

temporaries who did not waste all their time in visionary pursuits, but really made many interesting and most important discoveries. I will name but one, Sulphuric Acid, which was discovered about the 10th century, and of which it is impossible to overrate the importance in modern arts, not less than 100,000 tons of it being annually consumed in Great Britain alone.

Coming to our own times, what a contrast do we find between the simple life of those long passed away, and the essentially artificial existence of to-day, depending, as regards all classes, on operations of science, it is not doubted that our civilization is of a higher order than that which has preceded it, and though it might be possible to shew from excellent authorities how necessary it has become, and in what respect as regards the training of the mind it is advantageous, to add a study of Physical Sciences to the other indispensable elements of education, I wish on this occasion to dwell rather on the facts of scientific development, particularly those of a chemical nature, which form in great part the mainspring of the complicated machinery of scientific application by which every individual in civilized life is continually affected. For, to quote from a most interesting address of Sir B. Brodie, as President of R. Society of London in 1859, "If our houses and our cities are better and more economically lighted; if our population is better and more cheaply clothed; if our fields are more productive; if we travel by steam and communicate with those who are hundreds of miles distant from us by the telegraph; if a brighter light shines in our light-houses to guide the mariner at night—these and a thousand of things besides are but the result of the application by practical men of the discoveries made in the physical sciences to practical purposes. If sanitary and other improvements (these being the result of greater knowledge), have added to the average length of human life, be it observed that this fact includes another fact, viz., that they have added to human happiness, for true it is that the causes which tend to the shortening of life, are, with few exceptions, such as produce physical pain or moral suffering."

I said I wish to look at the chemical results of to-day, and who does not know, by name at least, Chloroform, Benzine, Glycerine, and Aniline, and, such is the familiarizing power of habitual use, it would be impertinent to do more than advert to Coal Gas and Washing Soda, or the arts of Photography and of depositing metals by electricity, yet these are all the really recent gifts of Chemistry to mankind and accepted as the common accompaniments of civilized life, and I anticipate at least a smile as I include the lucifer match as an evidence of our advantages over former peoples, yet, humble instrument as it is, we have only to compare it, and many here can do so from experience, with the now historical tinder-box, flint and steel, and sulphur-tipped