Mind and Health Series. The Influence of Joy.

By George Van Ness Dearborn. Pp. xviii +
223. (London: William Heinemann, 1916.)

Price 5s. net.

PROF. PAVLOV of Petrograd has shown in famous experiments that digestion is affected favourably or unfavourably by emotional conditions, and his work has been followed by Cannon, Carlson, Crile, and others. The author of this volume has studied the influence of joy on blood pressure, and has devoted some attention to the psycho-biology of the emotions. His thesis is that joy is an important factor in the health of the body, and his illustrations refer to the influence of joy (1) in stimulating secretion, the movements of the food canal, and the process of absorption; (2) on the circulation; and (3) on the general integrative function of the nervous system.

The evidence given as to the influence of joy on secretion and blood pressure is more convincing than that under the third head. Much attention is given to the influence of emotion on the secretion of adrenalin and all that follows even a slight increase in the amount of that

powerful substance.

The author writes with enthusiasm and occasionally with exuberance, but it is with good science that he confirms the good sense of the cheerful-minded in all ages, who have realised that "a merry heart is the life of the flesh." There is much salutary counsel in what Prof. Dearborn has to say regarding the cultivation of the will to be glad, and he has made a very useful contribution to psycho-biology.

Manual of Russian Commercial Correspondence. By Mark Sieff. Pp. xx+232. (London: Kegan Paul, Trench and Co., Ltd., 1916.) Price 3s. 6d. net.

This is a welcome addition to the student's library. Admirably qualified for the task, the author has compiled a veritable multum in parvo, and the student who masters its contents will have little to apprehend when called upon to deal with Russian correspondence. A valuable feature is the section, modelled on the plan adopted by N. A. Blatov in his "Manual of Russian Commercial Correspondence," setting forth with admirable clearness the general plan on which letters on various subjects should be constructed. It constitutes a lesson in orderly arrangement and concise statement which might be profitably studied by correspondents in any language. Where so much is excellent it seems almost hypercritical to point out that the English phraseology is in places somewhat cumbersome and might with advantage be simplified, and also that here and there the English idiom is not quite correct. But these are minor blemishes which in no way detract from the utility of the work. As it is one thing to read print and a very different matter to decipher handwriting, we would suggest that it might be of assistance to students if a future edition contained a few facsimile specimens of actual Russian letters.

NO. 2449, VOL. 98]

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.]

Optical Deterioration of the Atmosphere in July and August, 1916.

Dr. Maurer, director of the Swiss Federal Meteorological Institute, has forwarded to me a note on the optical deterioration of the atmosphere noticed in the Alps in the summer which has just passed. At his request I enclose a translation of his note, as the subject is likely to interest your readers.

Napier Shaw. Meteorological Office, South Kensington, London, S.W., September 21.

Remarkable optical deterioration of the atmosphere became apparent in the Swiss Alps during the last ten days of jury by the persistently abnormal magnitude and unusual intensity of the bright patch round the sun, to which the name aureole is sometimes assigned. Observations in previous years have established a well-defined minimum during the summer months, both in the diameter and the intensity of the solar aureole, but during the present year, from July 23 until the middle of August, the diameter generally attained 120° to 130°, and on August 25 even 140°, with relatively great intensity. Abnormal extension of the aureole was also observed after July 21 at high levels on the Alps, above 3000 metres, and a true brown Bishop's-ring was seen on August 3-4 on the high peaks of the Upper Engadine.

On August 6 twilight phenomena were very abnormal. The "purple light" was entirely absent; the westerly earth-shadow was very indefinite, and the eastern twilight-arch of the zodiacal light was similarly affected. The western sky, at first of a homogeneous pale yellow colour, showed a peculiar cirrus-like structure for some time after sunset. At first the stratification was strictly horizontal, but later on it appeared undulating, or in flaky form. It did not disappear until darkness set in. Similar phenomena were observed in 1883-4, 1902-3, and 1912, in connection with the much-discussed optical deterioration of the atmosphere in these years. After the end of July this remarkable cirrus-like layer could be seen best in the higher Alpine regions, but a bright "purple light" was not seen there either in July or August. The cause of the deterioration is for the time being still in doubt. Up to the present no reports of volcanic eruptions have come to hand from any part of the globe.

Zürich, September.

Science in Education.

In reply to "F.R.S.; F.B.A." (NATURE, September 28, p. 69), may I express the hope that, whatever may be the custom in France, those who discuss the place of science in education, when they say science will mean science, and not "Egyptology, classical archæology, history, art, linguistics, Indics, Sinics, Hellenics, philology (Latin and Celtic), French language and literature, Italian, Spanish, English, German, law, and economics"? No one wants to deny that the study of man holds as large a place as the study of Nature. Man has never yet tired of studying himself, and needs little encouragement to continue doing so. But the progress of the modern world is due to the fact that an increasing number of minds have escaped the vicious circle of these introspective examinations and begun to study the realities of external Nature.