The receipt of these time signals is so easy a matter that every observatory, and every other institution or person needing accurate time, ought to take advantage of them.

(1) *School Gardening, with a Guide to Horticulture.* By A. Hosking. Pp. xi+326. (London: W. B. Clive, 1912.) Price 3*s.* 6*d.*

(2) *Plant Geography.* By Prof. G. S. Boulger. Pp. viii+136. (London: J. M. Dent and Sons, Ltd., 1912.) Price 1*s.* net. (The Temple Primers.)

(1) MR. HOSKING has produced a useful book, or rather three small books, under the title of "School Gardens." The second part deals with soils, manures, and the cultivation of garden crops; while part iii. is devoted to garden pests and miscellaneous information.

Part i., which gives the title to the book, is to us the section of most interest and value, and we would gladly have seen it expanded at the expense of the other portions of the book which require treatment on a more generous scale. On the subject of school gardens the author can speak with a full experience, and his practical details throughout are concise and thoroughly to the point.

The school garden must not be considered in the light of a paying venture. Its value will only appear when the pupils have become settled in life; then the stimulus to observation and method and the interest in outdoor pursuits they received will be fully appreciated, and the experiment will reap sufficient reward.

(2) In the small compass of 136 pages Mr. Boulger has succeeded in compiling a very readable account of plant geography. The four divisions of the book deal with the evolution of the plant world, the factors of distribution, floristic regions, and botanical ecology or topography. He has wisely devoted the larger part of the book to the consideration of factors of distribution rather than to detailed accounts of the floras of different regions, since the science of plant geography is so fundamentally bound up with the proper understanding of the ways and means of plant dispersal.

Mendel's Principles of Heredity. By W. Bateson, F.R.S. Pp. xiv+413. (Cambridge University Press, 1913.) Price 12*s.* net.

A REVIEW of the first edition of Dr. Bateson's valuable conspectus of discoveries in regard to heredity made by the application of Mendel's methods of research, appeared in NATURE of May 25, 1911 (vol. lxxxvi., p. 407). Since then a vast amount of work has been done upon various subjects of Mendelian analysis; and Dr. Bateson has endeavoured to take account of this by a series of appendices giving descriptive references to papers representing advances upon the state of knowledge when the original volume was published. Short of rewriting the book, this was probably the best means of giving a new lease of life to a standard work upon Mendelism by a leading exponent of its principles.

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.]*

The Spectra of Neon, Hydrogen, and Helium.

IN the issue of NATURE for February 27 (p. 699), Prof. Collie and Mr. Patterson have directed attention to numerous approximate coincidences between lines of neon and hydrogen, from which it is presumably intended to be inferred that certain lines of neon are ordinarily present in the vacuum tube spectrum of hydrogen. A further examination of the observational data, however, seems to be desirable.

Messrs. Collie and Patterson have omitted to state that in the region considered, λ6507 to λ3472, Watson's list of the secondary spectrum of hydrogen contains more than 700 lines, while that of neon contains 260 lines, of which nearly 100 are of intensity 4 or greater. With spectra of this complexity there is nothing at all remarkable in the occurrence of a considerable number of approximate coincidences between lines belonging to the two spectra. As stated by Messrs. Collie and Patterson, there are, in fact, twenty neon lines of intensity 4 and upwards which fall within a quarter of an Angström unit of lines of hydrogen; while, if all the neon lines are included in the comparison, and differences of wave-length amounting to a whole Angström unit be allowed, the number is brought up to 110.

Messrs. Collie and Patterson, however, do not seem to have realised the accuracy of modern spectroscopic tables, such as they have utilised in the present comparison. A difference of more than a few hundredths of an Angström unit in the tabulated wave-lengths of two lines should now suffice to prove that they have different origins, unless other evidence of probable identity is forthcoming. If the permissible discrepancy be reduced to one-twentieth of an Angström unit, there remain only six lines which might be regarded as possibly common to the two spectra, namely :—

Neon			Hydrogen		
Intensity		Wave-length	Intensity		Wave-length
5	...	6175·09	0	...	6175·14
7	...	6143·31	0	...	6143·30
7	...	5343·40	0	...	5343·43
4	...	4537·93	0	...	4537·91
9	...	3520·61	1	...	3520·60
6	...	3472·68	0	...	3472·65

Thus, of the hundred brightest lines of neon, only six are found in hydrogen within the probable limits of error, and only one of the six brightest is among them. There is no evidence that the six "coincident" neon lines have special properties which would favour their survival, and the coincidences cannot, therefore, be properly regarded as significant. Even twenty such coincidences would not prove a relation between the two spectra, unless it could be shown that the lines in question were the most persistent of the neon spectrum.

A very similar result is indeed obtained when a comparison is made between neon and iron. Over the same range of spectrum there are thirteen of the hundred brighter neon lines which differ by no more than one-twentieth of an Angström unit from iron lines, but this would scarcely be accepted as evidence of any relation between the two spectra.

As regards the comparison of neon with helium, the mean deviation of the three lines noted is 0·16, which