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THE CONSTITUTION OF THE STARS¹

By Professor HENRY NORRIS RUSSELL

PRINCETON UNIVERSITY

To number and name the stars is easy enough—or would be so if there were not so many of them; but to determine their real nature, and discover how and why they shine, is a task which, though well begun, is not more than half done.

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and many of the rare ones—more and more as more powerful instruments can be applied—and few unidentified spectral lines remain, so that we can be sure that the stars are essentially similar in composition to our own world. No conclusion of science is more significant than this. The poet Stedman has expressed its meaning better in verse than any technical prose could render it.

White orbs like angels pass
Before the triple glass
That men may scan the record of each flame,—
Of spectral line and line
The legendry divine
Finding their mould the same, and aye the same,
The atoms that we knew before
Of which ourselves are made,—dust, and no more.

The materials of nature, and her laws, are the same everywhere. Upon this foundation we build.

¹First Maiben Lecture before the American Association for the Advancement of Science, given at Atlantic City on December 30, 1932.

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