

CHAPTER XII.

PHYSICAL FEATURES.

Botany of Wimbledon. Geology. Artesian Wells. Strata cut through in the formation of Lord Spencer's wall. River Wandle. Beverley. General Remarks.

THE BOTANY OF WIMBLEDON.

THE whole number of flowering plants and ferns found in Great Britain, according to the London Catalogue, is 1,566; of which number 984 have been observed in Surrey. Of these, about 600 have been either recorded or noticed as occurring within a distance of three miles from Wimbledon Church; and by a continued and careful search, this number might no doubt be considerably increased.

It was thought undesirable, even had it been practicable, to restrict the list to a district with such arbitrary limits as the parish. This would necessarily give only an imperfect idea of the general character of the vegetation, as the country in the neighbourhood is sufficiently varied to include plants requiring very different conditions of growth. The following list contains all the rarer and more interesting plants:—

1.—FLOWERING PLANTS.

Clematis vitalba (L.). Merton.

Anemone apennina (L.). Wimbledon Park. First noticed for this locality by Mr. Rand, in Ray's Synopsis, ed. 3. 1724.

Myosurus minimus (L.). Wimbledon.

Ranunculus circinatus (Sibth.). Ditches by the Wandle. (Surrey Flora.)

„ *hirsutus* (Curt.). Between Wimbledon and Kingston. (Surrey Flora.)

„ *parviflorus* (L.). Wandsworth.

- Eranthis hyemalis* (Salisb.). Wimbledon Park.
Nymphæa alba (L.). Wimbledon Common. (Surrey Flora.)
Papaver Argemone (L.). Wimbledon.
Corydalis claviculata (D.C.). British Camp.
Teesdalia nudicaulis (Br.). Wimbledon and Barnes Commons
Lepidium campestre (Br.). Wimbledon.
Arabis hirsuta (Br.). Garden wall of Wimbledon House.
Turritis glabra (L.). Roadside near Cottenham Park.
Erysimum cheiranthoides (L.). Robin Hood.
Reseda luteola (L.). Barnes Common.
Drosera rotundifolia (L.). Wimbledon Common.
Moenchia erecta (Sm.). Wandsworth and Wimbledon Commons.
 (Surrey Flora.)
Stellaria uliginosa (Murr.).
Cerastium aquaticum (L.). Merton.
Linum catharticum (L.). Wimbledon Common. (Fl. Metr.)
Radiola Millegrana (Sm.). Wandsworth Common.
Malva moschata (L.). Wimbledon Park. (H. Gamble.)
Hypericum hirsutum (L.). West Barns.
Geranium pyrenaicum (L.). Wimbledon Churchyard.
Euonymus europæus (L.). Coombe Wood. (Surrey Flora.)
Rhamnus catharticus (L.). Wimbledon Common. (J. Britten.)
Genista anglica (L.). Wimbledon Common.
Ononis arvensis (L.). Wandsworth Common.
Trigonella ornithopodioides (D.C.). Wandsworth Common. (Surrey
 Flora.)
Trifolium subterraneum (L.).
Ornithopus perpusillus (L.).
Orobus tuberosus (L.).
Prunus avium (L.). Wimbledon Park.
Rubus suberectus (And.). Wimbledon Common.
Rosa spinosissima (L.). Wimbledon Common.
 „ *hibernica* (Sm.). Roadside at Coombe Wood. (The Natu-
 ralist, 1864, p. 23.)
 „ *villosa* (L.). Near Coombe Wood. (New Bot. Guide.)
 „ *rubiginosa* (L.). Wimbledon Common. (J. Britten.)
Alchemilla arvensis (Sm.).
Pyrus communis (L.). Wimbledon Park. (Surrey Flora.)
Epilobium roseum (Schreb.).
Circea lutetiana (L.).
Callitriche platycarpa (Kütz.). Wimbledon Common.

- Sedum Telephium* (L.). Near Cottenham Park.
Saxifraga granulata (L.). Wimbledon Park.
Conium maculatum (L.). Barnes. (Surrey Flora.)
Helosciadium inundatum (Koch). Wimbledon Common.
Oenanthe fistulosa (L.). Roehampton Common.
Sison amomum (L.). Wimbledon.
Silaus pratensis (Besser). Wimbledon Common.
Valeriana dioica (L.). Coombe.
Thrinia hirta (Roth.). Wimbledon Common.
Lactuca virosa (L.). Kingston Bottom. (Burnett.)
Hieracium umbellatum (L.). Wandsworth and Barnes Commons.
Filago minima (Pers.).
Erigeron acris (L.). Wandsworth and Barnes Commons. (Surrey Flora).
 „ *canadensis* (L.). Wandsworth.
Jasione montana (L.).
Vaccinium Myrtillus (L.). Coombe.
Villarsia nymphaeoides (Vent.). Ponds, Wimbledon Common.
Menyanthes trifoliata (L.). Wimbledon Common.
Veronica scutellata (L.).
Bartsia Odontites (Huds.). Wimbledon.
Linaria cymbalaria (Mill.).
 „ *elatine* (Desf.). Wimbledon.
Orobanche major (L.). Wimbledon Common. (Surrey Flora.)
 „ *minor* (Sutt.). Wandsworth Common.
Verbena officinalis (L.). Wimbledon.
Mentha Pulegium (L.). Putney. (Surrey Flora.)
Scutellaria minor (L.). Wimbledon Common.
Myosotis repens (Don.). Wimbledon Common.
 „ *collina* (Hoffm.). Coombe Warren. (Surrey Flora.)
Hottonia palustris (L.). Pond in grounds of Wimbledon House.
Lysimachia vulgaris (L.). Wimbledon Common.
 „ *nemorum* (L.). Wimbledon Common.
Chenopodium olidum (Curt.). Putney. (Surrey Flora.)
 „ *polyspermum* (L.). Near Coombe Wood. (Surrey Flora.)
Rumex pulcher (L.). Putney. (Surrey Flora.)
Mercurialis annua (L.). Wandsworth. (Surrey Flora.)
Parietaria officinalis (L.). Wimbledon Churchyard.
Orchis Morio (L.). Wimbledon Common. (Surrey Flora.)
 „ *incarnata* (L.). Wimbledon Common.

