Mr. Alfred Waterhouse, R.A., for the realisation of the plans and requirements of our Museum of Natural History, has chosen an adaptation of the Round-arched Gothic, Romanesque, or Romaic of the twelfth century. No style could better lend itself to the introduction, for legitimate ornamentation, of the endless beautiful varieties of form and surface sculpture exemplified in the animal and vegetable kingdoms. But the skill in which these varieties have been selected and combined to produce unity of rich effects will ever proclaim Mr. Waterhouse's supreme mastery of his art.

I need only ask the visitor to pause at the grand entrance, before he passes into the impressive and rather gloomy vestibule which leads to the great hall, and prepares him for the flood of light displaying the richly-ornamented columns, arcades, and galleries of the Index Museum.

In the construction of a building for the reception and preservation of perishable objects, the material should be of a nature that will least lend itself to the absorption and retention of moisture. This material is that artificial stone called terra-cotta. The compactness of texture which fulfils the purpose in relation to dryness is also especially favourable for a public edifice in a metropolitan locality. The microscopic receptacles of soot-particles on the polished surface of the terra-cotta slabs are reduced to a minimum; the influence of every shower in displacing those particles is maximised. I am sanguine in the expectation that the test of exposure to the London atmosphere during a period equal to that which has elapsed since the completion of Barry's richly ornamented palace at Westminster, now so sadly blackened by soot, will speak loudly in favour of Mr. Waterhouse's adoption of the material for the construction of the National Museum of Natural History. A collateral advantage is the facility to which the moulded blocks of terra-cotta lend themselves to the kind of ornamentation to which I have already referred.

In concluding the above sketch of the development of our actual Museum of Natural History, I may finally refer, in the terms of our modern phylogenists, to the traceable evidences of "ancestral structures." In the architectural details of the new Natural History Museum you will find but one character of the primitive and now extinct museum retained, viz. the Central Hall. In Montague House there were no galleries, but side-lit saloons or rooms of varying dimensions and on different storeys.

In its successor, the Museum developed on its site at a later period, we find galleries added: that, for example, which was appropriated to the birds and shells being 300 feet in length. This architectural organisation still exists at Bloomsbury.

The Museum, which may be said to have budded off, has risen to a still higher grade of structure after settling down at South Kensington. In its anatomy we find, it is true, the central hall and long side-lit galleries; but in addition to these inherited structures we discern a series of one-storeyed galleries, manifesting a developmental advance in the better admission of light and a consequent adaptation of the walls as well as the floor to the needs of exhibition.[1]

Should the Section, as did the Académie des Sciences in relation to the passage cited, kindly condone such application to human contrivances of the current genealogical or phylogenetic language applied to vital structures, your President need hardly own his appreciation of the vast superiority of every step in advance which is manifested in existing as compared with extinct organisms. And thus, sensible as far as human faculty may comprehend them, that organic adaptations transcend the best of those conceived by the ingenuity of man to fulfil his special needs, he would ask whether analogy does not legitimately lead to the inference, for organic phenomena, of an Adapting Cause operating in a corresponding transcendent degree?

In conclusion, I am moved to remark that a Museum giving space and light for adequate display of the national treasures of Natural History may be expected to exert such influence on the progress of Biology as to condone, if not call for, a narrative of the circumstances attending its formation in the Records of the British Association for the Advancement of Science.

[1] In the notable reply (*Annales des Sciences Naturelles*, 1829) to an illustration of the unity of composition or of plan in Cephalopods and Vertebrates, by bending one of the latter so as to bring the pelvis in contact with the nape, advocated by Geoffroy St. Hilaire, Cuvier did not deem it too trivial to call in architecture to elucidate his objections. "La *composition d'une maison*, c'est le nombre d'appartemens ou de chambres qui s'y trouve; et son *plan*, c'est la disposition réciproque de ces appartemens et de ces chambres. Si deux maisons contenaient chacune un vestibule, une antichambre, une chambre à coucher, un salon, et une salle à manger, on dirait que leur *composition est la même*; et si cette chambre, ce salon, &c., étaient au même étage arrangés dans le même manière, on dirait aussi que leur *plan est le même*. Mais si leur ordre était différent, si de plain-pied dans une des maisons, ces pièces étaient placées dans l'autre aux étages successifs, on dirait qu'avec une composition semblable ces maisons sont construites sur des plans différens" (p. 245).

