that the author has been happy in his translator, or rather his translators (for the articles are by different hands), and we need to be reminded that what we are reading is really a translation from that usually most difficult language, the language of a German man of science.

The first lecture is on the relation of Natural Science to General Science, and is especially interesting to those who are endeavouring to solve for themselves or for others the problem as to the position which science ought to hold in education. The second lecture treats of the scientific researches, and though of special interest to the Germans is far from being uninteresting to us, a man of Goethe's universal genius being, after all, common property. Many of our readers who are acquainted with Goethe as a poet, do not know perhaps that his services to modern science were of the highest order. He established the leading principle of the Science of Comparative Anatomy as it stands at the present day, and he brought forward an equally important generalisation in Botany. He himself believed that his researches into the laws of colour were of more value than the whole of his poetry; but, curiously enough, it is just this part of his scientific researches which has turned out to be erroneous. The next three lectures treat respectively of the physiological causes of Harmony in Music, the phenomena of Ice and Glaciers, and the Interaction of the Natural Forces. Following these we have three very celebrated lectures on the Theory of Vision, one treating of the eye as an optical instrument, the second dealing with the sensation of sight, and the third with what will not, on the face of it, be thoroughly intelligible to non-physiological readers, namely, "the perception of sight." Some of the views expressed in these lectures will certainly not be accepted by any one who does not believe in the hypothesis of evolution; but they nevertheless constitute a very remarkable series of discourses upon one of the most difficult subjects in the entire range of Physiology. The next lecture deals with the "Conservation of Force," without exaggeration the most important generalisation of modern science. Lastly, the book is concluded with an address on the "Aims and Progress of Physical Science, delivered as President of what corresponds in Germany to the "British Association for the Advancement of Science."

Dr. Helmholtz's book will be read with profit by all those who, though themselves not necessarily scientific, desire to know something of the marvellous domains which science has conquered and made her own within the last century. The giant is yet in its childhood; and those who read and attentively follow this work will, probably, feel no disposition to predict what its maturity may bring forth.

YEAR-BOOK OF NATURE AND POPULAR SCIENCE FOR 1872. Edited by John C. Draper, M.D. New York: Scribner, Armstrong & Co.

Annual records of the investigations in nature and science have obtained a wide popularity; and, when well executed, they fully deserve their success. They present to the public in a condensed form the more important scientific results which have been arrived at during the year, and the more important theoretical opinions which may have been advanced during the same period. They thus save the general reader from the wading through a vast mass of technical literature, which would either be beyond his reach, or, if attainable, would be beyond his knowledge or his powers of endurance. It is true that a popular monthly journal of science to some extent takes the place of the year-book; but the latter has the advantage that its numerous facts are classified and arranged for easy reference in a manner which cannot be attained by the former.

Of the many Year-books of Science which now regularly make their appearance, the one edited by Dr. Draper is perhaps the best. It is not so technical as some of its competitors in the same field, and it is more especially addressed to that wide and increasing class of readers who take a general interest in science without pretending to any special knowledge. The classification of the materials treated of in the volume is remarkably good, the editor having wisely based his arrangement upon that followed successfully for many years by the British Association for the Advancement of Science. It is also a noteworthy and laudable feature in the work that an extra allowance of space has been given to the sections which treat of the subjects of Education and Special Biology, these subjects having of late occupied a large share of public interest. If any fault can be found, it is that perhaps undue prominence is given to the views of the "advanced" school of scientific observers. Lastly, there is an admirable table of contents, so arranged as to give an abstract of all the subjects in each section, with references to a complete list of all the articles contained in that section. In this way the search for articles bearing on the various branches of science is very much facilitated.

COLLINS' ELEMENTARY SCIENCE TEXT BOOKS.

In a new country like ours, where almost every branch of art and industry necessitates, in those engaged in manufactures, an acquaintance with the