LECTURE III.

1. Introductory remarks. 2. Substances composing the crust of the globe. 3. Crystallization. 4. Stratification. 5. Inclined and vertical strata. 6. Veins and faults. 7. Chronological arrangement of the strata. 8. Tertiary formations. 9. Classification of the tertiary strata. 10. Fossil shells. 11. Mineralogical characters of the tertiary system. 12. Newer tertiary or pliocene deposits. 13. Crag of Norfolk and Suffolk. 14. The Sub-Apennines. 15. Middle tertiary, or miocene deposits. 16. Lower tertiary, or eocene deposits. 17. The Paris basin. 18. The London basin. 19. The Isle of Sheppey. 20. Fossil fruits of the tertiary strata. 21. Upper marine, or Bagshot sand. 22. Artesian wells. 23. The Hampshire or Isle of Wight basin. 24. Alum bay. 25 London clay of the Hampshire basin. 26. Fresh-water strata of the Isle of Wight. 27. Organic remains of the Paris, London, and Hants basins. 28. Fossil plants and zoophytes. 29. Tertiary marine and fresh-water shells. 30. Nummulites, and other cephalopoda. 31. Crustacea and fishes. 32. Fossil birds. 33. Fossil animals of Paris. 34. Palæotheria and anoplotheria. 35. Fossil quadrumana, or monkeys. 36. Tertiary strata of Aix, in Provence. 37. Fossil insects. 38. Lacustrine formation of Œningen. 39. Fossil fishes of Monte Bolca. 40. Tertiary volcanoes of France. 41. Extinct volcanoes of Auvergne. 42. The crater of Puy de Come. 43. Mont Dor. 44. Fresh-water limestone and organic remains of Auvergne. 45. Summary of the geological phenomena of Auvergne. 46. Erosion of valleys by water-currents. 47. Extinct volcanoes of the Rhine. 48. Brown coal formation. 49. Other tertiary strata of Europe, North America, &c. 50. Altered tertiary strata of the Andes. 51. Tertiary saliferous deposit. 52. Retrospect. 53. Concluding remarks.

1. INTRODUCTORY REMARKS.—It is my object in these Lectures to present a general view of the philosophy of Geology, rather than enter at length on the nature and distribution of the materials of which the crust of our globe is composed; and to render the details of geological phenomena subser-