

William Henry Maw.

AN APPRECIATION.

The British Astronomical Association was founded in 1890 for the encouragement of amateurs to carry out work of real astronomical value. Astronomical amateurs may be of any age or of either sex, they may be rich or poor, may possess great telescopes or none at all, may devote themselves to one, or several, departments of astronomy, but if their observations are to be of lasting service to the science they must be organised and used in conjunction with those of other observers. The B.A.A. achieved this end by the organisation of a number of observing sections dealing with special branches of astronomy, each section being under the control of a Director having special knowledge of the branch of enquiry dealt with. Thus the observations made in the sections by members all over the world were co-ordinated; on the one hand, advice and assistance were afforded to the members as to both the method and the sort of observations to be made; on the other hand, the observations sent in to the various Directors were discussed and arranged for publication. The idea was not only conceived, but has become a practical reality; the B.A.A. is a great observatory, and the members of its staff are amateur observers scattered over the world, and, like other observatories, it issues its volumes of observational results. But such volumes are expensive to print, and since the majority of amateurs are not wealthy, the annual subscription to the B.A.A. had to be put very low. The fact that the B.A.A. has been able to pay its way is due in the main to Dr. W. H. Maw, who was one of its founders, the Chairman at its inaugural meeting, and its Treasurer for the first twenty-three years of its life.

Dr. Maw had the gift, rare in a rich man, of understanding how a poor man may live within his means, honourably, with self-respect and usefully; still more, how he can make use of his limitations in money and power to indicate the directions in which he can use that which he has to the best advantage.* The B.A.A. is relatively poor as compared with other observatories, and when it was founded, Dr. Maw urged upon the Association that the subscription ought to be made low enough for the ordinary amateur of small means to be able to afford it, and since the work offered to the Association by rich and poor amateurs

* The Address, with which Dr. Maw closed his first year of office as President of the B.A.A., points out, with admirable clearness and force, that the increase in the size of telescopes has not diminished the field of work open to the possessors of small instruments. See *Journal*, Vol. X., pp. 9-14.

is alike good, so all, rich and poor, ought to come in on equal terms. On the other hand, since the Association itself is poor, and all but an insignificant part of its income is spent on its publications, all members must pay their part; there must be no distinction allowed between the subscription paid by one member, or class of members, and another; there must be no honorary members and no "deadheads."

So, too, he urged upon us that all members should be members of the Association itself, first of all, quite independently of any membership that they might hold of any Branch of the Association. A Branch should be formed by the members in a locality on their own initiative, not on the initiative of the Association; all matters appertaining to the Branch should be under the control of the members of the Branch, and they should be responsible for its finances and working; the Association itself should neither interfere in the Branch affairs, as such, nor be responsible for its financial position.

His counsel to us was that only by holding to these two principles could the Association continue to do the best work for its members and for astronomy. It should serve all equally, not preferring one above another. So far his counsel has prevailed with us, and the continued usefulness and success of the Association is a witness to its wisdom.

When Dr. Maw assisted in the founding of the Association in 1890, he had already been a practical and consulting engineer for 35 years; he had edited the great publication *Engineering* for 25 years; he had helped to found another society—the Civil and Mechanical Engineers—and was its president during the sessions of 1863–64 and 1864–65. It was of his vast knowledge and experience that he gave so freely to the Association, and continued to give it—and to every individual member that asked him for it—up to two days before his death on the early morning of Wednesday, March 19, 1924.

In the issue of *Engineering* of March 21 there is a faithful and very beautiful memoir of him by one who was so long associated with Dr. Maw that he knew and had caught of his spirit. We make no apology for quoting from it, the very words that give apt expression to what so many of his friends thought of him:—

"He was not only the *doyen* of editors, but of engineers, having filled the presidential chairs of the leading British engineering institutions. He has seen pass in succession three generations of engineers, associating with the first with characteristic vitality and energy, leading the second with wide knowledge of every branch of mechanical science, and stimulating the third with experience, judgment and philosophical advice. They were, for the profession, years of intense ingenuity, of courageous enterprise, of great scientific advancement; and, contrary to the usual psychological attributes of advancing years, Dr. Maw was as progressive in temperament towards new ideas as he was intolerant towards proposals based upon long-explored theories. Moreover, for his many bright personal

