

*The Name of  $\epsilon$  Orionis.*

GENTLEMEN,—

The question was recently put to me as to the correct Arabic name of the star  $\epsilon$  Orionis, which has been called Al Nitam by Sir Norman Lockyer in a recent paper to the Royal Society. In a previous paper in 1904 on the temperature of the stars, Sir Norman Lockyer uses the name Al Nitam in a generic sense to describe a class of stars of particular spectra which he calls "Al-nitamian." As the word is thus likely to come into use, it is desirable to point out that there is no such name for a star among the Arabs as Al Nitam.

Smyth, in his 'Celestial Cycle,' says " $\epsilon$  Orionis is often called Al Nilam, from the Arabic Al-Nidham or Nizam"; but there is no justification for Al Nilam, which has also been used by Proctor in his 'Atlas' (copied from the maps of the S. D. U. K.). The word in Arabic is *النظام*, or *النظم*, meaning a string of pearls, and is applied to the three stars  $\zeta$ ,  $\epsilon$ , and  $\delta$  forming the belt of Orion, and also to other rows of stars, and it is specially given to  $\epsilon$  Orionis.

The transliteration of the word is Al Nidham or Al Nidam as pronounced in Arabia, or Al Nizham or Al Nazhm as pronounced, according to Silvestre de Sacy, in Egypt. The significant letter *ط*, which is very difficult for Europeans to pronounce, has the value *dh* or *zh*. It is the first letter of the name of the star "ultima fluvii," Al Dalim or Al Zhalim, and it is the middle letter of the common word "nadir," *نظير*. It will be seen therefore that there is no justification for the word in question being called Al Nitam.

I am, Gentlemen,

Yours faithfully,

E. B. KNOBEL.

32 Tavistock Square, W.C.  
1909, July 20.*On the Revelation of the Reversing Layer of the Sun.*

GENTLEMEN,—

In the last number of the *Observatory* Mr. Buss has made a critical remark on a passage in my article in No. 411, entitled "On the Progressive Revelation of the entire Atmosphere of the Sun." I had written:—"The images  $K_1$  of the spectroheliograph correspond to the lower layers, to the reversing layer, which is revealed for the first time other than at a solar eclipse." Mr. Buss rightly objected to the statement because Father Secchi and others had observed the reversing layer at normal times when the sky was clear. My wording was, perhaps, in certain points inexact or insufficient. I realize once more that it is difficult to say everything in a few words. It would be better to have written:—"These images  $K_1$  correspond to the reversing layer, which is obtained for the first time complete and otherwise than at a total eclipse."

The reversing layer, as you know, is observed and photographed