## THE FIFTH ANNUAL DINNER.

THE Fifth Annual Dinner of the Society was held in the Hotel Cecil, London, W.C. 2, on Wednesday, May 16th, 1923, at 7.15 p.m.

The President, Prof. W. E. S. TURNER, O.B.E., D.Sc., F.Inst.P., occupied the Chair. The company included Sir F. W. Dyson, LL.D., F.R.S., Astronomer-Royal, and President of the Optical Society; H. J. C. Johnston Esq., President of the Institute of Clayworkers; Sir Lawrence Weaver, K.B.E., Director, United Kingdom Exhibits, British Empire Exhibition (1924); A. R. Upjohn, Esq., LL.B., Master of the Glaziers' Company; W. F. J. Wood, C.B.E., B.Sc., and M. W. Travers, D.Sc., F.R.S., Past Presidents of the Society; R. L. Frink, Esq., Director, Glass Research Association; and Mons. Courty, Paris. Mr. J. Holland, President of the Ceramic Society, was prevented at the last moment from attending.

The following were the toasts:—

- I. "The King."
  Proposed by the President.
- II. "The Society of Glass Technology."

Mr. H. J. C. Johnston, who proposed this toast, made one of his characteristically witty and yet practical speeches. He said that in the early hours of the morning, as he travelled in the train, with his mind wondering what he might say at the Society's dinner, he was engaged in conversation by a person who expatiated at length on the follies of inventors. The biggest fool of all, his companion thought, was the man who, according to the legend, made unbreakable glass and was beheaded for his pains. He trembled to think of the time when their President or some other man of science should boldly come forward with a recipe for a glass that was unbreakable, for the glass industry without breakages would, he thought, be in just as untenable a position as the Astronomer-Royal would be without stars. There was some analogy, he thought, between the glass industry and the clay-working industry, with which latter he happened to

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be connected. Of course, from the point of view of antiquity the clayworker could look down on the glass-maker, for the clayworker could undoubtedly boast of the oldest craft in the world, although glass-making was admittedly an ancient occupation. But there was added interest in the connection between the clay-working and the glass-making industries, because he believed that one of the most plausible theories which had been advanced as to the origin of glass manufacture was that the ancient potter, contemplating the siliceous beads which formed upon his ware after excessive heating, and also considering the action of ashes upon the clay, probably became, thereby, the first glass technologist of the world. There were many resemblances between the pottery and the glass industries, but they were strongly alike in the respect that each exhibited the tendency to arouse poetic inspiration. They were also alike in being made from common raw materials which had poetic thoughts behind them-he had only to mention the "feet of clay" and the "sands of time" to instance that their raw materials had found their way into poetry. He was afraid he could not speak in any way effectively of the romance attaching to the glass industry or of its interesting and chequered history, although he recalled that the glass trade, in 1813, was subjected to a tax of nearly £5 per hundredweight, and that it suffered the indignity of having Excise officers requiring notice of every precise process carried out in the industry, even requiring notice and a licence for the removal of a glasspot from the position in which it was dried. He thought they might feel thankful that they were now living in better times. Coming more particularly to the Society of Glass Technology, the speaker said he admired the breadth of name which the Society had chosen. The word "technology," as he conceived it, included not only the chemistry and the physics of the industry, but also every aspect of the practical portion of the work, whether in connection with the raw materials of the industry or the finished product. The work which the Society had done since its inception in 1916 had, he was sure, been of the greatest possible value to the glass manufacturers of the country as a whole. Since then they had embarked on a new era in this country—an era of State-aided research. Everyone would welcome the interest which the State had taken in regard to industrial research. But whether research was supported by the State and the manufacturers generally, or whether it was supported by the manufacturers alone, it was of the utmost importance that that research should be collective, co-operative, and unified. hoped that in the glass industry there might be no danger—as there had been in others—that the State-aided research should be in any way antagonistic or detrimental to the private research which had previously been carried on. The closest unification that was possible was desirable in the interest of all concerned. Proceeding to speak of the Society's President, Prof. Turner, the proposer of the toast said that Prof. Turner's name was a household word wherever the glass industry was known, and he was quite sure that in removing his sphere of usefulness to the presidential chair the Society of Glass Technology had taken a very wise and prudent step. To sound the praises of Prof. Turner before the members of the Society of Glass Technology would be to waste one's breath, because his qualities were so well known and so much appreciated. He wished the Society long life and even greater success in the future than it had achieved in the past.

