

PROCEEDINGS OF THE THIRTY-FIFTH MEETING.

HELD in the Institute of Chemistry, 30, Russell Square, London, W.C.1, on Wednesday, May 19th, 1920, at 2 p.m., the President, S. N. JENKINSON, Esq., in the Chair.

In connection with the election of members, Mr. ARNOLD STEVENSON directed attention to Rule 5 of the Society's Constitution and Rules, whereby collective members had to be elected by ballot. The PRESIDENT said that election by the vote of meeting was adopted as it saved time. Mr. T. E. WOOD, LL.B., who assisted in framing the rules, expressed the opinion that a vote by show of hands might be used where the rule referred to ballot. The Council, however, would consider the point further.

The PRESIDENT announced that several members were prevented from being present owing to having to attend important Manufacturers' Association meetings in Leeds.

Dr. TURNER made a brief statement on the latest developments in regard to the American trip in the autumn.

A vote of thanks was accorded to the Institute of Chemistry for providing accommodation for the meeting.

A welcome was extended to members of the Faraday, Optical, and Physical Societies who were present, an invitation to the meeting having been sent to members of these societies who resided in or near London.

The PRESIDENT also gave a hearty welcome to Mr. K. E. Ostlund, a Swedish member of the Society, and President of the Federation of Swedish Glass Manufacturers. In welcoming Mr. Ostlund, Mr. Jenkinson said that they were an international and cosmopolitan Society. Some two years previously Dr. Turner had raised the question of starting a branch of the Society in Scandinavia, so as to receive papers and information affecting the glass industry in that part of the world and form a closer link than existed at present. A proposal had also been made to have a tour of Swedish glass works, or to have Swedish members visit glass works in Britain. Swedish manufacturers, said Mr. Jenkinson, took a very broad view. "Live and let live" was their motto. They were not averse to teaching their competitors something, realising that by so doing they would themselves learn something in return.

Mr. K. E. OSTLUND, who was received with acclamation, said that he was very glad to be present and to visit his English colleagues. He hoped they would all work well together. He regretted that his limited knowledge of English prevented his speaking at greater length.

The principal business of the meeting was a General Discussion on "The Physical Properties of Glass." The discussion was opened by Mr. C. J. PEDDLE, M.Sc., F.I.C., who gave an account of the development of glasses for optical purposes. The following papers were taken as read:—

1. "The Development of Various Types of Glass," by C. J. Peddle, M.Sc., F.I.C.
 - Part I. "The Interaction of Silica with the Oxides of Sodium and Potassium."
 - Part II. "The Interaction of Silica, Lime, and Sodium Oxide."
 - Part III. "The Interaction of Silica, Lime, and Potassium Oxide."
 - Part IV. "The Interaction of Silica, Lime, and the Oxides of Sodium and Potassium."
 - Part V. "A Comparison of the Soda-lime-Silica and the Potash-Lime-Silica Glasses."
2. "The Thermal Expansion of Magnesia-containing Glasses," by S. English, M.Sc., and W. E. S. Turner, D.Sc.
3. "The Optical Properties of some Lime-soda Glasses," by J. R. Clarke, M.Sc., and W. E. S. Turner, D.Sc.
4. "The Annealing Temperatures of Soda-lime and Soda-Magnesia Glasses," by S. English, M.Sc., and W. E. S. Turner, D.Sc.
5. "The Durability of Lime-soda Glasses," by J. D. Cauwood, M.Sc., J. R. Clarke, M.Sc., Miss C. M. M. Muirhead, B.Sc., and W. E. S. Turner, D.Sc.
6. "The Influence of Lime on the Value of Young's Modulus of Elasticity for the Lime-soda Glasses," by J. R. Clarke, M.Sc., and W. E. S. Turner, D.Sc.
7. "The Density of Soda-Magnesia Glasses and a Comparison with that of the Soda-lime Glasses," by S. English, M.Sc., and W. E. S. Turner, D.Sc.

Mr. Peddle's communication elicited a lively discussion, in which there took part the President, Dr. W. E. S. Turner, Dr. W. Rosenhain, and Messrs. W. L. Baillie, E. A. Coad-Pryor, B. P. Dudding, R. L. Frink, W. E. Oakden (a visitor), and V. H. Stott. Mr. Peddle replied.

A hearty vote of thanks was accorded to Mr. Peddle for his paper.

Dr. M. W. Travers, F.R.S., then gave a short paper entitled, "A Surface Effect in Glass, probably caused by re-heating." Two specimens of glass were exhibited. Dr. W. Rosenhain, Mr. R. L. Frink, and the President joined in the discussion that followed. Members were invited to send to Dr. Travers specimens of interest.

The following members were elected:—

Collective Members.

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| The Glass Research Association. | 50, Bedford Square, London, W.C.1. |
| Messrs. Gregg & Co. | Glass Bottle Manufacturers, Hope Glass Works, Knottingley, Yorks. |
| Messrs. King, Taudevin & Gregson, Ltd. | Consulting Engineers and Furnace Builders, Melbourne Chambers, Cambridge Street, Sheffield. |
| Messrs. J. W. Sutcliffe & Co. | Glass Bottle Manufacturers, 52, Queen Victoria Street, London, E.C.4. |
| Messrs. Campbell Brothers. | Glass, Oil and Colour Merchants, 19, 21, & 23, Franklin Street, Belfast. |

Ordinary Members.

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| Frederick William Adams, M.Sc. | Rockware Glass Syndicate, Greenford, Middlesex. |
| William Atack. | 52, Pottery Street, Whitwood Mere, Castleford. |
| Harold Bunniss. | Manager, Aldham Glass Works, Wombwell. |
| William Galbally. | General Factory Superintendent, c/o Messrs. Cannington Shaw & Co., Ltd., St. Helens, Lancs. |
| Phauindra Nath Ghosh, M.A. | Lecturer in Optics, University College of Science, Calcutta. |
| Miss Doris Holdsworth, B.Sc. | Research Assistant, Dept. of Glass Technology, University, Sheffield, and 151, Rock Street, Pitsmoor, Sheffield. |
| Thomas Courtney Moorshead. Mem. Am. Soc. Civil Engrs. | Technical Adviser, Messrs. British Glass Industries, Ltd., and c/o Messrs. United Glass Bottle Manufacturers, Ltd., 195, Strand, London, W.C.2. |
| Hu Wei Pai. | Department of Glass Technology, University, Sheffield. |
| James Seddon, Lieutenant (Late R.E.), A.M.I.Mech.E. | c/o Messrs. British Glass Industries, Ltd., 2, Central Buildings, London, S.W.1. |
| Norman Shaw. | c/o Messrs. Shaws (Huddersfield), Ltd., Fruit Preservers, &c., Storths Mill, Mold Green, Huddersfield. |
| Alfred Wilson. | Gas Furnace Engineer, 35, Doxey, nr Stafford. |