portant branch of physiological method; and there is certainly no ground for the statement that it is "the influence of public opinion only" which has hitherto prevented abuse in this country. As pointed out in our article, the English physiologists themselves took the initiative in laying down a code of rules against abuse some time before the sense of the general public was aroused, and it does not appear that since this has been aroused there has been any change in our physiological practices. Moreover, we cannot think that many of our readers will resemble our correspondent in failing to see that "atrocities" may be guarded against while "more moderate practices" are allowed; and in this connection it is always to be remembered that our English physiologists have gladly acquiesced in legislation directed against the former.—ED.]

TOWARDS the close of an interesting article on Vivisection in a recent number of NATURE (p. 429), the following remarks from an article in the *Fortnightly Review* by Lord Coleridge occur: "What would our Lord have said, what looks would He have bent upon a chamber filled with unoffending creatures which He loves, dying under torture deliberately and intentionally inflicted." Prof. Yeo in answering this, quotes "Ye are of more value than many sparrows," "How much then is a man better than a sheep." But there is one passage in Scripture which I think has even a closer connection with vivisection than those mentioned above, namely, the healing of the man possessed with devils (Mark v. verse 13), "and the unclean spirits went out and entered into the swine; and the herd ran violently down a steep place into the sea (they were about two thousand;) and were choked in the sea." If our Lord therefore considered it expedient to permit the destruction of a whole herd of swine, numbering 2000, in order to alleviate the sufferings of the demoniac, surely the labours of a man like Hunter must be justified, who by experiments on living animals has been the means of reducing death from aneurism of the principal artery of the lower limb from 95 per cent. to 10 per cent., as stated by Sir James Paget.

CHARLES ALEX. STEVENSON

45, Melville Street, Edinburgh, March 14

Muffs and Vivisection

YOUR correspondent, Mr. H. H. Johnston, of the Zoological Gardens, has offered your readers some "facts," which, he says, he "knows to be true." He says that some little time ago I called on "a distinguished member of science"; that "three things were observable in my outward presentments"—to wit, ostrich feathers in my bonnet, a bird of paradise on, or near my muff, and an ivory-handled umbrella; and that the man of science took each of these articles as a text for a rebuke to me for encouraging cruelty. Sir, these "facts" may possibly be "accurate enough for scientific purposes," like some others which we heard of at Bond Street, last winter, but they have given much merit to those who happen to be acquainted with my real "outward presentments." Suffice it to say, that I never paid such a visit as Mr. Johnston describes; never received such a rebuke; never used an ivory-handled umbrella; never wore a bird of paradise, or any other bird, either in or near my muff, or any other portion of my attire; and, finally, having never possessed such an object in my whole life, am driven to think that the only Muff connected with the ridiculous story, must be the person who assures us he "knows" it to be true.

1, Victoria Street, S.W.

FRANCES POWER COBBE

Pasteur's Inoculations

IN the *Proceedings* of the St. Louis Medical Society, recorded in the *St. Louis Medical and Surgical Journal* for December last, Dr. Spinzig is reported to have said:—"Splenic fever only prevails where there is low ground, or what is called 'bottom ground.' Sheep that are fed and shepherded on such ground will take this disease, while those that are shepherded in lofty regions never take it. But Prof. Pasteur had perfect confidence in his antidote, and asserted that if the sheep were properly 'vaccinated' it would make no difference where they were, because the specific poison could not reach them. In Germany, however, they found this was not the case." May I ask, through your columns, what is Dr. Spinzig's authority for this statement?

Again, I have been informed, that although it has been abundantly proved that cattle and sheep inoculated with attenuated virus are protected against the otherwise deadly effects of uncultivated virus, they do not enjoy similar immunity from the ravages of a natural epidemic of splenic fever. I should be glad to know whether any record is forthcoming as evidence that the inoculation of the attenuated virus has proved as successful against natural epidemic arising under ordinary conditions as against artificial introduction of the virulent matter into the system.

A STUDENT

"Eophyton"

AFTER all that has been written, both in England and abroad, about the inorganic nature of Eophyton, it is strange to see such statements as those made by Mr. Elsdon, in NATURE (vol. xxv. p. 409). As long ago as 1873, I pointed out that in Sweden it occurs under circumstances, which most decidedly prove that it cannot have been any plant or organic being whatever, and Principal Dawson has been led to precisely the same conclusions, from his studies of Eophyton at St. John. Last year, I further, by way of experiment, produced Eophytons, which cannot be distinguished from the Cambrian ones.

A. G. NATHORST

Geological Survey Office, Stockholm, Sweden, March 16

"Telescopic Definition in a Hazy Sky"

MR. ROYSTON-PIGOTT's letter in NATURE, vol. xxv. p. 77, reminds me that during the Transit of Venus in 1874, the sky here for the greater part of the day, being covered with thick but varying clouds, I several times, for a considerable time together, saw the planet on the sun's disk, with the naked eye; the cloud at these times stopping out the superfluous light, but not stopping distinct vision.

I may add (though off the line) that, towards evening, the sun shone out brilliantly, and from my garden, through a bit of smoked glass, I watched the whole egress. Unfortunately, the subsidiary station, which was to have been here, had to be abandoned at the last moment, a matter of great regret to all concerned, and to all interested, and not the least to myself, having witnessed a great chance which there was no one to use.

Nelson, New Zealand, January 27

A. S. ATKINSON

The Weather in South-Australia

MRS. MERRIFIELD, with her compliments, begs to inclose extracts from two letters she has recently received, describing the hot weather in South Australia during last January, also mentioning the curious fact, that the water in the Sturt river is more abundant in dry seasons than in wet ones. Perhaps the Editor may consider the statements sufficiently interesting for insertion in NATURE.

Stapleford, near Cambridge, March 14

"On Tuesday, January 17, the thermometer was registered at 180° in the sun, and 114° in the shade. I believe we had it hotter here; for, in the afternoon, the hills were covered with bush-fires. Fortunately, they were on the other side of the railroad, about two miles off. At night, when the fire was nearly out, and only the stumps and dead branches left burning, it looked like a large town lighted up. A strong south-east wind blew the heat over to us. In the morning, a strong hot blast came from the north, as hot as I have felt it in West Australia. Yesterday, the thermometer fell, out of doors, to 90°. To-day (January 19) was, I think, as hot in doors as on Tuesday. Metals in the room were unpleasantly hot to the back of the hand. The leaves are falling off the trees, from the intense heat and dryness of the air. The ants, which up to 9 a.m. were busy, forming a column varying in width from eighteen inches to three feet, and almost colouring the ground, retired to their nests. Not one was to be seen. Neither a bird, fly, nor other insect was visible, unless disturbed by the rustling of the leaves. The following statement will show the hottest days in certain years:—

In 1860	...	thermometer	158
1862	...	"	159
1871	...	"	153
1880	...	"	172
1882	...	"	180

"February 2

"It is a curious circumstance that the Sturt river or creek, which runs through Mr. L.'s garden, has more water in it in dry