THE BRITISH MONTHLIES.

What need of Faith, if all were visibly clear ? "Tis for the trial time that this was given. Though Clouds be thick, its sun is just as near, And Faith will find Him in the heart of Heaven.

'Tis oft on the last green ridge of war,

God takes His stand to aid us in our fight; He watched us while we rolled the tide afar, And beaten back, is near us in His might !

Under the wildest night the heaviest woe, When Earth looks desolate—Heaven dark with doom, Faith has a fire-flash of the heart to show The face of the Eternal in the gloom.

-Gerald Massey.

"On Comets." By Sir John F. W. Herschel, Bart.—The comet of Encke has revealed the remarkable fact that its successive revolutions are each a little shorter than the last. Biela's comet, in 1846, suddenly split into two distinct comets on the 13th of January, each with a head and coma and a small nucleus of its own. In 1852 they were seen again, about the same distance from one another. If ever the earth swallows up a comet, it will about the 30th of November, the day on which the earth passes the spot intersected by the orbit of Biela's comet. The number of comets whose return has been calculated, is 36,—four of which have periods of revolution from 70 to 80 years, and several from 3 to 7 years. Other comets are not periodical, wandering off into space in such directions—owing to perturbations and other causes—as to leave it a matter of doubt when they will return to our sun, or if ever.

The observations on the most recent comets show that an actual analysis of the cometic matter is effected by the sun's influence, thus showing that comets consist of at least two kinds of matter possessing very different properties. The tail of a comet consists of matter capable of reflecting the light of the sun, yet so rare that very small stars can be seen through it. This material substance of the tail is inconceivably rare and ethereal ; it is a vapour so delicate that a star shines through 90,000 miles of distance with undiminished lustre.

There must be less matter in the tail of a comet 90,000 miles through than in the puff of a steam engine which obscures the light of the sun. The nucleus of some comets consists of a minute, brilliant and possibly solid body. Yet this is not always the case, as in Biela's comet minute stars were seen through part of its head at least 80,000 miles in thickness. The tail is thrown out by evaporation of matter, and as the comet pursues its retrograde path this matter is again condensed. The recent history of comets proves the existence in nature of gravitating and levitating matter; in other words, of a repulsive force co-extensive with, but enormously more powerful, than the attractive force we call gravity. This force is especially shown in the formation of the tails of comets; its acknowledged existence opens a new field for physical research, at the same time it shows us that we