traits of character he was as highly respected as he was greatly honoured. . . . He was, at all times, most progressive in his ideas in regard to engineering science and practice, and assisted in every way the development of new processes and appliances. Having a splendid memory, he could, with invariable accuracy, give information as to the novelty or otherwise of most ideas, and from his great practical knowledge of mechanical science he was able to advise on the probabilities of any apparatus being a success. No correspondent ever wrote to him without getting the best advice he could give. To all who approached him he was, in every sense of the word, a truly helpful and courteous mentor"; and again: "His courtesy was invariable. His appreciation of good work was generous and his expressions of thanks were frequent and sincere. Complete master of himself under all conditions, his cheerful equanimity in the face of every difficulty was as wonderful as the promptness and courage with which the difficulties were disposed of. His strong sense of humour and the happiness of his disposition enabled him to derive genuine enjoyment from emergencies which would have disconcerted many a man, and the same characteristics turned every acquaintance into a personal friend. The natural integrity of his character rendered him incapable of any word or thought of meanness, and he will be remembered by all who knew him as an English gentleman, in the highest meaning of the words."

He was interested in many departments of work and of science. He was president, as has been said, of the Civil and Mechanical Engineers' Society; of the Institution of Mechanical Engineers in 1901; and of the Institution of Civil Engineers in 1922. He was president of the British Astronomical Association in the years 1898-1900, and of the Royal Astronomical Society in 1905-7. The University of Glasgow gave him the degree of LL.D. in 1909, and in 1923 the Iron and Steel Institute conferred upon him the Bessemer medal.

During the War, he served on many committees, particularly in connection with the Ministry of Munitions, and he was a member of the advisory panel of the Munitions and Inventions Department. He was Chairman of the Committee dealing with Machine Tools and Mechanical Transport. He also served on the committee appointed to consider the simplification of the manufacture of artificial limbs. On the last occasion on which the writers of this appreciation saw him (on February 8, 1924) he told them of his experiences on this committee, and that he found it the most interesting of all.

Of his presidential address to the Institution of Civil Engineers in 1922 it has been said:—"The remarkable thing about this presidential address was the detailed knowledge it showed of recent engineering developments, whether in connection with special alloys, X-ray investigations, steam-turbine practice, or reduction gearing. For such an address to have been prepared unaided, as it was, by a busy man in his eighty-fourth year was evidence of an energy and a living interest in a wide variety of subjects which might well be envied by most younger men."

But Dr. Maw's work in astronomy was not confined to his wise control and advice. Again we may quote:—"He was himself a most indefatigable and skilful observer of double stars. At one time this department of astronomy was much cultivated by English amateur astronomers, and English astronomy had a high reputation from the work done in this direction. But for several years past that reputation had rested almost entirely upon Dr. Maw's observations, for I believe he was latterly practically the only astronomer, not professional, either in England or abroad, who devoted himself to this most important branch of the science with persistency and success. It should be noted that the double-star observations throughout are those of fairly close or very close doubles; not of wide and easy pairs, where it would be a light matter to gather a great number of easy and therefore almost worthless observations. Many of the stars had been almost neglected, and observations had been urgently required."

Amongst the many kindnesses rendered by Dr. Maw to the Association was this:—that through the office of *Engineering* the illustrations for the *Journal* and *Memoirs* were prepared, and thus we had the benefit of the personal supervision and advice of Dr. Maw and his assistant, Mr. F. W. Jackson. It was in this connection that the writers last visited the office of *Engineering* on the afternoon of Friday, March 14. We missed seeing Dr. Maw by but a few minutes, for he had gone to spend the week-end at his country-house at Outwood, in Surrey. On the Saturday evening, one of the other officers of the Association wrote to him on a small matter required for the Association, and when Dr. Maw returned to the office on Monday morning he himself attended to the matter and answered the letter personally. But that same evening, about 6 o'clock, he went home to his house in Addison Road feeling very ill. The pain passed away almost wholly on Tuesday, but on the morning of Wednesday, March 19, about 4 o'clock, he died peacefully. The last tribute to him is this:—"He was perfectly wonderful to the last, and in harness up to the end, which I am sure is just what he would have wished."

On Saturday, March 22, at 12.30, there was a Memorial Service held in St. Margaret's, Westminster, and amongst the astronomers present were Dr. Dreyer (President of the Royal Astronomical Society), Sir Frank Dyson (Astronomer Royal), Mr. H. P. Hollis, Mr. T. F. Maunder (Assistant Secretary of the British Astronomical Association), Mr. P. J. Melotte, and the writers.

A. S. D. M.; E. W. M.