

these places, Claydon House, will ever remain of deepest interest to Nurses and those interested in Nursing, for is it not closely associated with Miss Florence Nightingale, whose sister, Frances Parthenope, married the late Sir Harry Verney.

On Tuesday evening, last week, Lady Verney read a paper on the "Historical Associations of Claydon House." This was followed on the afternoon of the next day, by a visit to Claydon of about 100 University Extension Students at the kind invitation of Lady Verney. The day was beautifully clear and bright, and everything conduced to make the visit stand out in one's life as a landmark which one always loves to recall. A walk of a mile from the little country station, first through a pretty lane, then through the undulating park, brought the party to the house. Being divested of cloaks and umbrellas by the maids, Lady Verney received her guests in the spacious drawing room, where for the sake of convenience, they were divided into two parties, one of which went outside to inspect, under the careful guidance of the clergyman, the little church nestling literally under the shadow of the great house, the park, the kitchen and flower gardens; the fish ponds, now drained, and the Cyprus trees grown from cones brought by Miss Nightingale from Scutari.

At five o'clock the gongs were struck, and the visitors reunited in the large dining room to enjoy a substantial tea. Then those, who had before tea been out of doors, were now conducted round the rooms and corridors, filled one and all with objects of interest to the student of history, of archæology, of art, etc. There were portraits of many generations of Verneys, several by Vandyck, one supposed to be by Velasquez. There were remains of pillars and stones unearthed from the ruins of the Temple of Diana; there were the museum, and the cedar room to be visited; also the sitting room, bed room, and dressing room of Miss Florence Nightingale. About seven o'clock, host and hostess "Sped the parting guests," and then on bicycles accompanied them to the station. The kindness and charming hospitality of Lady Verney cannot be exaggerated; and her interest in, and her attendance at, many of the lectures of the Summer Meeting will long be remembered.

The Oxford Summer Meeting was fittingly concluded on Friday, last week, by a conversazione—the most pleasing feature of which was the spontaneous joining of hands upon the first notes of Auld Lang Syne, and the hearty singing of "Should auld acquaintance be forgot."

A. M. H.

## Science Notes.

### THE NEW CONSTITUENT OF THE ATMOSPHERE.

SINCE the days of Henry Cavendish so much careful study has been devoted by successive generations of chemists to the examination of the atmosphere, so many thousands of analyses have been made, and confirmatory results obtained, that it seemed that its composition was known with absolute certainty.

Air is known to be a mixture—not a compound—of several gases. Oxygen, the active element, by virtue of which we breathe, and by whose agency alone combustion of fuel is possible, amounts to nearly twenty-one per cent. of the whole; nitrogen, the inert diluent, long thought to be useless except in so far as it modified and kept within bounds the action of oxygen, forms about seventy-nine per cent., and comparatively insignificant quantities of other constituents complete the list. The most important of the latter are water vapour and carbon dioxide, which is formed in the respiration of animals and in the combustion of bodies containing carbon. One of the most interesting constituents, and one whose functions are not, perhaps, as yet fully known, is ozone, an allotropic modification of oxygen. This substance may be loosely defined as condensed oxygen. Its ultimate atoms are more closely packed together than in the ordinary gas, and it possesses the same general properties in an exaggerated form. Thus, for example, cork which is burnt and oxidised when heated in oxygen is slowly corroded by ozone at ordinary temperatures. Such properties are conferred on ozone by its unstable nature, due to the fact that it tends to change into ordinary oxygen, giving off free atoms (*nascent oxygen*) at the same time, these free atoms being, as usual, of exceptional activity at the moment of their liberation.

The confidence felt in the completeness of the present state of knowledge regarding the composition of the air was rudely disturbed at the recent meeting of the British Association at Oxford. The announcement by Lord Rayleigh that he had isolated a constituent characterised by properties different from those of any known gas, and that further investigations on it were now being made by him in conjunction with Professor Ramsay, was received with considerable excitement and much enthusiasm. It was felt that the 1894 meeting was saved from mediocrity by a discovery which would appeal to the understanding of technical and non-technical people alike, and the jubilation with which the newspaper correspondents fastened on the item showed that this hope was well founded.

The new constituent so warmly welcomed has not yet received a name. It is characterised by extreme inertness, and, indeed, bears a strong family resemblance to nitrogen, from which it differs mainly in being of greater density.

In the animated discussion which followed Lord Rayleigh's paper, the inference was therefore naturally drawn that this new gaseous body bears the same relation to nitrogen that ozone does to oxygen. The proof or disproof of this suggestion can only be obtained by further experiments. If, however, such an interesting relation is proved to be the fact, it may turn out

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