



# The Volunteer Review

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[For "THE REVIEW."]

### FIRST AND LAST.

BY MARY A. M'IVER.

One bright dream of my boyhood  
I would not have return,  
Though once its very mem'ry  
Could make my bosom burn  
With wild and vain regretting  
O'er Love's abandoned urn.

In dreams I never see her,  
The lost star of my youth,  
Yet her's was dazzling beauty  
Such beauty as in sooth  
Had been like that of angels  
If but allied with Truth.

I passed the stately mansion  
In which she dwells to-day,  
Around its fair wide portals  
The tall elms wave away,  
I saw her lovely children  
Upon the lawn at play.

I saw her noble consort  
For whom she broke the vow  
I thought would last forever—  
All, all, is altered now;  
My step was light and joyous,  
He had a troubled brow.

For she is but a statue  
Though very fair to see,  
The marble heart she gave him  
Was never meant for me,  
The warmth of my wild worship  
Was not for such as she.

With calm control I met her,  
She bowed with gracious pride,  
Then viewed with dazzling glances  
The maiden at my side,  
She saw her girlhood's lover  
And his young, promised bride.

Thank Heav'n my better nature  
Has depths she could not stir;  
Thank Heav'n on one true spirit  
My heart can yet confer  
A deeper, holier passion  
Than that I gave to her!

Ottawa, November, 1866.

For "THE REVIEW."

### THE PLURALITY OF WORLDS.

"In my fathers house are many mansions."—  
John 14, Verse 2.

No one who has viewed the vault of the stars in the stillness of night, can be insensible to the impression the survey imparts. It separates man, in thought from the spot upon which his foot is planted, and by its vastness and splendor affords the highest example of the sublime. It reminds him

of his ephemeral character, and that the globe he tenants instead of being "Greatest in the kingdom of Heaven" is in reality one of the smallest in the empire of nature. Not only is such a view calculated to reveal the littleness of man, but also to give high and exalted ideas of the power of Him, at whose fiat they were launched into space—whose breath enkindled their perpetual fires, and whose hand, ever upholds, and directs in their various courses, through this universe.

The spacious firmament, in which a million of million of miles is as a grain of sand to the sun itself, is filled with a countless number of stars. On directing the eye to the celestial concave, the impression upon the mind is that of an incalculable number of stars being visible, this is, however an optical delusion—the deception arising from their twinkling and disorderly position in the sky. On the most favorable night, an ordinary eye will not perceive more than a thousand in our firmament; and including both hemispheres three thousand will be the outside number which a keen and experienced gaze can reach. But with the aid of a telescope, Herschel saw 50,000 within an hour. Of the milky way, Ovid wrote as the path leading to Olympus whose ground work is of stars." Milton likewise speaks of "That broad and ample road," whose dust is gold and pavement stars! These poetical conceptions become verities through the aid of the Telescope. This Zone has been found to be composed of an innumerable host of stars; some faint conception of which may be formed from the fact, that Herschel was led to the conclusion that in some parts of it no less than 50,000 were included in a Zone of two degrees in breadth which passed under his review in a single hours observation with a telescope of only 15 aperture. Yet this is but a specimen of countless combinations which are visible in other parts of the Heavens, and as rich in stars as the zone itself! A second of a degree fifty billions of miles from the earth, may be proved to be equal to 242,400,000 miles consequently at one hundred billions of miles distance, it becomes equal to 484,800,000 miles or up-

wards of 29,088,000,000 miles per minute, so that what appears as a minute of a degree is in fact 60,000,000,000 miles in diameter! Hence at the distance of four thousand billions of miles. All objects less than twenty four million of millions of miles in diameter are invisible; thus, while millions of stars may be seen with assisted vision, there are in the same extent of space, millions more which the eye can never reach, owing to their great distances, and comparative smallness. On this point Doctor Halley advances his Metaphysical paradox, viz: "That the number of fixed stars must be more than any finite number and some of them are at more than finite distances from each other" "A thought says Addison" far from being extravagant when it is remembered that the universe is the work of infinite power prompted by infinite goodness, and having an infinite space to exert itself in.

To measure the distance of these numerous orbs it is a task which has baffled the ablest men; and until our own day, the conclusion arrived at, was only a negative one, namely—that the nearest fixed star must at least be removed from us a certain space which requires the billions of our Arithmetic to express. It has been shown that the enormous interval between us and Uranus, is but a narrow chasm compared with the interval between the planet and the most contiguous of the stellar orbs! The usual method to ascertain the distance of a star; is to determine its annual parallax; even to a single second has been detected, supposing however, a parallax of one second to be perceptible—that by the rules of trigonometry would give a distance from us of more than nineteen billions of miles, but as there is no such quantity detectable, there is no star lying within that range—they all lie beyond it! Professor Bessel after repeated attempts by means of his Fraunhofer Heliometer, in 1834 succeeded in determining the annual parallax of the Star Cygno to be 0',3136 or somewhat less than  $\frac{1}{3}$  of a second which places it from the earth. At the distance of 657, 700 times the radius of the earths orbit, or nearly 62½ billions of miles. To aid the imagination in forming