we openly confess and declare that the philosophy which we shall not be ashamed to learn in these matters."

Perhaps the most striking example of the humility which was ever present with Bacon is to be found in the following passage, which I consider to contain some of the most elegant and singularly graceful diction to be found in his entire writings: "At length, breathing a little, and casting back our eyes over the way we have passed, this one thing we seem to find out, that the sounds which musicians make when they are bringing their instruments to perfection by tuning, indeed, although harsh and grating to the ear, are yet the cause that the sounds which follow after are sweeter. So have we been set in ways tuning the instruments of the Muses, that the chords may be struck by others hereafter with a better hand or judgment."[8]

Many other of these passages scattered throughout Bacon's writings tell us of the spirit which actuated him, and the principles on which he worked; all of them show that he laboured not for profit, not for reputation, but for the glory of God and the benefit of his fellow-men.

G. F. RODWELL.

*(To be continued.)*

FAR VISION.

*To the Editor of* THE READER.

SIR,—I have read with great interest Mr. Tood's letter in the READER. It has also appeared in your journal on the 12th instant, as I am able to corroborate the statement of the gentleman in seeing the reflection in the sky of objects at a considerable distance from my own experience. I remember perfectly well, about twenty years ago, the *inverted* figures of a man and a horse appearing in the sky, although their appearance above the sea off Hornsea, a small watering-place on the Yorkshire coast. The representation was very distinct, and continued visible, as near as I can remember, about five minutes. The phenomenon excited great wonder among the spectators, some asserting that the figures were attracted by a donkey race. At the time it was said that the church and lighthouse thus strangely became visible were situate on the island of Heligoland, which is about 300 miles distant from and independent of the land. Yorkshire coast; and that the appearance is only seen once in about a hundred years. I have also seen a similar reflection of ship phenomenon than that given by Mr. Tood out at sea, off Hornsea, in the year, I remember, '59, years obediently,

CHARLES S. WAKE.

8 Grey's Inn Square, May 25, 1866.

THE FIGURE OF THE EARTH (NOT ARCHITECTURAL OR PRETTY).

*To the Editor of* THE READER.

SIR,—Dr. Pratt would willingly mystify us upon all the most familiar phenomena of mechanics. Surely he is hard upon "E. V. N." in blaming him for not having read his article carefully.

If, as Dr. Pratt supposes, the plumb-line always hangs perpendicular to the surface of the earth, then the earth would necessarily be a perfect sphere, the level of the ocean-water being perpendicular to the plumb-line, the sea would always be perpendicular to every plumb-line, and the centre of gravity and attraction only compatible with a perfectly spherical earth.

The direction of the plumb-line (in practice), I believe, is found by the mean surface of both of mercury) is the actual measure of the direction of the earth's surface at the point of observation. Now, if the earth were in a manner different from what it would do in a sphere, the other will do not. Now is mine will be, by many, accounted not only daring, but whimsical and silly, while to others they may appear worthy of consideration; and it is the hope that such some one of the latter class, with more talent and leisure than myself, I am persuaded, will take up the subject, that I have written.—Yours, &c.,

WM. PICKARD.

May 28, 1866.

PROCEEDINGS OF FOREIGN ACADEMIES.

PARIS.

THE FRENCH ACADEMY.—May 21. — "On the Dilation of Solid Bodies by Heat, by M. Fizeau; "On the Question of the Stability of the Rotation of the Earth," by M. Delaunay; "Notes on Two Stars," by M. Le Verrier. MM. Wolf and Rayet have made some interesting observations on the spectrum of the star just discovered by Mr. Hind in Mr. Gallon's. We read a short criticism on a work just published by M. Stas, on the atomic weights of simple bodies. An interesting paper was read by M. N. Joly, on a human monster, which was born some time ago at Toulouse, belonging to the class of exencephali. He proposed a new name for this particular monster—*Metencephalus*, or *Opisthocephalus*. M. l'Abbé C. Richard reported the discovery of a wonderful set of flint instruments of the Stone Age, at Villegenon, Canton de Nailly, not far from the Fontainebleau Forest. The spot had been occupied for a long time by a wood; the ground, after the trees and the ground prepared for cultivation, vast quantities of the flints formed in, and the workmen used to pave the roads. A great number, however, still remain.

REPORTS OF LEARNED SOCIETIES.

ROYAL.—May 17.—General Sabine, President, in the chair.

The following papers were read :—

"On the Effect of a Rigid Body turning freely about a Fixed Point." By Prof. Sylvester.

"On Apparatus for Ascertaining the Temperature and Keeping the Air of a Building at any desired Degree of Moisture." By Dr. Ure. The Council of the Royal Society who were acquainted with the late Mr. John George Appold have often expressed their admiration of the various scientific arrangements which he from time to time introduced into the building, Queen Victoria Street, Finsbury Square. However intense might be the heat of without, or the cold, or the brilliancy of the flame of the gas with which his rooms were lighted, when once under his hospitable roof, you found a most delightful breathing atmosphere. Much of this was undoubtedly due to the strong current of fresh air that communicated with his business premises immediately from the open fields dwelling-house. But he could at any time force a current of fresh air at a given temperature from any of his rooms. However, he would always contended that dwelling-houses could not be made thoroughly comfortable as habitations for man, unless by artificial power; but among the many of his arrangements to produce a comfortable state of the rooms, there were also those that do not require the aid of artificial power, and which, therefore, in private dwellings, but which, nevertheless, might be easily adapted with comfort and effect to the offices of the public for inmates. Those were his automatic temperature regulator and his automatic hygrometer. The latter he had the original apparatus repaired and placed in perfect working order. The Council have also had his offered them in her name to the President and Council of the Royal Society, who directed the author to express her hope that they will oblige her by retaining them among the other scientific instruments belonging to the Society, as a remark of respect to the memory of one who always esteemed it his highest privilege to be useful to mankind in both life and, June, 1853. The author also presented a description and plan of both instruments.

"On the Classification of Determinants : being a new and brief Method for computing their Arithmetical Values." By the Rev. C. L. Dodgson.

"On the Electrical Tension of the Air in Corona Borealis." By William Huggins, F.R.S., and Dr. A. Miller, M.D., F.R.S. In this paper, one of us received a note from Mr. John Birmingham of Tarbert, Ireland, in which he announced on the night of May 12 a new star in the constellation of Corona Borealis. He described it as "of the second magnitude, and of a red colour." Mr. Baxendell, of Manchester, wrote to one of us saying that he had observed the object of the new star, as seen by him on the night of the 15th instant. "A new star was evidently burst forth

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| | R.A. 1866, May 17 ..... | 15h 38m 56s |
| | N.P.D. ..... | 66° 41' 57" |

agreeing precisely with Argelander, No. 5,765 of "Bonner Durchmusterung," declination + 26° 59' 1" nearly. Mr. Baxendell writes on the 21st, "It is probable that this star will turn out to be variable with a very irregular period, and it may be conveniently at once designated as variable." Mr. Baxendell's observation of the star on June 9, 1866, he saw a star of the sixth magnitude in the position of the variable star, and he thinks that it is probably the same star which was first seen nearly by naked eye ailuminations, the star seen by him may have been possibly a former temporary outburst of light in like manner.

[8] "De Augmentis," Lib. VIII., cap. 3.