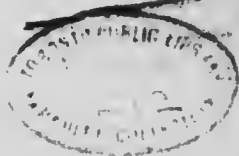


82-669-092.

With compliments

Will. Aug.



CONCEPTIONS OF MATTER: ANCIENT AND MODERN.

THE science that deals with the constitution of matter has occupied the time and energies of countless generations of men since the time of Adam, who, possibly, was himself an alchemist, as one might be led to believe when he reads of

"A book where Moses and his sister,
And Solomon have written of the art."(1).

The quest of the alchemist was the production of new substances and the conversion of one form of matter into other forms by a process of transmutation. This was possible, he argued, because, in nature, plants and animals were seen to grow, change, develop, and die, and that therefore the same growth and development ought to proceed in the mineral kingdom. Just as a grain of seed in the ground died, and from its dead body arose the perfect plant or tree, so, in the earth, the metals were looked upon as undergoing a growth and becoming more perfect—in time reaching the highest stage of all, namely, gold.

Alchemy did not give place to chemistry proper until the eighteenth century, and, in its long life, experienced many vicissitudes. Its students and followers were not merely natural but also moral philosophers; they regarded nature from both standpoints, watched and studied the course of nature as exemplified by the growth of living things, vegetable and animal, endeavoured to discover the secret of her workings, and trusted to be able to apply this secret to the transmutation of the baser into the nobler metals, to the production of an *Elixir Vitæ*, which would be the cure of all ills, and, as a result of this, hoped for the mental happiness which would follow from the practical knowledge of the supreme secret of nature. Their quest was for an undefinable something, called by various writers "*the one thing*," "*the philosopher's stone*," "*the essence*," "*the soul of all things*," and by many other names.

(1) *The Alchemist*: by Ben Jonson, 1610.