

In a room on the floor above there is a special exhibition of a large number of photographs, which is being constantly increased by new additions. They consist of photographs of all the ancient instruments copied from engravings of the period; and all the foreign instruments in present use, taken from nature. There are also drawings representing the principal observatories in the world.

Such is the commencement of the astronomical museum of the Paris Observatory. It will be completed by organising a second circular room resembling that which we have just rapidly passed under review. This new room will be adorned with portraits of the most illustrious of foreign astronomers:—Newton, Galileo, Tycho-Brahe, Kepler, Copernicus, Herschel, Bradley, and others. It will also contain a special exhibition of large astronomical instruments; notably a quadrant of Lalande's, a sextant of Lacaille's, a quadrant of Langlois' which was used by the North Pole Committee, and a meridian telescope of Delambre.

It would be useful to bring together in the Paris Observatory those instruments which are scattered here and there in various other national institutions, so as to complete a collection already so rich in valuable objects. The directors will also gratefully accept of any bequests that may be addressed to them from private individuals, as was done by Mme. Laugier with reference to the instruments of Arago and Delambre which she had in her possession.

After our survey of the new Astronomical Museum, it now remains to say a few words regarding the extension of the observatory, which is about to be made by annexing the ground on the Boulevard Arago (Fig. 1). This waste land contains a superficies of at least 9000 metres, and when the ditch which at present divides it from the Observatory garden is filled up, it will be united to the rest of the institution without any separation. On these grounds will be erected the great 75 m. telescope, the arrangements for which are already well advanced; also the equatorial presented by M. Bischoffsheim, the circle of Fortin, which long rendered excellent service, and was dismantled in 1862 to make room for the the great meridian-circle, and several instruments for the special use of the pupils.

The plan which we give above (Fig. 1), from official documents, shows what the Paris Observatory will be as a whole when the projected improvements are completed.

We regret that the works are being so slowly carried on, notwithstanding the praiseworthy energy evinced by the directors of the Observatory. A ditch to be filled in, a garden to be laid out, a few buildings to be erected, all amount to but very little. But before the masons cut a stone or the gardeners trace an alley there is a path to be traversed which is not exactly the shortest or quickest, viz. that of administrative and official routine.

ACHILLE DELESSE

WE regret to have to record the death of this eminent geologist, which took place, after a long illness, on March 24. Delesse was born at Metz, and was educated at the lyceum of that town, afterwards proceeding, at the age of twenty, to the École Polytechnique at Paris. He was a diligent and successful student, and in 1839 took his degree as a mining engineer. He then travelled for some time through his own country, in Germany, Poland, and the British Islands, and in 1845 was appointed Professor of Geology and Mineralogy at Besançon, where he also practised as a mining engineer. It was during his residence here that he wrote his "Notice sur les Caracteres de l'Arkose dans les Vosges," and his "Memoire sur la Constitution minéralogique et chimique des Roches de Vosges," both of which works appeared in 1847. After a stay of five years at Besançon

Delesse returned to Paris, where he was employed as a mining engineer, and was especially engaged in superintending the quarrying operations about the city for nearly eighteen years. In 1855 he prepared the report on building materials in connection with the Exposition Universelle of that year in Paris. In 1864 he was nominated Professor of Agriculture, Drainage, and Irrigation in the École des Mines. Delesse's earliest researches were directed to pure mineralogy, and he paid great attention to the subjects of pseudomorphs and the association of minerals, and this led him to study the question of the metamorphism of rocks. The outcome of this period of study was his well-known work, "Recherches sur l'Origine des Roches," published in 1865, in which he argued ably and forcibly in favour of the view that crystalline rocks owe many of their characters to the action of superheated water, and are not produced by simple dry fusion. This important work of Delesse has exercised a marked and very beneficial influence on the progress of petrographical science, and its originality and value were at once recognised by the most advanced thinkers of the time. Already in 1858 Delesse had published two of his valuable maps, namely, the "Carte géologique souterraine de la Ville de Paris" and the "Carte hydrologique de la Ville de Paris," and his subsequent studies came to be especially directed into the channels of inquiry which were associated with the professorship that he had created and so ably filled. In 1868 appeared his work on the Rainfall of France, and other memoirs treating of the agricultural bearings of geology were produced about the same period.

The war of 1870 caused an interruption in the scientific labours of Delesse, and we find him at this period superintending the construction of cartridges in the departments. But in 1878 he was appointed an Inspector-General of Mines, and the south-east of France was assigned to him as his district. During the last twenty years Delesse has issued, in conjunction with MM. Langel and de Lapparent, a series of annual volumes entitled "Revue de Géologie," a work of such value that we regret to hear that it is to be discontinued in the future. Delesse received many honours in recognition of his valuable labours. He was an officer of the Legion of Honour, and filled the post of President of the Geological Society of France. As long ago as 1859 he was elected a Foreign Member of our own Geological Society. He was also for two years President of the French Geological Society, and he occupied the chair during the International Congress of that Society in 1875. In 1879 Delesse was elected a Member of the Academy of Sciences. In Delesse France has lost one of her most distinguished and widely-known scientific men.

PROFESSOR HELMHOLTZ'S FARADAY LECTURE

ON Tuesday evening Prof. Helmholtz gave the Faraday Lecture of the Chemical Society at the Royal Institution. We have so recently (NATURE, vol. xv. p. 389) given a full account of the life and work of the eminent German worker in various departments of science, that it is unnecessary to go over the ground again. A very fair estimate of his position was given in a leading article in the *Times* of Saturday last; and we are glad to notice that the leading journal now is glad to draw attention to men of science whose work is deserving of public notice. The University of Cambridge did itself the honour of conferring upon Prof. Helmholtz the degree of LL.D. on Thursday last, on which occasion the public orator, Mr. Sandys, made the following elegant and appropriate speech:—

"Dignissime domine, domine Procancellarie, et tota Academia:

"Singularum quidem scientiarum terminos protulisse,