conscious night
Secret they finished, and in order set,
With silent circumspection, unespied."

Milton still further represents the great enemy as contriving a park of artillery, masked by his legions till the time for action.

"So scoffing in ambiguous words, he scarce
Had ended, when to right and left the front
Divided, and to either flank retired:
Which to our eyes discovered, new and strange,
A triple mounted row of pillars laid
On wheels (for like to pillars most they seem'd,
Or hollowed bodies made of oak or fir,
With branches lopt, in wood or mountain fell'd),
Brass, iron, stony mould, had not their mouths
With hideous orifice gap'd on us wide,
Portending hollow truce: at each behind
A seraph stood, and in his hand a reed
Stood waving, tipp'd with fire: while we suspense,
Collected stood, within our thoughts amused
Not long; for sudden all at once their reeds
Put forth, and to a narrow vent applied

With nicest touch. Immediate in a flame,
But soon obscur'd with smoke, all heaven appear'd,
From those deep-throated engines belched, whose roar
Embowell'd with outrageous noise the air,
And all her entrails tore, disgorging foul
Their devilish glut, chain'd thunderbolts and hail
Of iron globes; which, on the victor host
Levell'd with such impetuous fury smote,
That whom they hit none on their feet might stand,
Though standing else as rocks, but down they fell
By thousands, angel on archangel roll'd,
The sooner for their arms: unarmed they might
Have easily, as spirits, evaded swift
By quick contraction or remove; but now
Foul dissipation follow'd, and forc'd rout;
Nor serv'd it to relax their serried files.
What should they do? if on they rush'd, repulse
Repeated and indecent overthrow
Doubled, would render them yet more despis'd,
And to their foes a laughter; for in view
Stood rank'd of seraphim another row,
In posture to displode their second tier
Of thunder; back defeated to return
They worse abhorred."

Without tracing the invention to so remote a date, we must look for it about the time, or a little anterior to the time, when cannon were first introduced; and our search leads us to the cell of a worthy but strongly-suspected monk—one Roger Bacon, of whom you have doubtless heard.

This Roger Bacon was born in Ilchester, in Somersetshire, about the year 1214. He received a first-rate education, or what was so considered in his day. It probably resembled that of the other most learned man of the period—John of Salisbury, who has given us an account of the Curriculum through which he passed. He says, "he went to the Peripatetic of Palais (the famous Abelard), and there studied logic. He afterwards adhered to Master Alberic, as *opinatissimus dialecticus* (a dialectician in the highest repute), and an *acerrimus impugnator* (most keen impugner) of the nominal sect. He was two years with

UB Braunschweig http://www.digibib.tu-bs.de/?perid=00031385&imgid=00000103.jpg