- Allium vineale* (L.). Wandsworth Common. (Surrey Flora.)
Ornithogalum nutans (L.). Wimbledon Park.
Stratiotes aloides (L.). Pond on Wandsworth Common, originally
 planted by Mr. Anderson, Curator of the Chelsea
 Botanic Gardens.
Actinocarpus Damasonium (Br.). Wandsworth Common. (Surrey
 Flora.)
Potamogeton pectinatus (L.). In the Wandle at Merton. (Surrey
 Flora.)
 „ *oblongus*. Wimbledon Common.
Lemna polyrrhiza (L.). Barnes. (Surrey Flora.)
Acorus Calamus (L.). Barnes Common, and water-side, Wim-
 bledon House.
Narthecium ossifragum (Huds.). Wimbledon Common. (Surrey
 Flora.)
Scirpus setaceus (L.). Wimbledon Common. (Surrey Flora.)
 „ *multicaulis* (Sm.). Wimbledon Common.
Carex pulicaris (L.). Wimbledon Common. (Surrey Flora.)
 „ *muricata* (L.). Wandsworth.
 „ *flava* (L.). Wimbledon Common.
 „ *sylvatica* (Huds.). Plantations, Wimbledon House.
Triodia decumbens (Beauv.). Wandsworth Common. (Surrey Flora.)
Glyceria plicata (Fries.). Wimbledon Common.
Bromus giganteus (L.). Wimbledon Park.
Brachypodium sylvaticum (Beauv.). Merton.

2.—FLOWERLESS PLANTS.

- Polypodium vulgare* (L.). British Camp, and elsewhere.
Lastrea thelypteris (Presl.). Wimbledon Common.
 „ *oreopteris* (Presl.). Wimbledon Common. Now destroyed.
 „ *Filix-mas* (Presl.).
 „ *spinulosa* (Presl.). Wimbledon Common.
 „ *dilatata* (Presl.). Wimbledon Common.
Asplenium Filix-femina (Roth). British Camp.
Asplenium adiantum-nigrum (L.). Wimbledon.
 „ *Ruta-muraria* (L.).
Scolopendrium vulgare (Sym.). Ham.
Osmunda regalis (L.). Wimbledon Common. Now destroyed.
Ophioglossum vulgatum (L.). Near Coombe Wood, and elsewhere.
Lycopodium inundatum (L.). Wimbledon Common.

Equisetum Telmateia (Ehrh.). Wandsworth Common.

„ limosum (L.). Wimbledon Common.

Claytonia perfoliata (Don.), a North American plant, is well established near the windmill, Wimbledon Common.

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GEOLOGY OF WIMBLEDON.

It is obvious that, in a work like the present, space permits us only to give a few general remarks on the geology of our parish.

The formation of our soil is *London tertiary*, consisting, that is, of London clay, with accumulations here and there of ancient drift, formed of loam, gravel, and sand, which are designated *post-tertiary detritus*, or diluvium.

Take first the upper layer of gravel which is found on the Common and in certain portions of the Wandle valley. This gravel is for the most part formed of flints of a sub-angular shape, from the chalk (but by what means separated from the chalk by so wide an interval we leave it to others to decide*), and of black flint pebbles of a perfectly rounded form, answering to those found in the bright-coloured clays and light-coloured sands of the "lower London tertiaries." "Yet although flints form by far the larger proportion of the gravel, there are a few other substances showing a different origin. First there are some sub-angular flattish fragments of a hard, light-coloured, porous stone, and of a brown, horny-looking flint. Now we have no rocks or minerals like these, either in the tertiary strata around London or in the chalk; but beyond the chalk hills, and rising up from beneath them, are a series of strata known as the Upper and Lower Greensands, some of the lower beds of which latter may be

* The reader is referred to three lectures on the geology of Clapham and the neighbourhood of London, entitled, *The Ground beneath us*, by Joseph Prestwich, F.R.S., F.G.S. Also to the "Geological Survey," by G. Mantell, F.R.S., in vol. I. of Brayley's *History of Surrey*.