Lehrbuch der Chemie und Mineralogie. By Prof. G. Siebert. 3 vols. Pp. viii + 101, vi + 144, vi + 110; figs. 100, 91, 32. (Braunschweig: Friedrich Vieweg und Sohn, 1901.) Price Mk. 4·25.

THIS text-book, which is intended for use in higher schools, does not differ to any very remarkable extent from numerous other elementary treatises on the same subject. Perhaps the first volume, described as an introduction to chemistry and mineralogy, shows the most originality in treatment. In this part the beginner is made acquainted with the most important chemical processes, such as oxidation and reduction, and is taught something of the more common chemical compounds, mainly by means of experiments, of which a hundred are fully described. These experiments are in most cases quantitative, and involve the weighing of gases as well as of solids and liquids. The laws of chemical combination which receive their expression in the atomic theory are thus impressed on the student by his own actual quantitative results. The treatment of the mineralogy is of a somewhat perfunctory character. The six systems of crystals receive the usual brief and inadequate exposition common to chemical text-books, and the Naumann system of notation for the crystal-faces is explained, but no mention is made of Miller's system. A review of the most important minerals appears at the end of the volume, and brief descriptions, with figures of the crystals, of natural phosphates, sulphates, &c., are given in their appropriate places in the text. The second volume is devoted to inorganic chemistry, and the elements with their principal compounds are treated in turn, the non-metals in the order of their valencies, and the metals in the usual groups. The third part deals with organic chemistry. Structural formulæ are explained, but the treatment is sufficiently elementary, as is evident from the fact that the whole subject of both fatty and aromatic compounds occupies less than a hundred pages. In an appendix are given the descriptions of a number of simple experiments illustrating the methods of production and properties of some of the most important organic compounds. A very brief introduction to organic and volumetric analysis completes the volume.

Knowledge. Vol. xxiv., January to December, 1901. Pp. xii + 288. (London: *Knowledge* Office.) Price 8*s.* 6*d.*

SOME of the full-page photographic plates in this volume of *Knowledge* are very fine. Among the subjects are several brilliant photographs of star clusters and nebulæ, taken by Dr. Isaac Roberts, constellation figures on Greek coins, lunar photographs, life-history of a sun-spot group, spectra of Nova Persei, and the solar corona of May 18, 1901. Mr. E. W. Maunder has a series of articles on constellation studies, in which he deals largely with the poetical aspects of the sky; Dr. Vaughan Cornish has four articles on the sizes of ocean waves; Mr. G. H. Carpenter describes insects of the sea; Mr. R. Lydekker writes on a number of subjects of zoological interest; Mr. H. F. Witherby on ornithological experiences in the Soudan; and Mr. R. Lloyd Praeger on flowering plants. There are numerous other articles of an instructive character.

A Geography of Wales. By A. E. L. Hudson, B.A. Pp. xii + 164. (London: Macmillan and Co., Ltd., 1902.)

THIS book is intended chiefly for use in Welsh schools, and the general idea borne in mind in its preparation is that the best foundation for a knowledge of geography is the study of the land and the people of the district and country in which the pupils live. The attention given to physical geography and to civic affairs, such as local and national government, and population and its distribution, is noteworthy. There are many attractive illustrations, which, with the instructive text, will serve to commend the book to the attention of teachers.

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.*]

Fall of Mud or Dust.

MY men here noticed on Thursday last the 23rd inst. that the leaves, glasses of the frames and iron work of the gates were smeared with a reddish mud; one hedge in particular they described as almost covered with the substance; and the pinafores of a cottager's children which were hanging out to dry were so stained with the deposit that they had to be rewashed. When the substance fell no one here knows, nor is it clear whether it fell as dust or mud; from the firm way in which it has attached itself to the iron work I should think that it fell as mud.

Unfortunately, I did not hear of the event till some days afterwards, and I first saw the deposit yesterday. It was still, notwithstanding a good deal of rain, to be seen on the iron work, the glasses of the frames and on leaves. I send for your inspection herewith a laurel leaf, down the sides of the midrib of which you will find some of the deposit in question. Possibly some expert may be able to determine the nature of the deposit. It does not appear to me to be silica.

I append cuttings from local papers, showing that the phenomenon was observed elsewhere. Lawrence Weston is some five miles north-east from hence, Chewton Priory some fifteen miles south-east, and Barry Island some twenty miles west-by-south and on the other side of the Bristol Channel.

Failand, January 28. EDW. FRY.

From the *Bristol Times and Mirror*, January 21.

A CURIOUS STORM.

SIR,—I thought the readers of your valuable paper would be interested to know that on Thursday morning we had what I think a rather strange storm, about a quarter past seven, of about 15 minutes' duration. After it got light I found quite a covering of dust on the glass on the garden frames, about the colour of Bath brick dust. Not having seen any account of it in your paper, I thought I should like to hear if anyone else had noticed it. Yours truly,

Lawrence Weston, Henbury, January 24. A. DENHAM.

From the *Western Daily Press*, January 28.

SINGULAR PHENOMENON.

SIR,—Seeing in your paper of yesterday's date a paragraph about a mysterious red substance which fell at Barry Island on Wednesday last, I write to say that a somewhat similar phenomenon occurred here.

Wednesday the 22nd was with us very warm, with wet mist only measuring 0·02 of rain. Afterwards the glass and woodwork of the greenhouses and frames were covered with a rust-coloured dust, which has left stains on the paint.

Yours faithfully,

Chewton Priory, Bath, January 26. WALDEGRAVE.

Change of Pitch of Sound with Distance.

I HAVE read with considerable interest the letter by Mr. Paul R. Heyl on this subject in your issue for January 23. Speaking off-hand, I should have agreed with Mr. West, that pitch rises with distance; but, in view of the experience of your later correspondent's grandfather, I am inclined to adopt the contrary view. Many years ago I was sitting with an organist friend listening to a fugue on an organ—I think the player was the late Mr. Thomas Adams, and the fugue one of the immortal "Forty-eight" of Bach. At any rate, it was in a minor key; but I noticed that the last chord was *major*. "Why," I asked my friend, "does he end with a major chord?" "Because," was the reply, "sound has a tendency to rise in a long building like a church, and therefore the writer anticipated this by writing his final chord with a major third." But was this the reason? If the late Mr. Knauff was right, it was probably to allow for the third dropping, and the chord reaching the listeners as a minor chord, in keeping with the rest of the piece.