REPORT
ON THE
GASES AND EXPLOSIONS IN COLLIERIES.

By Sir Henry T. De la Beche and Dr. Lyon Playfair.

Earl of Lincoln to Sir H. T. De la Beche.

Sir,

1, Whitehall Place, 27th August 1845.

You are aware that the recent Occurrence of many calamitous Accidents in Coal Mines, and the obvious Inefficiency of every Means at present devised for their Prevention, has engaged the anxious Attention of Her Majesty's Government, and that, at the Request of Sir James Graham, Professor Faraday and Mr. Lyell have investigated the Circumstances attending the Explosion in the Haswell Colliery, and reported to him upon the precautionary Measures which had suggested themselves during that Investigation. It has been represented, however, to the Government, that the Public are still very imperfectly informed as to the Conditions under which Fire Damp is generated, and that the Nature and Composition of the explosive Gases themselves has not been examined with the Aids which modern Science can bring to such Investigations.

On a Subject so important to the Interests, not of Science only, but of Humanity, and the practical Purposes of Life, Her Majesty's Government consider these Suggestions to be deserving of their serious Attention; and they are as desirous, therefore, with as little Delay as possible, to institute an Inquiry into the Conditions under which the explosive and other noxious Gases in Mines are generated, to ascertain as far as possible the Nature and Condition of these Gases, and to be advised as to the Measures, if any, which can be applied in Mitigation if not in Prevention of the Evils inflicted through their Agency. It is, of course, the Desire of the Government to connect with these Investigations an Inquiry into the various Methods employed for preventing the Escape of Gas into Mines, or of obviating Danger therefrom by proper Ventilation; and as these are Subjects on which great Interest has been expressed in Parliament, and upon which it may be found impossible to provide all the necessary Remedies but through the Intervention of the Legislature, it is desired to take advantage of the present Recess to collect and to digest the requisite Information, so that the whole Question may be brought under the Consideration of the Government at latest by Christmas next.

In communication with Sir James Graham, I have undertaken to be the Medium of conducting the Inquiry proposed; and I have been induced to do so very much under the Conviction that in the Museum of Economic Geology in London there are Resources, in the Services of yourself as its Director, and of Dr. Lyon Playfair as one of its appointed Chemists, for bringing that Inquiry to a practical and successful Issue, and that the greater Portion, if not all, of the Points involved in that Inquiry have a bearing more or less upon the Objects of that Institution.

I have to request, therefore, that you will place yourself in communication with Dr. Playfair with as little Delay as your Convenience may permit, that you will make Arrangements with him as to the Mode in which the Inquiry shall be conducted, and that when these Arrangements shall have been completed you will report to me the Result.

I am, Sir,

Your most obedient Servant, (Signed)  Lincoln.

Sir H. T. De la Beche.

(S21.)

A  Sir