

turbed by a small magnet. If we draw a circle of any diameter with the magnet for centre, and join those points in which the circle cuts the lines of force, the straight lines so drawn will be parallel and equi-distant, and it is easily shewn that they represent the actual lines of force in a paramagnetic, diamagnetic, or crystallized body, according to the nature of the original lines, the size of the circle, &c.

ON THE FORM OF LIGHTNING.

Mr. J. Nasmyth read a paper to the effect that the form of lightning as exhibited by nature was an irregular curved line, shooting from the earth below to the cloud above, and often continued from the cloud downwards again to some distant point of the earth; and this appearance was the result of the rapidly-shooting point of light, which constituted the true lightning, leaving on the eye the impression of the path it traced. These views led to much discussion in the Section.

(To be continued.)

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

The Tenth Meeting of the American Association for the Advancement of Science was opened at Albany, in the Capitol of the State of New York, on the 20th of August, by Professor James B. Hall. A deputation from Montreal was introduced to the association on the following day, and Principal Dawson of McGill College, in the name of the deputation, communicated the invitation to the Association,—which at a subsequent meeting was accepted,—that the next meeting should be held in Montreal.

The American Association is still on a much smaller scale than its British prototype; and in some respects presents characteristic differences. The arrangements of business, which are left in the British Association exclusively in the hands of the Central Committee, were at Albany repeatedly made the subject of discussion by the whole body; and a good deal of time was lost in debates in general meeting, upon questions of order and constitutional forms, little calculated to interest those who had been attracted from a distance by the desire to listen to the communications of the distinguished representatives of American Science assembled on the occasion. Another characteristic, which could scarcely fail to strike those who are familiar with the proceedings of the British Association, was the absence of that numerous body of youthful aspirants for a place among the ranks of the Scientific Legion, which constitutes so valuable a feature in the Sections at Home. Already, chairs in the Colleges of England, Scotland, and Ireland, are filled by those who owed their first introduction to the Scientific world to the Sections of the British Association; and not the least of the benefits traceable to that institution pertain to this important feature of its organization, which has been so employed as to invite the younger students of Science into the arena, and stimulate them to compete with those whose rank has long been established by universal consent. The American Association on the contrary seems chiefly composed of the veterans of Science; nor was there wanting some appearance of an apprehension of any greater infusion of the popular element, such as the influence of the political institutions of that Country on all large and some-