## Albert D. Watson

ascertained by carefully safeguarded methods. We have been wearied by conflicts between science and religion, materialistic on the one hand, superstitions on the other; traditional religion entrenched against an insurgent science, both crudely conservative, or both narrow in vision and devoid of philosophical insight.

Too often the empty husks of thought have been used as buttresses of a conservatism from which the vital evergy and living fire have long since fled, while almost as invariably, the new theory with its vivid enthusiasm is so swaddled in the erndest wrappages that the prejudices of the learned against it are almost to be condoned.

What is needed in this situation is a more general knowledge and appreciation of those canons of research which the most thorongh and effective science has always maintained, and especially such as are chiclly observed by the astronomer. The careful observer in any field of research never regards a theory as more than an hypothesis nuless accumulated evidence has broken down and cleared away all other and opposing theories.

The most fatal enemies of all newly acquired knowledge are those who, regarding themselves as its friends, formulate a new generalization from insufficient data, state it as a creed or a law, and straightway regard all who do not accept it as enemies of progress.

These pseudo-scientists are stort defenders of their theories. To them the "law" is all-important : the facts are treated lightly. One may at any time find them measuring and modifying their facts, ignoring those that do not fit their theory, imagining or supplying others that do, abating or enhancing the data in their eagerness to prove their theories true. They leap at once from their conviction as to the existence of a new force to a theory of its nature and purpose. The frailest possible chain of evidence is sufficient to prove what they are already convinced is true, and straightway their problem is solved.

Henceforth, their whole task is to bring new facts to *prove* that the problem is solved. This method is opposed to all the

81