

cal arts, or find worthy matter of speculation in the mine or the laboratory. Yet it cannot be supposed, that all the indications of nature continually passed unremarked, or that much good observation and shrewd reasoning on it failed to perish unrecorded, before the invention of printing enabled every one to make his ideas known to all the world. The moment this took place, however, the sparks of information from time to time struck out, instead of glimmering for a moment, and dying away in oblivion, began to accumulate into a genial glow, and the flame was at length kindled which was speedily to acquire the strength and rapid spread of a conflagration. The universal excitement in the minds of men throughout Europe, which the first out-break of modern science produced, has been already spoken of. But even the most sanguine anticipators could scarcely have looked forward to that steady, unintermitted progress which it has since maintained, nor to that rapid succession of great discoveries which has kept up the interest of the first impulse still vigorous and undiminished. It may truly, indeed, be said, that there is scarcely a single branch of physical inquiry which is either stationary, or which has not been, for many years past, in a constant state of advance, and in which the progress is not, at this moment, going on with accelerated rapidity.

(384.) Among the causes of this happy and desirable state of things, no doubt we are to look, in the first instance, to that great increase in wealth and civilization which has at once afforded the necessary leisure and diffused the taste for intellectual pursuits among numbers of mankind, which have long been and still continue steadily progressive in every principal European state, and which the increase and fresh establishment of civilized communities in every distant region are rapidly spreading over the whole globe. It is not, however, merely the increased number of cultivators of science, but their enlarged opportunities, that we have here to consider, which, in all those numerous departments of natural research that require local information, is in fact the most important consideration of all. To this cause