

*THE MANCHESTER WHITWORTH  
INSTITUTE.*

THE inaugural proceedings in connection with the formal organization and constitution of the Manchester Whitworth Institute took place on Thursday last, July 17. Among those present were Lord Hartington, Sir F. Leighton, Sir Joseph C. Lee, Sir J. J. Harwood, Mr. W. Mather, M.P., Sir Henry Roscoe, M.P., Mr. O. Heywood, and many representatives of educational institutions in the city.

The governors first held their inaugural gathering in the building which is to form part of the museum, and which stands in one corner of the park. Afterwards, a meeting was held in a tent in the park. At this meeting Lord Hartington said that, although he had not been aware that he would be called upon to address them before the evening proceedings, he was pleased to move a resolution which acknowledged the wise benevolence and generosity of the legates of Sir Joseph Whitworth, and commended the Institute to the support of the public as subscribers and donors of works of art and books, and to the community of Manchester for a contribution from its municipal funds for maintenance. He described the new departure taken that day as of a very important and possibly momentous character—probably the most important and ambitious step which had been taken yet in the direction of the movement of technical and scientific instruction and art education. That undertaking was the embodiment of a great idea, and the charter of the institution appeared to have embodied the ancient idea of a University, under which various colleges independent of one another agreed to co-operate in a common management and government, while retaining a considerable independence for a common end and a common good. In one respect, however, the ancient course seemed to have been reversed, for the University was prepared to support the colleges, which were the technical and art schools, instead of the colleges supporting the University, as of old. In conclusion, he expressed a hope that the example of the Whitworth legates would lead others, and especially the Corporation, to assist and promote the useful objects of the Institute.

The proceedings connected with the opening of the Institute were continued in the evening, when the Mayor entertained a distinguished company at a banquet in the Town Hall. The loyal toasts having been honoured,

The Mayor proposed the residuary legates of the late Sir Joseph Whitworth.

Chancellor Christie, in responding, said it was the earnest desire of the late Sir Joseph Whitworth that his fortune should be employed in promoting the cause of education, and especially of science and art education. He desired that there should be a graduated system of schools and colleges, by which a deserving lad might rise from the lowest elementary school to the highest institutions for the teaching of science, literature, or art. How best to accomplish this exercised Sir Joseph Whitworth for many years, but he was never able to perfect a scheme. That work he left to his legates, and they had already spent over £300,000 in carrying out what they believed to be his ideas, while other liabilities still remained.

Mr. Alderman Thompson proposed "Success to the Whitworth Institute."

The Marquis of Hartington, in responding, said that his connection with the question of technical education was an extremely slight and superficial one. He did not pretend to be an expert on the matter, and he had only taken it up because he had been struck with the fact that every other country in Europe gave more time and money to the promotion of technical education in some form or another than did the English nation. This state of things was coincident with complaints of the great severity of the commercial and industrial competition to which we were exposed. He could not help asking himself whether there was any connection between our neglect of technical education and the increased severity of the competition to which we were exposed. Then there was another question. Suppose the severity of the commercial competition were due to other causes, were we giving ourselves every chance in neglecting the technical education of our industrial population? He thought it was scarcely possible to exaggerate the importance of this question. To us the maintenance of our place in the race of commercial and industrial competition was not a question of greater or less prosperity at any particular moment; it was not a question of being leader or follower in the world's civiliza-

tion; it was for many millions of our population a question of actual existence. If, through any circumstances, we ceased to be the greatest producers of the necessities the world required; if, through any circumstances, we ceased to be the greatest distributors of the wealth of the world, not only would these small islands cease to be the seat of a great empire, but their limited extent would fail to produce the materials of bare existence for millions of people whom our industrial supremacy alone had brought together and enabled to exist here. We had received from our predecessors a great inheritance—the commercial and industrial leadership of the world. Up to the present time that inheritance had not shrunk or dwindled. Our pre-eminence had been largely due to the natural advantages we had enjoyed, but we knew that the conditions of supremacy, such as we had hitherto enjoyed were not always permanent. History taught us that in ancient times Greece and her colonies, and in modern times Italy and Holland, enjoyed that commercial supremacy which had more lately been ours. That supremacy had passed away from those countries under the changing conditions of commercial and industrial enterprise in Europe, and it would be rash to predict that our natural advantages, to which we owed so much, were sure to continue. It would be impossible for human foresight to make adequate protection against what might happen, but it must be a great advantage to any nation when the leaders and captains of its industries and commercial pursuits were able to avail themselves of the most complete scientific education which it was possible to give. It was such considerations as these that had induced him upon more than one occasion to call the attention of his fellow-countrymen to the importance of this question. He could not pretend to do more. How these things were to be attained he left to experts to say. We might have long to wait before, by the action of the State, any measures would be taken which we might hope would place us on a footing as regarded technical and scientific education with other European nations, and it therefore gave him the greatest satisfaction to see that localities where the need was more especially felt had themselves taken the initiative, and had founded institutions for the purpose of making some advance in that which had been considered to be the business of the State in other countries. There was one feature of the present time which was calculated to give cause for just and legitimate satisfaction. He alluded to what he thought he saw in the growth of local public spirit. Such a spirit had never been altogether wanting among us. That it existed formerly among us was abundantly proved by the munificent foundations for religious, educational, and charitable purposes which our forefathers had handed down. There was a time when there was a tendency for even these ancient foundations to lapse into lethargy, and mismanagement began to prevail, but all that had begun to change, and now we had not only been occupied in reforming the abuses of those old foundations and institutions, so as to make them fully available for the new and growing wants of the people, but there had been shown to exist at the present time to as great an extent as formerly a disposition on the part of individuals who had acquired wealth in certain localities to use that wealth not for any selfish or personal purpose, but for the benefit and advantage of that population in the midst of which they had lived. He doubted not that the example which had been set by men like Sir Joseph Whitworth would be largely followed.

Sir Frederick Leighton also responded.

*WEIGHTS, MEASURES, AND FORMULÆ  
USED IN PHOTOGRAPHY.*

THE Photographic Convention of the United Kingdom, at a meeting held in the Town Hall, Chester, on June 26, considered the Report of a Committee which had been appointed to consider the weights, measures, and formulæ used in photography. The Committee consisted of W. Bedford, C. H. Bothamley (Secretary), A. Cowan, A. Haddon, A. Levy, A. Pringle, and G. Watmough Webster. The Report was drawn up by C. H. Bothamley. The following recommendations were unanimously adopted by the Convention:—

A. *Weights and Measures.*—(1) If the metric system be used, weights will naturally be expressed in grammes and measures in cubic centimetres.