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OPENING REMARKS-H. F. RANCE

MY Lord, ladies and gentlemen, sixteen years ago, we met in Cambridge on the occasion of the first international symposium organised by the Fundamental Research Committee of the Technical Section of the British Paper and Board Maker's Association. The subject was *The Fundamentals of Papermaking Fibres*.

Eight years later (eight years ago), we met here again to consider the fundamental aspects of *Consolidation of the Paper Web*. Now, after sixteen years, at our fifth international symposium, we have at last reached the end and purpose of all our considerations: we have moved from consideration of the components of paper, through the manufacture of paper, to the use of paper. We are about to debate the fundamental properties of paper related to its end uses.

Let no one think that our industry has stood still during these sixteen years of progress in the pattern of our meetings. Nearly one and a half billion tons of paper and board have been made throughout the world since that first meeting, sixteen years ago, on machines and equipment of ever-increasing scale and complexity. Nearly one and a half billion tons of paper and board have been used for an ever-increasing range of purposes and secondary products.

Let no one think that the *technology* of our industry has stood still during those sixteen years. On the contrary, this period has been decisive in transforming our basic process of papermaking from something akin to a craft into a highly controlled sequence of chemical and mechanical engineering.

Much of this progress has been directly attributable to the much deeper understanding that has been achieved of the science and technology of our raw materials, of our processes and of our products.

Speaking on behalf of our Fundamental Research Committee, I believe we would not be unduly lacking in modesty, if we were to claim that the deeper understanding underlying this progress has been in no small degree based upon the body of knowledge that has been formulated, collated and recorded in the proceedings of our four preceding symposia. I suggest that it must be so, since these proceedings have, during this period, represented the considered conclusions of the leading scientists and technologists of the whole papermaking world.

The function of this Committee has been to provide a means of gathering

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together all available talent in this field, to provide a forum for controlled deliberation and to provide a means of collating and recording the fruit of this interchange.

This has been the vital function of all such gatherings throughout the history of science. The work of each scientist has no meaning unless it can be seen in the wider context of the work of all his peers and can with their work be raised to provide a yet higher level of understanding.

Today, we have with us a distinguished man, the Earl of Shannon, whose distinguished ancestor, Robert Boyle, laid the foundations for a significant part of the deeper understanding that we and our fellow-workers in other fields have reached in our respective industries. No one could therefore be more fitting to open our symposium. Ladies and gentlemen, I ask your attention for Lord Shannon.