LECTURE II.

1. Introductory observations. 2. Extinction of animals. 3. Animals extirpated by human agency. 4. The apteryx australis. 5. The dodo. 6. The Irish elk. 7. Epoch of terrestrial mammalia. 8. Character of the ancient alluvial deposits. 9. Classification of mammalian remains. 10. Comparative anatomy. 11. Adaptation of structure in animals. 12. Osteological characters of the carnivora. 13. Structure of the herbivora. 14. Structure of the rodentia, or gnawers. 15. General inferences. 16. Fossil bones. 17. Fossil elephants, or mammoths. 18. Mammoth and rhinoceros in ice. 19. Teeth of recent, and fossil elephants. 20. The mastodon. 21. Mastodons from the Burmese empire. 22. The sivatherium. 23. The megatherium. 24. The megalonyx. 25. The sloth. 26. Fossil hippopotamus, rhinoceros, horse, &c. 27. The dinotherium. 28. Fossil carnivora in caverns. 29. Cave of Gaylenreuth. 30. Forster's Höhle. 31. Bone caverns in England.—Kirkdale cave. 32. Diseased bones of carnivora found in caves. 33. Human bones, and works of art in caverns. 34. Osseous breccia, or bone conglomerates. 35. The rock of Gibraltar. 36. Osseous breccia of Australia. 37. Retrospect.

1. INTRODUCTORY OBSERVATIONS.—In the previous lecture we took a comprehensive view of the actual physical condition of the surface of our planet, and of the nature and results of the principal agents by which the land is disintegrated and renewed. We found in the modern fluviatile and marine deposits, that the remains of man, of works of art, and of the existing races of animals, were preserved. In every step of our progress, the grand law of nature, alternate decay and renovation, was exemplified in striking characters—whether in the