

yard or two the position of his boundary, and made the fact quite clear to any other robin who did not. Moreover, the author found that it was not easy to drive them out of their own little estate, to which they invariably returned immediately.

The intention of making life habits the chief feature in the work is fully carried out in the last two sections. A notice inserted in the last part informs readers that in order to render the notes on Distribution more complete, the range of each species outside its breeding area will be briefly indicated.

Mr. A. W. Seaby's pictures are as charming,



FIG. 2.--Reed-warbler feeding its young. From "The British Bird Book." [W. Farren.]

spirited, and lifelike as ever—quite the most original and refreshing bird pictures we have seen for long—and there are excellent plates of the rosy pastor, golden oriole, and waxwing by some of the other artists who contribute to the work.

#### A MONUMENT TO JANSSEN.

**A**N influential committee has been formed to raise to the memory of Janssen a durable monument which shall recall to the minds of those who see it the enormous and brilliant services rendered to astronomy by the great French *savant*.

A man of rare breadth of mind, it was not simply to any one branch of the oldest science that Janssen turned his attention, but he will be remembered chiefly for his fruitful researches in astronomical physics. That brilliant discovery, shared by Lockyer, in 1868, will probably be the *lucida* of his labours, the method of observing solar prominences, of drawing and measuring those enormous solar flames, without waiting for the rare and uncertain seconds of a total solar

eclipse. Only those whose work it is to observe and to study solar phenomena know how much of our present knowledge is due to the timely discovery of this method. By this have the labours of the discoverers, of Respighi, of Young, of Tacchini, Ricco, Hale, and Deslandres, and of many others become productive. Janssen from India and Lockyer from West Hampstead sent messages to the French Academy which arrived almost simultaneously, and immediately a new era in the rapidly expanding knowledge of the sun's physical and chemical attributes was opened.

Janssen also studied with great assiduity and marvellous results the laws of the absorption and transmission of light travelling through gaseous media, and thereby laid foundations on which have since been erected wonderful superstructures. As an organiser he was in the forefront. His photographs of the solar surface were magnificent and have never been excelled. It is to Janssen that we owe the establishment of the solar observatory on Mont Blanc, whither, in spite of his lameness, he made many ascents.

All this will count as an imperishable monument to those who know aught of astronomical physics. We heartily sympathise with the aims of the committee which has charged itself with receiving subscriptions to this end, and below give the names of those who have already joined:—MM. Armand Gautier, président de l'Académie des Sciences; G. Lippmann, vice-président; G. Darboux, secrétaire perpétuel; Ph. Van Tieghem, secrétaire perpétuel; C. Wolf, doyen de la Section d'Astronomie; Henri Poincaré, de l'Académie Française; G. Bigourdan, de l'Institut; J. Violle, de l'Institut; B. Baillaud, directeur de l'Observatoire de Paris; Prof. Chauveau, de l'Institut; De Selves, préfet de la Seine; Daumet, de l'Institut; Edmond Perrier, directeur du Muséum; Prof. Bouchard, de l'Institut; Alfred Grandidier, de l'Institut; Prof. Lannelongue, Sénateur; Dr. Roux, directeur de l'Institut Pasteur; R. Radeau, de l'Institut; G. Lemoine, de l'Institut; H. Deslandres, directeur de l'Observatoire de Meudon; M. Hamy, de l'Institut; P. Puiseux, astronome à l'Observatoire de Paris.

#### PIERRE EMILE LEVASSEUR.

**B**Y the death of Pierre Emile Levasseur both geography and economic science in France have sustained a severe loss. Born on December 8, 1828, Prof. Levasseur devoted his energies during a long life to demonstrating the importance of a right appreciation of geography in its application to man and of economic science. As early as 1863 he published a "Précis d'Histoire de France" and a "Précis de Géographie," and throughout many years of active work in economic geography he always aimed at the highest precision in his studies with the view of building up a truly scientific type of geography and insisting upon the educational value of the subject when so treated. He especially directed his efforts towards a thorough understanding of the economic geography of France, but he also travelled widely in order to study economic conditions occurring in other lands; a journey to the United States in 1853 resulted in an important work, "L'Ouvrier Américain," and the same line of investigation, followed up both historically and economically, produced important studies on the working classes in France up to the time of the Revolution, and a later work dealt with their