

In presenting before you a catalogue of those many branches of knowledge, all delightful and all useful, how difficult is it, in attempting to prove the admirable uses which Science is calculated to promote, to select subjects for illustration. The field is boundless; and all we can do is to tread on the threshold of Science, and select one or two striking instances of what it has done for man.

There are certain remarkable eras in the history of inventions and discoveries, and the 15th Century is very noted in this respect, perhaps more so than any Century since the Creation, extending as they do, with extraordinary power to the present day. We find in that Century the invention of Printing, the Mariner's Compass, and the discovery of America. I shall select as a display of the triumphs of Science one or two of great note.

I go back to a discovery of a most important article, I mean gunpowder. This was either invented or brought into notice by Roger Bacon, a Friar, who in the year 1216 published a Treatise, in which he says: "You may raise thunder and lightning at pleasure, by only taking sulphur, nitre, and charcoal, which singly, have no effect, but mixed together and confined, cause a noise and explosion greater than thunder."

The quality of gunpowder depends on the proportions of the three ingredients.

Common gunpowder consists of 75 parts of saltpetre, 12.5 of charcoal, and 12.5 of saltpetre. We may take into our hands a piece of charcoal, or saltpetre, or sulphur, we may examine them and investigate their properties. We shall find by chemical analysis that a piece of charcoal consists of the same elements as the diamond that sparkles on a lady's forehead.— We shall discover all the articles of decided value to man, according to their several properties; but, we shall wholly fail to detect that prodigious power which, when combined they exert.