

THE NEW BELL-PETTIGREW MUSEUM OF
NATURAL HISTORY IN THE UNIVERSITY
OF ST. ANDREWS.

THE comparatively few specimens of natural history in the olden time were stored in the Library of the University or in other rooms, and though Dr. McVicar, the first lecturer on the subject of natural history, commenced a new collection, about 1826, in the old dining hall of the United College, the results were small. It was not until 1838, the date of the foundation of the Literary and Philosophical Society, that Sir David Brewster pressed forward the formation of a museum for the University; indeed, this was one of the main aims of the society. Under the fostering care of the distinguished principal just mentioned, active progress was made, and by and by the Government provided a hall and adjoining rooms, with the necessary cases for the collections. The specimens have gradually accumulated since that date, and to such a degree after 1882 that the crowded condition of the shelves renders the museum at present mainly a store for the preservation rather than the exhibition of its contents. The need for extension was felt as early as 1884, when the architect of the Board of Works made plans for the extension of the museum on the present site—plans which met with the approval of everyone in the University. These included an aquarium and a marine laboratory on the ground floor, laboratories and class-rooms over them, whilst another large hall and accessory rooms formed an extension of the present museum to Butts Wynd, these filling up the north-western corner of the quadrangle. Unfortunately, though sympathetic, Mr. Gladstone's Government could not afford the funds, and ever since the condition has been clamant. It is true the University might have provided the funds, for it has built large additions in the shape of new class-rooms and a physical laboratory, and appropriated 5000*l.* of the Carnegie grant for endowing the chemical research laboratory, the munificent gift of Prof. Purdie. The department of zoology, however, had to wait. Thus it happened that, after the death of Prof. Pettigrew, his widow resolved to erect a memorial to him in the form of the spacious new museum at the Bute Medical Buildings, a site which in itself is full of reminiscences of the long-continued efforts of the deceased professor and a colleague—supported by the late Lord Bute and the medical graduates of the University—for securing two *anni medici* at St. Andrews, the other three years being intended for Dundee. Moreover, as he was a former custodian of the old museum, the gift of this memorial of Prof. Pettigrew is peculiarly appropriate.

Accordingly, plans of the new museum were prepared by Messrs. James Gillespie and Scott, architects, St. Andrews (to whom this article owes its illustrations), and the negotiations between Mrs. Pettigrew

and the University Court were energetically carried out by my colleague, Prof. Musgrove, who, indeed, superintended the operations from first to last. Now the entire structure has been completed and furnished with electric light, and the cases (jointly provided by Mrs. Pettigrew and the University) have been erected in the great hall, where the celebration banquet was held last September. These cases are of the most modern type, viz. of iron, each wall-case carrying a door composed of a single sheet of plate-glass 9 feet by 5 feet, larger



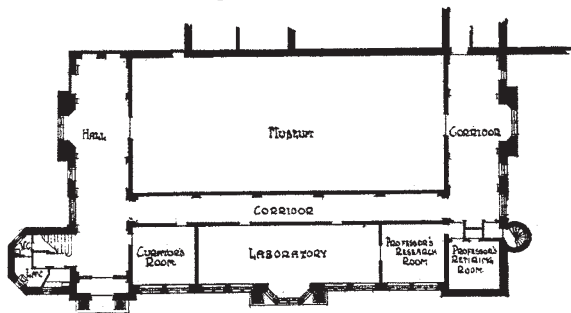
FIG. 1.—Front (West) of the New Bell-Pettigrew Museum.

sheets of glass occurring in the central cases on the floor.

The museum (Fig. 1) faces the west, close to the line of trees skirting the long walk of St. Mary's College, and is appended to the Bute Medical Buildings, from which access is gained by a fireproof door on each flat. Externally it has the botanic garden on three sides, and, when the approaches are widened, public access from Queen's Terrace and West Burn Lane will be facilitated; yet as regards position it is perhaps less in the current of visitors than the old museum in the United College.

The building (Fig. 1) is in the style of the English Renaissance, thus agreeing with the Bute Medical Buildings to which it is attached, and which were erected by Lord Bute, the same architects having prepared the plans. The main door faces the west and Queen's Gardens, and there are two stories. At each end of the roof is an open stonework canopy, the monogram of Prof. Pettigrew and his widow being engraved beneath.

