appearance of a specimen is to be most strongly deprecated, unless, indeed, this has been deliberately undertaken for the express purpose of demonstrating some particular structural feature; yet many collectors are in the habit of making their specimens "look pretty." The conchologist removes the periostracum from his shells, treats them with acid or oil, and conceals any imperfection by aid of a file; the entomologist is said to be not above patching a damaged insect with parts taken from another specimen (not necessarily of the same species); and corals are occasionally provided with artificial bases of plaster of Paris.

The practice in vogue in many museums of mounting small specimens upon tablets is an exceedingly bad one, since it greatly restricts any critical examination; moreover, the specimens are liable to be injured by the cement used.

Collecting a Representative Series of Specimens.—As has been pointed out, scientific research necessitates the examination of large series of specimens exactly representing the form as it occurs at the particular station where the specimens were collected. The field naturalist will most readily ensure that a series shall conform to this condition by collecting every specimen of the form in question which is observed during a certain period of work—five minutes, an hour, a month, according to its abundance and variability. And, in order that small local variations may be rendered evident, the area over which the series is collected must be a small one. If now the whole gathering thus obtained is kept *intact* and unmixed with specimens collected on other occasions or at different stations, it may safely be regarded as fairly representing the species as it occurred at that particular time and place; and it will form a satisfactory basis for comparison with similar series gathered elsewhere and at other seasons. It will probably be urged that this system of collecting is impracticable, as it will entail greater cabinet space. Granted that it may necessitate the provision of more storage room, but is not the usefulness of a collection the only excuse for its formation? And if more space is required it must be provided. However, this objection is not nearly so serious as might be imagined; it is by no means necessary or even desirable that enormous series of specimens should be displayed for exhibition in museum cases or cabinets; all that is required is that they should be stored in such a way as to be easily accessible when wanted for study. Thus in most cabinets much space is occupied by cotton-wool which could readily be filled with specimens without in the least adding to the bulk of the collection. In any case, whatever difficulties may be encountered they will have to be overcome, as only when large series of carefully localised specimens from numerous stations are gathered together in our museums and private collections will it be possible for any really scientific taxonomic work to be accomplished. Until this material is available it is useless to argue over rules of nomenclature and such like, as no satisfactory answer can yet be given to the fundamental question, "What is a species?" S. PACE.

Variations of Atmospheric Electricity.

I ENCLOSE a photograph of the tracings, recording the atmospheric electricity disturbances from January 4 to February 15 inclusive. The records are obtained in the following manner: Two antennæ are used, one vertical 20 metres in length, its lower extremity connected to coherer. The other, 47 metres long, consisting of an ascending vertical portion of 20 metres, also connected below with same pole of coherer, a horizontal portion of 7 metres, and a descending vertical portion of 20 metres, the whole being the shape of an inverted U, going up one side of house, across the top and down the other side. These two antennæ are carefully insulated. The other pole of coherer is connected to earth, in this case to the bottom of a deep well. The coherer closes the circuit of a relay, which in its turn closes the circuit of two electro-magnets, one of which draws up the style and so records a stroke on the revolving drum; the other sets a clockwork apparatus in movement which strikes coherer and so decoheres. The receiver is situated on a hill, overlooking the neighbouring country.

The disturbances seem at times to recur about the same time on successive days, or sometimes after an interval of a day or two. For instance, the first two on the 4th and the first two on the 9th seem to have some connection. Again, the second pair on the 9th seem identical with the first pair on the 10th.

Taking the central group on the 9th, 10th, 12th, 14th, it might be subdivided into two groups, commencing on the 9th with two in each group, reaching its maximum on the 10th, five and seven, and on the 12th reduced to one in each group, finally, on the 14th, only one remaining in the stronger group, that is the one with a maximum of seven.

On February 13 there was one disturbance, on February 14 two, the first of which was at identically the same time as the one of the previous day. It would be interesting to compare the records of several receivers and see how far-reaching these disturbances are, or whether they are purely local phenomena. For this purpose two more receiving stations are shortly to be fitted up in this department. During the period covered by these records there have been no visible or audible signs of thunderstorms, and on many occasions the sky was cloudless, barometer high, thermometer low—28° F. to 36° F.—during the last eight days of February, when there could have been no storms within several hundred miles. E. PELLEW.

Bellevue, Laroin, Pau, Basses Pyrénées, France.

The Selborne Yew-tree.

GILBERT WHITE, in his "Antiquities of Selborne," Chap. v. (Chandos Classics Edition) mentions a male yew growing in the churchyard. He believed it to be some centuries old and states its girth as 23 ft. This afternoon I have, with Mr. Lewis Eynon, remeasured the trunk and find it to be 25 ft. 6 in. The stem of this magnificent tree is squat and rather bulging, and as White mentions its girth as something extraordinary, it is to be presumed that his measurement was made at the point of maximum diameter—about four feet from the ground. This is the height at which our figure was obtained, and we used a steel tape taken right round without regarding irregularities of surface. The increase in girth will be seen to correspond to a radial growth of 4·7 in. in the 120 years or so since White's time. I know not whether recent measurements of this tree have been published, but the fact seems worthy of record.

F. SOUTHERDEN.

75 Barry Road, Dulwich, S.E. March 16.

INJURIOUS CONSTITUENTS IN POTABLE SPIRITS.

AN interesting communication is just to hand, by Sir Lauder Brunton and Dr. Tunnicliffe, upon "Certain apparently injurious constituents of potable spirits." Its appearance now is certainly opportune, since, whatever else we may be interested in, alcoholic beverages are certainly attracting a deal of public attention at the present time. It is further, if not a relief, certainly a change, to learn that something else in alcoholic drinks besides arsenic and selenium may be the cause of mischief, and their removal advantageous. Our mentation just now is rather apt to be over-arsenicated; moreover, from the point of the consumer, the impurities discussed by these workers certainly seem to have one important advantage over arsenic, in that they can be completely removed—that is, removed to the satisfaction of the chemist as well as to that of the pharmacologist.

The subject of whiskey, with which the above monograph is concerned almost entirely, has not received very much attention at the hands of chemists, pharmacologists or dietetic experts, since the publication, in 1891, of the report of the select Committee on British and Foreign Spirits. This Committee directed itself mainly to the question whether compulsory bonding, as practised in Canada, should be adopted in this country, and also whether any restrictions should be placed upon blending, as by, for instance, limiting the name whiskey to the product made from malt, or malt and grain, in a so-called pot-still. The result of the Committee, so far as legislation was concerned, was nil. In the course of the inquiry, however, many interesting pharmacological facts came out, and the present work must be looked upon as a continuation of what may be termed the pharmacology of whiskey. Readers who are interested in the subject are strongly recommended to consult the Blue Book, which contains a mass of most interesting and important information.