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## ATOMIC HYDROGEN AS AN AID TO INDUSTRIAL RESEARCH<sup>1</sup>

It is difficult for me to express adequately my appreciation of the honor you have conferred upon me through the award of this beautiful medal. I wish to thank you and also my other friends, Hendrick and Whitney, for the kind, although exaggerated words spoken about me.

I am sure that those of you who know Whitney well, or in fact all you who have just heard him speak, will understand that this medal should properly be regarded as a second award to him. The work for which this medal is now given was made possible by the remarkable inspiration and guidance which only Whitney can give.

Although I am a chemist by training, my work during recent years has been mostly in physics. The chemical work I have done has been largely purely scientific, started, at least, without thoughts of practical applications. Thus when I received notice of the action of the Perkin Medal Committee, while I was in Italy a few months ago, it puzzled me that I should have been chosen, especially when I considered that the medal is given for work in applied chemistry. I can assure you that I am not guilty of any deep laid plan to secure this medal. It came to me as a complete surprise—a surprise similar to those I have experienced when I have first realized that some purely scientific observations that I had made were capable of industrial applications.

On returning home from abroad, and finding that the committee had made the award mainly for my work on atomic hydrogen and its applications to welding, I was at first inclined to choose as a subject for this address an account of other work on atomic hydrogen completed more than ten years ago, but which I have neglected to publish except in such abbreviated form that it is nearly useless. Since one of the objects of the Perkin Medal is to stimulate research, it would seem particularly fitting that this award should thus lead directly to the publication of the results of investigations which would otherwise largely be lost.

<sup>1</sup> Address given on the occasion of the presentation of the Perkin medal, on January 13, at a joint meeting of the Society of Chemical Industry, Société de Chimie Industrielle, American Chemical Society and American Electrochemical Society.

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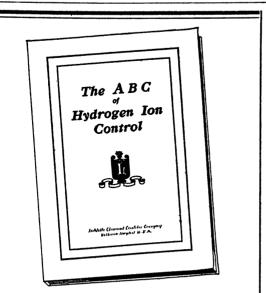
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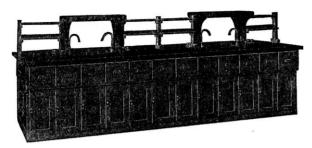
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