GEOLOGY AND CHEMISTRY

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We are here to-day with the pleasant duty of dedicating a splendid new building to the service of chemistry and geology. Some of you may have been led to wonder at the housing together under one roof of two sciences that are often placed in opposed categories, the one an experimental science, the other a natural science. But is it, after all, so strange a union?

Chemistry had a utilitarian beginning. It grew out of the attempts of man to convert natural materials to his uses. The first chemical process consciously employed was probably the process of combustion. Fire was to early man, as it is to us to-day, of outstanding importance, and one of its earliest services was that of reducing metals from their ores. A primitive hunter kindled a fire in the lee of a rusty boulder and was astounded to find in the ashes glistening pellets that he could shape at will by pounding them with a stone. From this beginning he and his fellows learned to associate the production of this lustrous, malleable material with the bringing together of fire and a certain kind of rock substance. When they wished more of that material, for which they found many uses, they learned to seek other occurrences of similar rock to be fired in a similar manner. The production of metals from natural rock substances was at first no more than a craft. But man does not long remain content with wholly utilitarian pursuits, else we should not find among primitive peoples the remarkable knowledge of such matters as the motions of heavenly bodies. Our nimrod metallurgist soon began to ponder upon the fundamental nature of his craft. In this act the science of chemistry was born, but no less also was the science of geology born, if indeed any purpose is served by attempting to classify the trains of thought instituted in those unpracticed minds. The desire to understand the real nature of the raw material, to grasp why it
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