A Beech pierced by a Thorn Plant

THE word pierced makes the difference between an impossibility and a fact which is not uncommon in nature. The thorn putty and a fact which is not uncommon in nature. The thorn mentioned in your last impression by Mr. Murphy has grown between two beech stems, which were so close that from their annual increase they grew together, and in so doing they en-closed the thorn, which could no more have *pierced* the beech than it could have pierced a block of marble. If young trees are twisted together they will grow together. Years ago I placed a bar of iron in an intersting have on two stems so twisted in bar of iron in a interstice between two stems so twisted, in another interstice below it I placed a part of the drag-chain of a waggon. According to Mr. Murphy the two iron appen-dages "have grown right through the middle of the trunks of the two beeches." They are at least as firmly fixed as if they had done so.

The tree with the iron branches is close to the lodge on Brookwood Hill. Should any of your readers consider it to be worth inspection, the lodge-keeper will show it to them.

April II

GEORGE GREENWOOD

Mars

I BEG to offer my thanks to Mr. Knobel for his obliging correction (vol. ix. p. 396) with regard to the contrasted tint of the snow-poles of Mars. His observations had quite escaped my recollection.

I have also to mention a correction with which I have been favoured by the Earl of Rosse. It appears that an erroneous hour had been affixed to the drawing of Mars made at Parsonstown on September 14, 1862, and engraved in Mem. R.A.S., vol. xxxii., pl. v., and that an explanation is thus offered of one of the discrepancies commented on by Prof. Kaiser. Cheltenham, April 9 T. W. WEBB

Cheltenham, April 9

Bright Shooting-star

A SHOOTING-STAR, equal in apparent brightness to the planet Jupiter, was seen here by me this evening at 9h 18m. It traversed a path of 24° in two seconds, beginning at 9 IO 242°, D + 47°, and ending at R.A. 278°, D + 50°. No per-ceptible train remained after the disappearance of the nucleus, ceptible train remained after the disappearance of the futcletis, which, however, emitted numerous sparks when in motion. The radiant point of this meteor was probably near β Boötis, and identical with No. 36 in Mr. R. P. Greg's table of radiant posi-tions in the "Monthly Notices R.A.S.," vol. xxxii. p. 350. This is given at R.A. 223°, D + 40° by Greg and Herschel, and at R.A. 224°, D + 38° by Schiaparelli and Zezioli. The meteor described above was not therefore a member of the wellmeteor described above was not therefore a member of the wellmarked meteoric streams of April 18-20. At stations eastward it was probably a much brighter object than observed here, and these brief details may be useful, taken in conjunction with others, in determining its height and velocity.

WILLIAM F. DENNING Cotham Park, Bristol, April II

THE LATE DR. LIVINGSTONE

OUR readers are no doubt familiar through the daily press with all that has transpired during the past week in reference to the all-absorbing topic of the late Dr. Livingstone and the home-bringing of his remains. The coffin containing these arrived at Southampton yesterday morning, and was received by the Corpora-tion, Livingstone's family and friends, the President and fellows of the Royal Geographical Society, and many others, with all solemnity and with every mark of genuine respect. The body of the great explorer was accom-panied to the station by a long and distinguished procession, and was conveyed in a special train to London, to be buried in Westminster Abbey on Saturday at I P.M. The proposed position of the grave in the Abbey is

near that of Major Rennel, the father of English geography, and the friend and adviser of Mungo Park. There was some hesitation between this position and the one near the grave of Sir John Chardin, the Persian traveller.

The President of the French Geographical Society, Vice-Admiral Baron de la Ronciere le Noury, is coming over from Paris, for the express purpose of being present at the funeral.

The Government grants a sum which Sir Bartle Frere trusts will be sufficient for all purposes." Still we are glad to have Sir Bartle Frere's assurance that in the end there will be "no shortcoming on the part of the Government.'

Dr. Livingstone's vocation was not a money-making one ; he did not even live to hear that the world ranked him among its greatest men ; the end of all his labours was a sad one. This country, all civilised countries we may say, will attend to the appeal which has been made on behalf of his family.

As was to be expected, Scotsmen have taken the initiative in raising a monument to one of the greatest of their fellow-countrymen; at a meeting held at Edinburgh, on Tuesday, it was resolved, in recognition of the "heroic services rendered to science and civilisation by the late Dr. Livingstone," that a national statue be erected to his memory in the capital of his native country. This is right and it is honourable to his fellow-countrymen, though the memory of Livingstone will need no "labour of an age in piled stones" to render it immortal. Indeed a true idea of the full height of his greatness is only as yet beginning to dawn gradually upon us, and it will be some time ere we are able adequately to estimate it. No doubt, therefore, the thought contained in Tennyson's sad strain must have occurred to many a one during the last few weeks-

" I would that my tongue could utter The thoughts that arise in me;

and perhaps with still greater force those others--

" Oh for the touch of a vanished hand

And the sound of a voice that is still."

What honours would we have heaped upon his head had he only lived to reach his native shore !

NATIONAL MUSEUMS IN BRAZIL

THE working of the National Museums in Brazil seems to be conducted on similar principles to those recently advocated for the management of the Government Museums in this country. From a thick volume of 388 pp. explanatory of the topography, constitution, and resources of Brazil, issued in connection with the Brazilian Department of the late Vienna Exhibition, we gather that the most important Natural History Museum in South America, is that at Rio de Janeiro, which was founded in 1817. It is divided into four sections :-- the first includes Comparative Anatomy, Physiology, and Zoology; the second Botany, Agriculture, and the Mechanical Arts; the third Mineralogy, Geology, and the Physical Sciences; and the fourth Numismatics, Archæology, &c. Each section has its separate director, who has assistants, and the whole Museum is presided over by a Director-in-Chief. "The Museum has, over by a Director-in-Chief. besides, several corresponding members in the National and Foreign Scientific Societies, and there are two naturalists travelling through the Empire, for the purpose of making collections.

"The principal object of the National Museum is, to collect and study all the natural products of the country, and to deliver public lectures on the science of its province, spreading among the people theoretical and practical knowledge, in a simple style, adapted to their comprehension.

"The Museum," it is stated, "now keeps up a correspondence with European establishments of the same description, and willingly exchanges duplicates of its col-

lections for those of foreign museums. "The Government intends to create in the provinces several museums independent of that in the capital of the empire, that they may exchange among one another the respective products of each one, receiving at the same time from the central one, not only the necessary instructions for the classification and study of the collections, but its superabundant duplicates."