### Popular Science

To apply the term 'popular science' to a book is generally sufficient to make a man of scientific training turn aside distrustfully. This is particularly unfortunate in these days of increasing specialisation, when it is more than ever desirable that specialists should be enabled to follow broad lines of advance in fields other than their own, but the fact remains that most popular science books are 'written down' and simplified to the point of sheer inaccuracy. There is also an increasing body of laymen interested in the advances of science who rightly ask to have accurate though plain accounts of current work. Davy and Faraday showed one way in which both needs can be met: the scientific worker can come from his laboratory and explain his investigations. Faraday's Friday evening discourses at the Royal Institution are still regarded as models of exposition, and it may justly be said that Faraday's mantle has fallen on the present occupant of his post, Sir William Bragg. Sir William's course of Christmas lectures of 1923-24, "Concerning the Nature of Things", forms an admirable introductory volume in a group of four published by Messrs. G. Bell and Sons, Ltd., in a new "Popular Science Series" (4s. 6d. net each). From that we may pass to "Engines", by Prof. E. N. da C. Andrade, another course of Christmas lectures at the Royal Institution, and then perhaps to Prof. J. Kendall's "At Home among the Atoms", described by its author as "A First Book of Congenial Chemistry", which with its quaint chapter headings and unconventional diction will amuse as well as inform. Finally, there is Prof. Andrade's "The Mechanism of Nature", a more ambitious work for the intelligent reader, surveying in plain language modern views on the structure of matter and radiation. All these books have been published before, but in their new and tasteful 'dresses', any or all of them might well serve to solve the problem of the selection of a Christmas present for a young or an older reader.

#### Electrically Heated Incubators

THE use of electrically heated incubators is steadily increasing. Some people think that the method is a risky one, as the interruption of the electricity supply even for a short period might involve a failure. We learn from the Electrical Development Association (the E.D.A.) that this risk is negligible. For example, a leading firm of poultry farmers and incubator manufacturers sent batches of eggs in its incubators to agricultural shows. In one case, two batches, 219 eggs in all, were sent to the Royal Show at Southampton. One batch had been incubated for thirteen days and the other for fifteen. After being taken out of the incubators at the farm they were packed in egg-boxes and carried in a loaded three-ton lorry a distance of sixty miles by road to the show. They were then unpacked and placed in the incubator. At the end of the normal periods 209 chicks were hatched. The eggs were out of the incubator for a very much longer period than any interruption in an electricity supply is likely to last. Another case is described where the half-incubated eggs were packed in the ordinary way and sent 240 miles by road and train without any apparent effect on the number of chickens hatched.

# Institution of Automobile Engineers' New Journal

THE Institution of Automobile Engineers had its birth in 1898 at Birmingham, as the Cycle Engineers' Institute, and took its present title in 1906, when its headquarters were removed to London. In 1911 it had a membership of 530, while to-day it has a membership of 2,520, with seven provincial centres and a branch in New Zealand. Up to the present, it has only issued leaflets devoted to the papers read and other matters, while the Automobile Engineer, published by Messrs. Iliffe and Sons, Ltd., has been considered as its official organ. It has now, however, been considered desirable that the Institution should have its own monthly journal, and the first issue of this has recently appeared. Journal is intended to include advance copies of papers to be read, summaries of the discussions which take place, abstracts of papers and articles from other sources and reviews of books of special interest to members. This is certainly a step in the right direction and one which will be generally appreciated. Last year the Institution formed a Research and Standardisation Committee and appointed a director of research and the first issue of the new Journal includes the annual report of the Committee for the year July 1, 1931-June 30, 1932.

## Armstrong College Mining Society

THE July number of the Journal of the Armstrong College Mining Society has recently been issued. Probably the most important paper in it is one by Prof. Granville Poole and Mr. J. T. Whetton on "Skip Winding", showing how this method is being adopted in a number of German mines, even in certain collieries. It is doubtful to what extent this method of winding is applicable to British collieries, but its use should, no doubt, be carefully considered. It has, of course, been used for many years as the main method of winding in the metalliferous mines of Cornwall, although the authors of the paper appear to have overlooked this fact entirely. may also be pointed out that they make no allusion to the methods which have been recently tried in Germany of constructing skips of material lighter than steel. Another interesting paper is one by Mr. M. T. Adamtchik on the so-called 'Aeroto' fan, which apparently is simply a multiple propeller fan. Curiously enough, the author makes no reference to the Steart fan, which was the first type of propeller fan ever employed; it would appear that the fan here described is simply a development of the latter fan. The Journal concludes with a glossary of mining terms, with French and German equivalents, which unfortunately are not always correct.

## Taxonomy of the Hymenomycetes

The presidential address of Mr. A. A. Pearson to the British Mycological Society reviews the European

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