

LITERARY AND PHILOSOPHICAL SOCIETY OF MANCHESTER.

Ordinary Meeting, January 26th, 1869.

R. ANGUS SMITH, Ph.D., F.R.S., Vice-President, in the chair.
"On Microscopical Examination of Dust," by J. B. Dancer,
F.R.A.S.

The author stated that he had made some microscopical examinations of dust collected in June, July, and August last, and also

of the particles contained in the rain water after the long drought. He had intended to bring these observations before the Society in a complete form, but has not hitherto found time to do so. He proposed to carry on observations during every month in the year, for the purpose of recording the average amount of solid matter deposited on a given area, and also as far as possible to ascertain the character of the deposits. The observations so far have shown, as might have been expected, that the dust in various localities, at different altitudes, and under other varying conditions, contained particles differing in magnitude, appearance, and quantity for the same superficial area. In every instance molecular activity was abundant, but the animal life was very variable in amount, the largest number of moving organisms being in the dust collected at the lowest points—this was about five feet above the surface of the earth. This dust also contained the largest proportion in magnitude and quantity of vegetable matter. These observations also show that in thoroughfares where there are many animals engaged in the traffic, the majority of the light dust, which when disturbed reaches the average height of five feet, or about the level of a foot-passenger's mouth, consists of a large proportion of vegetable matter which has passed through the stomachs of animals, or which has suffered partial decomposition in some way or other. This is not an agreeable piece of information, but it is a fact. It shows the necessity, in a sanitary point of view, of the streets being well watered before the scavengers are allowed to commence operations; otherwise the light dust is only made to change its locality, and is not properly removed. It is not pleasant to contemplate the possibility of germs of disease being wafted along with this decaying matter and inhaled by those whose condition might be favorable for its development. The author hopes to bring the details of these observations before the Society at some future time.

H. A. Hurst, Esq., read a paper on the "Flora of Gibraltar," in which he remarked on its great richness, comprising, as it does, in an area of about $1\frac{1}{4}$ square miles, 500 plants, being one half of those contained in the 'Cybele Hibernica,' and one third of the whole number enumerated as growing in the British Islands in the last London Catalogue.