Prof. W. E. S. Turner responded. He said he was reminded, sitting as he did between heaven and earth (the Astronomer-Royal was sitting on his right and the President of the Institute of Clayworkers on his left) that there were certain analogies at any rate between the members of the trio. In the first place all three in some ways were dealing with things intangible. For instance, no one had yet been able, so far as he knew, to give a ready definition of what clay was. Similarly, he believed that physicists were not yet agreed upon a definition of the ether of space. His friend on the right—the Astronomer-Royal—was probably content with looking out for strains in it. As for themselves—those interested in glass and its production—they were still quarrelling as to what kind of a substance glass was, and so far as he could see there was very little light to be thrown on the situation. Mr. Johnston had referred to unbreakable glass as the highest likely achievement. It had recently been claimed in Czecho-Slovakia that unbreakable glass had been made. He would content himself with the achievements made in producing fire-resisting glass. So much advance had been made in this direction that in America glass coffins were being manufactured.

There had been suggestions more recently that glass was not quite what it seemed to be—that it had a tendency to crystallise out. But there was this, at any rate, that was common between clay and glass: they both belonged to the class of borderline substances. So far as the glass industry was concerned, he thought that it, like glass itself, would have been difficult to define, certainly as an entity, before the Society came into existence. After seven years, however, they had the pleasure of knowing that there had been developed a sense of corporateness which did not exist in the years 1915 or 1916. For this he thought they were all grateful that the Society had brought them together—manufacturers and suppliers of raw materials alike—and had made them friends. The

Society had pursued a good many activities. He remembered that at the first meeting the first President expressed the hope that the Society would be a society with a journal rather than a journal with a society, but he thought that even their first President would since have realised how far the JOURNAL had helped to make the Society, by bringing into close association glass technologists in all parts of the world. They welcomed with them that evening Mons. Courty, who came over in the name of one of the largest and most important firms of glass manufacturers in France to discuss with them how they might best arrange a programme for a visit to his country. The Society had already been to America; it seemed only a very short distance to France. It might be thought that they ought to have taken that journey hitherto, but, at any rate, they were hoping now to be able to pay that visit this year, and possibly within a comparatively short space of time. There were two other matters he would like to refer to. One of these was that the Society was always anxious to spread the ramifications of the knowledge of glass technology amongst all classes of persons engaged in the glass industry. It already had a number of workmen who paid their subscriptions and were to be numbered amongst its ordinary They wanted to stimulate that interest still further, and with that object the Council had decided that persons who were engaged in manual or clerical operations in glassworks, as well as the junior technical members, should be permitted to come into the Society, if they so desired, at a reduced rate of subscription. The Society was willing to sacrifice part of its subscription in order to encourage the reading of its journal and so foster, by every means possible, the glass industry as a whole. They were at all events anxious that all possible opportunities might be put into the hands of the ambitious glassworker, in order that he might gain knowledge and make progress for himself. Such a desire was all to the good of the industry at large, and the Society was out to promote that good by extending its membership along the lines mentioned. These were not the days when they could wax very enthusiastic about the prosperity of the industry, and at a recent Council meeting, when they had been discussing what steps they might best take to assist the manufacturers, one of the members of the Council suggested that the manufacturers would most of all like a well-filled order book. That certainly would help the situation not a little. But it was no use losing heart. He sometimes wished that a little of the buoyancy -perhaps in some ways it might be thought over confidence—of their American friends might be transferred over here; that they might be inoculated with something of the same spirit; that they might import into their outlook a sense of optimism, which would

tend to relieve the dullness of the present situation. After all, it would be better to die in hope than live in melancholy. And this brought him to a point he would like to mention about the 1924 Exhibition. What were the glass manufacturers going to do about this? Why not make a big show? The 1851 Exhibition showed to the world how England could, and did, lead the way. In respect of many of her glass products she gained a first prize, and her products were admired by those who came from far and near to pay the exhibition a visit. Why not look forward to 1924 as an opportunity of showing the world what the British glass industry could do now and what it meant to be in the sphere of glass-making? He sincerely hoped that the glass manufacturers would make a really serious effort in this connection.

He had referred already to the glass industry having been lacking in organisation before 1915 or 1916. He hoped that although glass might have a tendency to crystallise, the Society would not set definitely and crystallise in definite directions; that it would be, not an organisation merely, but rather an organism, living and acting with the power of adjusting itself to serve the interests of the industry they all loved. That was what they were all happy to feel had been the characteristics of the Society up to the present time. He hoped that by the goodwill and good fellowship that it promoted it would continue to be that for many years to

come.

