

now obtained from coal-tar, the impure source of so many wonders. Such is a discovery which has issued from the womb of science, and of science the most abstract; confirming preconceived ideas on the relations of composition and of atomic structure between anthracene, alizarin, and the intermediate terms. And this will not be the last product of this beautiful development of chemistry. Future conceptions on the intimate structure of complex organic compounds will be so many landmarks for new syntheses, and hypotheses rigorously deduced from acquired principles will be fruitful in the happiest applications.

Saccharine matters, alkaloids, other complex bodies whose properties and diverse transformations are actively investigated with a view of deducing their molecular constitution—all these substances may be artificially reproduced, as soon as this preparatory work, so difficult and often seemingly so useless, will have sufficiently advanced. So fine a programme justifies the great efforts which have been made, in our days, in this direction. To discover, to analyse, to study, to classify, reproduce artificially so many diverse substances, to study their internal structure, to indicate their useful applications; to surprise, in a word, the secrets of Nature and to imitate her, if not in her processes, at least in some of her productions—such is the noble aim of contemporary science. She can only reach it by the sure but slow paths we have indicated; experiment guided by theory. In chemistry, at least, empiricism has had its day; problems, clearly stated, must be boldly faced, and henceforth the rational conquests of experiment will only leave a place more and more circumscribed for fortunate finds and the surprises of the crucible. Away, then, with the detractors of theory, who go in quest of discoveries which they can neither foresee nor prepare; they reap where they have not sown. But you, courageous workers, who trace methodically your furrows, I congratulate you. You may be sometimes deceived, but your work will be fruitful, and the goods which you amass will be the true treasure of science.

Will not this science be one day embarrassed and as if encumbered with so much riches, and will the strongest memory be able to support all the weight? If the danger exists, there is no need to fear it. The classification of all these materials will free us from embarrassment. In a well-arranged edifice, each stone requires to be prepared before taking its place; but the construction accomplished, all do not strike the eye equally, though