The sunk floor contains long passages and spaces for storage and ventilation, and gives access to pipes and wires. The ground floor (Fig. 2) covers an area of about 130 feet by 75 feet, the entrance, already noted, being at the north-west corner, and leading to a vestibule, shut off by swinging and partially glazed doors, and a hall 65 feet long by 17 feet broad, with a spacious bow-window in the centre commanding views of the ancient halls of St. Mary's College and the principal's house, as well as the fine new Carnegie Library. At the eastern end of the hall are blank spaces which indicate where doors will in future open into a large lecture-theatre (not yet built). The ethnological collections will probably be placed in this hall. A stair leads from the north-western end of the hall to the upper floor, and in the spaces of the projecting tower are sinks and lavatories. The west front is devoted to teaching and administration, and is



- Ground Floor Plan -

FIG. 2.—For scale see Fig. 3.

separated by a long corridor from the main hall of the museum. It contains from north to south a curator's room, a class-room for practical zoology, 62 feet by 17 feet, a research-room, and a professor's room; near which is a turret-stair leading to the upper floor and to the roof. A corridor about 50 feet long and 17 feet broad extends along the southern face, with a spacious bow-window as in the north corridor; and, as the botanical department adjoins and communicates with its eastern end, it is probable that this area will be devoted to the botanical collections.

The main hall of the museum on this floor is 90 feet long by 40 feet broad, and it passes upward to the roof, so that large skeletons, such as those of cetaceans, may be suspended in mid-air, rings and hooks being fixed to the beams, whilst a belt of wood below the cornice gives facilities for hanging pictures. The roof is doubly glazed, the inner layer being formed of muranese glass for diffusing the light, which is northern throughout, except at the lateral windows of the corridors. The floor is handsomely paved with marble mosaic, a special gift of Mrs. Pettigrew. This large hall will probably suffice for the mammals and birds, and, it may be, for the reptiles.

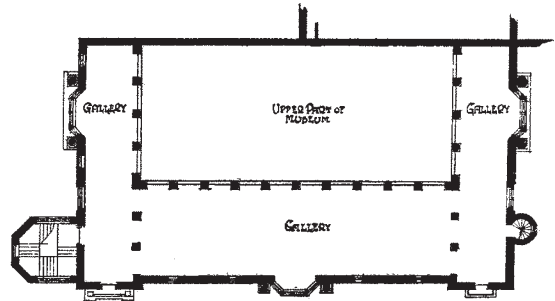
The upper floor (Fig. 3) has the same general area as the ground floor; but, since the great hall goes to the roof, only the western, northern, and southern galleries are available for cases. The spacious western gallery is about 122 feet long by 28 feet broad, and

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the inner borders of both it and the adjoining galleries are flanked by a series of Roman Doric columns, the effect of which is agreeable from all points of view. The entire upper floor is fireproof, being composed of iron and concrete with solid interlocked maple blocks. The north and south galleries are each about 70 feet long by 17 feet wide, a large bow-window occurring in the centre of each.

The extensive series of spirit preparations of the marine invertebrates (chiefly British), the collection of fishes and their eggs and early stages, will find space on the main part of this floor and along the northern corridor, but wall-cases are still required. Table-cases now in the old museum will occupy much of the floor. The southern corridor, which communicates by a door with the Bute Medical Buildings and is on a level with the department of geology, will probably contain the larger part of the geological and mineralogical specimens.

The munificence of Mrs. Pettigrew has thus solved the long-continued problem of museum accommodation, while at the same time it has produced a lasting memorial to a valued colleague, whose early researches on the muscular fibres and nerves of the mammalian heart, of the muscular fibres of the stomach and of the bladder, and whose ingenious ex-



- First Floor Plan -

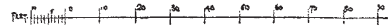


FIG. 3.

periments on flight and animal locomotion are worthy of all praise. Indeed, as regards flight, it needed but a modern petrol engine to have raised Prof. Pettigrew's marvellous apparatus in the air, instead of flapping along the ground under the weight of a heavy steam-engine.

W. C. M.

*THE PRESERVATION OF THE AFRICAN FAUNA AND ITS RELATION TO TROPICAL DISEASES.*¹

WHEN educated opinion in Europe, especially in England, could take stock of the ravages of British and Boer hunters who were exterminating the wonderful mammalian fauna of South Africa, a movement set in in the opposite direction for pleading with the British, German, French, and Belgian Governments to discourage or prohibit the destruction of wild life in their African territories. This desire to preserve the fascinating aspects of wild nature began to take a more acute shape in the last decade of the nineteenth century, and various African administrators, who were naturalists as well as sportsmen, induced their Governments to allow them to proclaim certain areas in Africa to be game reserves in which more or less complete protection was afforded to beasts, birds, and reptiles. The British

¹ "Further Correspondence Relating to the Preservation of Wild Animals in Africa." [Cd. 5775.] (H.M. Stationery Office.) Price 3½d.