## III. "The Guests."

The toast of "Our Guests" was proposed by Dr. M. W. Travers, who coupled with it the name of Sir Frank Dyson, F.R.S., the Astronomer-Royal. Dr. Travers said that in art, science, and industry glass was a matter of the first importance. The scientific study of glass was a fascinating problem, and the more so because it was a problem that was exceedingly difficult to handle. taking up a bit of glass one had to remember that what one had to deal with was something which had happened. It was a mixture of things, substances, compounds, which had been melted at a very high temperature and which were in a state of frozen balance. The material was unstable, and therefore they were investigating something which presented problems of the utmost difficulty and obscurity. It was this which made the study of glass technology so fascinating a pursuit. Dr. Travers went on to outline the distinguishing characteristics of some of their guests, taking in turn the Astronomer-Royal, the Master of the Glaziers' Company, the Director of the British Empire Exhibition, the representative from St. Gobain, and lastly Mr. Johnston, the President of the

Institute of Clayworkers. In regard to their friend from France, he would like to say that everyone knew the wonderfully artistic glass which came from that country. France was one of the homes of artistic glass. As regards Mr. Johnston, they welcomed him despite the fact that he was a representative from that refractory or earthy side of the glass industry—the side which made them all shiver. He knew it was not the fault of the refractory materials manufacturers, for he had been assured by many of them that if ever they had to be born over again they would take care to choose an industry which did not deal with glasspots.

Sir Frank Dyson and Mons. Courty responded for the guests, and the latter read a rough translation of a letter, the substance of which he had been requested to communicate to the Society at its This was as follows:—" Paris, May 14. My long-standing friendship with English people and the cordiality which I have always received from your country would have made the participation in your annual gathering extremely pleasant to me. interest which you have shown to me further adds to my wish to come into touch with you, and thus to bring about a collaboration in the technique of the industry which interests us both. I hope within the early future to see some of you here, and it will be a great pleasure to me to assist you to bring about your proposed visit Our different groups of technical men value very highly the friendship of allied neighbours, and only some weeks ago the English Legation was received by our Society of Civil Engineers, which is proud to number well-known Englishmen amongst its members. I can assure you, gentlemen, that in all circumstances my colleagues and I will give you a most cordial and friendly welcome to France.—Fraternally yours, L. Delloye."

This communication was received with acclamation, and Prof. Turner requested Mons. Courty to convey to Mons. Delloye the extreme pleasure which his letter had occasioned, and to express their hope that the visit to Paris might yet be arranged.

An informal toast was also drank to the success of the British Empire Exhibition in 1924, and Sir Lawrence Weaver, in reply, in a racy speech, begged of British glass manufacturers to view the Exhibition, not as a means of booking so many orders, but as a matter of pride and prestige in their own industry. If the matter were approached in this spirit the orders would follow. As to space, he hoped manufacturers would speedily make their applications as sites were being rapidly allotted.

The enjoyment of the evening was enhanced by music and by stories, Mrs. M. W. Travers and Messrs. B. P. Dudding and J. Connolly being amongst those who assisted.

## The following members and guests were present:—

Adams, F. W.
Adamson, R.
Atherton, J. B. B.
Bacon, R. F.
Bagley, S. B.
Biram, R. S.
Boam, F. J.
Bryson, F. F. S.

Cauwood, J. D. Clark, F. G. Coad-Pryor, E. A.

Coad-Pryor, Mrs. Connolly, J. Connolly, Miss Connolly, Miss E.

Courty, Mons.
Dudding, B. P.
Dyson, Sir F. W.
Edgington, W.

English, S. English, Mrs.

Ferguson, A., and guest.

Foster, F. G.
Fox, J. Chas.
Frink, R. L.
Frink, Mrs.
Gardner, W. J.

Hailwood, E. A.

Halse, Col. S. C. Hurlbut, F. A.

Jackson, A. H.

Johnston, H. J. C.

Lamplough, F. E.

Luraschi, A. G. Mandefield, J.

Mayhew, C. Meigh, E.

Moorshead, T. C.

Moorshead, W. A.

Naudeau, Mons.

Norton, E. J.

Parkinson, C.

Quine, E.

Riley, Col. Chas.

Saxton, C. Saxton, Mrs.

"Sheffield Independent" Repre-

sentative.

"Sheffield Telegraph" Representative.

Simpson, G.
Sinkinson, E.
Smeaton, W. G.
Snowdon, W. C.
Stark, Mrs. M. A.

Stott, V. Sutcliffe, T. C. Sutcliffe, Mrs. Taudevin, E. P.

Teisen, T. Towers, F. B.

Townsend, H. ("Pottery Gazette"

Representative.)
Travers, Dr. M. W.

Travers, Mrs.

Turner, Prof. W. E. S.

Turner, Mrs. Upjohn, A. R. Wardley, T. Weaver, Sir L. Webster, J. H.

Williams-Thomas, H. S.

Wood, W. F. J. Wood, Mrs. Youldon, F. Youldon, Mrs. Zeal, G. H. Zeal, H. H.

Total 76.