SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

FRIDAY, OCTOBER 23, 1903.

CONTENTS:

MSS. intended for publication and books, etc., intended for review should be sent to the responsible editor, Professor J. McKeen Cattell, Garrison-on-Hudson, N. Y.

*THE ATOMIC THEORY.**

ONE hundred years ago, on October 21, 1803, John Dalton gave this society the first announcement of his famous atomic theory. It was only a slight preliminary notice, a mere note appended to a memoir upon another subject, and it attracted little or no attention. In 1804 Dalton communicated his discovery to Dr. Thomas Thomson, who at once adopted it in his lectures, and in 1807 gave it still wider publicity in a textbook. A year later Dalton published his 'New System of Chemical Philosophy,' and since then the history of chemistry has been the history of the atomic theory. To celebrate Dalton's achievement, to trace its influence upon chemical doctrine and discovery, is the purpose of my lecture. It is an old story, and yet a new one; for every year adds something to it, and the process of development shows no signs of nearing an end. A theory that grows, and is continually fruitful, can not be easily supplanted. Despite attacks and criticisms, Dalton's generalization still holds the field; and from it, as from a parent stem, spring nearly all the other accepted theories of chemistry.

Every thought has its ancestry. Let us briefly trace the genealogy of the atomic theory. In the very beginnings of phi-

* The Wilde lecture before the Manchester Philosophical Society, delivered May 19, 1903.