OUR ASTRONOMICAL COLUMN

ENCKE'S COMET.—We continue the ephemeris of this comet in the contracted form adopted in NATURE, vol. xxiv. p. 292, from the calculations of Dr. O. Backlund of Pulkowa:—

At Berlin midnight

	R.A. h. m. s.	Decl. ° ′	Log. distance from Sun.	Log. distance from Earth.
Sept. 2	4 23 4	+35 53·2	0·1659	0·0222
4	4 31 17	36 35·9		
6	4 40 7	37 19·2	0·1493	9·9885
8	4 49 38	38 3·0		
10	4 59 56	38 46·8	0·1317	9·9535
12	5 11 6	39 30·3		
14	5 23 16	40 12·8	0·1128	9·9173
16	5 36 32	40 53·3		
18	5 51 1	41 30·9	0·0926	9·8805
20	6 6 51	42 4·1		
22	6 24 7	42 30·9	0·0709	9·8439
24	6 42 54	42 49·3		
26	7 3 13	42 56·3	0·0474	9·8089
28	7 25 0	42 49·3		
30	7 48 5	42 24·9	0·0219	9·7776
Oct. 2	8 12 13	+41 40·4		

In 1848, when the perihelion passage occurred eleven days later than it will do in the present year, the comet was remarked to be "just visible" to the naked eye at Harvard Observatory, U.S., on the morning of October 9, when the theoretical intensity of light was 4·3, and it was "plainly visible" to the naked eye on the morning of November 4, with an intensity of 9·5. The latter is a greater value than will be attained at this appearance, the maximum being 7·5 on November 9. On October 10 the calculated brightness will be equal to that, when it was just visible without the telescope in 1848, but moonlight will interfere at the time. For about four weeks after September 10 the comet will not set in London. As we have already stated it will be nearest to the earth on October 11, and in perihelion on November 15.

[Since the above was in type we learn from Mr. A. A. Common that he detected Encke's comet with his three-feet reflector at Ealing, shortly before midnight on Saturday last. On the following night, when it was better seen, its diameter was about 2′, and there was a central condensation of light.]

SCHAEBERLE'S COMET.—This comet will soon be well observable in the other hemisphere. The following track depends upon elements which Dr. v. Hepperger has calculated from observations to August 11:—

At Berlin Midnight.

	R.A. h. m.	Decl. ° ′	Log. distance from Earth.	Intensity of light.
Sept. 1	13 30·0	+11 27	9·8329	12·5
5	13 52·7	+ 1 41	9·8965	8·5
9	14 7·7	− 5 32	9·9606	5·7
13	14 18·1	10 52	0·0198	3·8
17	14 25·7	14 56	0·0725	2·6
21	14 31·4	18 8	0·1191	1·9
25	14 36·1	20 42	0·1601	1·4
29	14 40·0	22 51	0·1962	1·0
Oct. 3	14 43·5	24 41	0·2284	0·8
7	14 46·6	−26 16	0·2569	0·6

The intensity of light on July 18, the date of the first European observation, is taken as unity.

NOTES

THE Royal Gardens, Kew, have just received, through the kind exertions on their behalf of Sir Ferdinand von Mueller, K.C.M.G., F.R.S., Government Botanist, Melbourne, perhaps the most remarkable Australian Cycadaceous stem which has ever been imported into this country. It is about four feet high, five and a half feet in circumference, and weighs about six hundredweight. It is the type of a new species described by von