monary complaints. Tourists who like to leave the beaten track, and seekers after a refuge from an English winter, will be attracted to Biskra if they read Mr. Pease's little book.

Practical Photo-Micrography. By Andrew Pringle. (London: Iliffe and Son, 1894.)

WORKERS in this fascinating branch of science will no doubt be well acquainted with the author's large treatise, a book which is suitable, more especially, for those who wish to devote themselves very considerably to this kind of work, and to enter into all the details connected with it. The publication of the present book will not appeal so much to the interest of this class of readers, but will be welcomed more by those who wish to get a good working idea of photo-micrography. With this intention this manual has been kept within very reasonable limits, is decidedly explicit, and thoroughly practical. In the seventeen chapters the reader is led through all the manipulations, from the choice of instruments to suit his purse, kinds of plates to use, colour treatment of objects, and general photographic procedure, &c., to those dealing with good hints on lantern-slides, cover-glass preparations, and section cutting and staining. The text is accompanied with numerous well-chosen illustrations, and the get-up of the book is all that could be desired. It may interest our readers to know that in the above pages we are informed that no apparatus is recommended on hearsay, or is any statement made or step suggested "outside the knowledge and practice of the writer."

Twelve Charts of the Tidal Streams on the West Coast of Scotland. By F. Howard Collins. Small folio. (London: J. D. Potter, 1894.)

MR. COLLINS has elaborated the work of the Hydrographic Office by producing a set of charts showing the direction of the tidal streams on the west coast of Scotland at intervals of one hour from the time of high water at Greenock. The twelve charts are prefaced by a note describing how they should be used, and a tide-table. The sources of his information are duly acknowledged, and the work was carried out with the assistance of Captain Wharton, the hydrographer. The work is similar in scope and method to the atlas of tides in the North Sea by the same author. It is a serious defect that no method has been adopted for distinguishing the velocity of the tidal streams, or at least of indicating the furious tidal races which occur in many channels and off many headlands. So far as the direction of the streams is concerned, this compact set of charts should be useful to yachtsmen, and is not without interest for oceanographers.

LETTERS TO THE EDITOR.

[*The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of* NATURE. *No notice is taken of anonymous communications.*]

On Some Methods in Meteorology.

Is it not a *desideratum* in our rainfall records that they should give, with the amount of rain, not mere rain-days (or days' rain), but the exact time (or as near an approximation to that as possible), during which rain has fallen? This might at least, surely, be expected from our observatories and better equipped stations. Some of our continental neighbours are before us in this respect. Thus, the Geneva record, for more than thirty years, has contained as one of its items, "hours of rain." May we not then ask why an institution like that at Greenwich, goes on giving the number of days on which rain fell; a momentary sprinkle being thus put in the same category with an incessant downpour of twenty-four hours?

One might here remark on the great fulness of detail and excellence of arrangement in records of the weather at various continental stations (*e.g.* Pola); which are apt to lead us into invidious comparisons.

With regard to measurement of bright sunshine, the burning-glass method leaves much to be desired from a scientific point of view, and the photographic method seems likely to supplant it increasingly. But might not the concentrated rays be got to produce some other physical effect (metal-expansion?) than burning paper, yielding a more exact record of the amount of sunshine?

Again, may it not be said that the graphic method is far too little utilised in meteorology? Probably nine persons out of ten would agree that they apprehend a truth of statistical nature, a numerical variation, much better every way—more quickly, more clearly, more retentively—through a graphic curve, than through a column of figures, or a verbal description. Yet we have only to turn over the pages of our meteorological publications (and others dealing with figures) to see that this method is used very sparingly. And it is easy to pick out cases where the want of it is felt very plainly. I can recall one such case in a valuable paper by one of our ablest meteorologists (Dr. Buchan), published a short time ago in the Scottish Society's *Journal*, on mean temperature in the neighbourhood of London during 130 years. Here we find paragraph after paragraph, over several pages, describing how certain smoothed values of temperature had varied, now above, now below the line of average. This imposes a considerable strain on the imagination, proves, I am afraid, somewhat tedious reading, and leaves, perhaps, no very distinct impression after all. A simple diagram, giving the curves themselves, would here be an effective labour-saving contrivance, both to the author and his readers.

But to multiply diagrams means great expense, it will naturally be urged. Now the cost of a well-finished diagram (and we all like such) is no doubt considerable. But with the aid of photography diagrams can now be reproduced very cheaply; and it seems to me open to consideration whether we might not do well to sacrifice a little fineness and finish, for the sake of a freer and more frequent use of the method, and the greater clearness of comprehension which that would ensure. Moreover, such diagrams are not to be regarded as a mere addition, and therefore requiring more space; they may even mean an economy of words and space. There are frequent cases in which it is not necessary to give all the figures involved; the object being merely to point out a relation, the salient features of a curve. And if the diagram can be relied upon for accuracy, little need be said about it, in some cases; it tells its own tale. Then again, the photographic reproduction of an author's diagram may even prove a gain in accuracy; some intermediate perils are avoided. I believe, in fine, that the graphic method has a great future before it, not only in science, but in other domains; and the sooner we set about developing its capabilities to the utmost, the better.

A. B. M.

Magnetism of Rock Pinnacles.

IT is well known that the Riffelhorn powerfully affects the compass, and the like has been observed on other peaks in Switzerland; but I have never seen any record of similar observations in this country.

Four years ago, on a visit to the Lizard, accident drew attention to a strong influence on the compass exhibited by a crag on the moors near Kynance. I have taken the opportunity of a visit this year to ascertain whether that were a solitary case. I find that such influence, though not general, is by no means uncommon. Most of the rocks in which it was observed were serpentine; it occurred also in hornblende schist; there were no sufficient opportunities of testing the other rocks of the district. The influence was exhibited only in rather prominent crags, but among them often in lower adjacent blocks, as well as in the absolute summits. At a few yards' distance it was always imperceptible.

I saw no traces in any case of the crag having been struck by lightning. This was the only point to which I gave attention; but it would be natural also to inquire if all kinds of rock can possess the property, if wet or weather affects it, and if it be temporary or permanent.

I used a common pocket compass, taking the bearings of some distant object, first a few feet off, then in four surrounding positions as near as the compass could be held to the stone I