with Charles Bradlaugh; thus we see, war between science and priesteraft is continually going on, and the weakness of our opponents displays itself in their spasmodic struggles for the supremacy ending in concession. In the meantime, foremost in the van stands the stalwart figure of Charles Bradlaugh; abused, insulted, belied, "stormed at with shot and shell," he still shows a bold front to the enemy, and justly does he deserve our sympathy and help. To his friends and admirers I dedicate the following lines:—

### DARE TO HAVE A PURPOSE.

Tune-Moody and Sankey's Collection, No 7.

Faithful to his promise true, In form and presence grand, Defying all his foes can do, See our hero stand.

Hail! Hail to Bradlaugh, standing there alone, Who dares to have a purpose, and dares to make it known.

Free to the air our banners toss,
For justice boldly stand,
And brave the champions of the cross
By joining Bradlaugh's band.
Shout, huzza for Bradlaugh, standing there alone,
Who owns no god but Justice, and dares to make it known.

Priests and courtiers, great and small,
Who lord it o'er the land,
Now perched on high will surely fall,
When met by Bradlaugh's band.
Shout, huzza for Bradlaugh, who dares to stand alone;
Who owns no god but Justice, and dares to make it known.

With Watts and Aveling, Symes and Moss, And Saladin the grand, And gallant Foote and Ramsay, We'll shout for Bradlaugh's band. Hail! hail to Bradlaugh, he shall not stand alone We'll hold aloft his banner, and proudly make it known.

CHARLES J. RAE.

# Notes & Queries.

#### ANSWERS.

#### PLURALITY OF WORLDS.

In answer to query in your April number, "What position does science occupy with regard to the idea of a plurality of worlds, and what are the most recent authorities available?" with your permission I will state my position. Being an admirer of the scientists I am anxious to answer your correspondent, and tell him what they think of a question that is scouted with scorn by all the orthodox; because on the truth of the plurality of worlds becoming universally known their system or various systems or schemes that they have invented must fall to pieces. It is true the Bible is dead against us; but as many statements that have been made by the writers of that Book have been examined and found incorrect, or rather untrue, the statement made by it, or words to the effect that this world of ours is the only humanly inhabited one, may be examined as to the truth. In order that this paper may be within the limits allowed, your correspondent must grant that time and space are eternal, that space is filled with matter, and that the extent of that matter extends to eternal space in every direction. This can easily be demonstrated, but not in this answer. We find ourselves an odd number from our sun or stars there is nothing whatever about our world to show that it is more highly favoured than others. Human pride and human ignorance have given it a place it does not possess. In the economy of Nature other worlds are more highly favoured than we are; one of them (I am speaking of our own system at present) has perpetual spring; two of them have trains of moons attending them, besides other appendages that we are denied; two of them have more light and heat than we have; and any of them are not in want of anything we possess. The sun himself may be, and probably is, teeming with intelligent inhabitants, physically adapted for their existence. The idea that the sun is a ball of fire or burning hydrogen gas excludes the idea of being inhabited; but when we consider that the sun cannot, and does not, emit any heat to us unless his rays are received direct into our dense atmosphere, and that there is nothing but

our own atmosphere has as much to do in the production of heat and light as he has. The same may be said of the moon. We meet light here in every circumstance—in the water and out of it, in the earth, without light, heat, or atmosphere; but I do not think the moon is inhabitated—I think she is a dead moon at present. But that she may yet be provided with an atmosphere which will create life on her surface is probable. With our own planets the case is different. Take Venus or Mars, for instance, our nearest neighbours on either side. Our sister Venus has a striking family likeness to us, her appearance, her weight, her size, her atmosphere, her seasons, her moutains and seas, and everything that has been observed being exactly the same as ourselves, with the exception that her year is 224 days and she has no moon accompanying her. Mars is 5000 miles in diameter, he revolves within 40 minutes of the time that we do, his axis is inclined only a little more than ours, he possesses the same circumstances to maintain life that we do. This is still further confirmed by the two brilliant patches of ice and snow at his poles. Permanent markings and conspicuous diversity of colour clearly mark the presence of continents and seas on his surface. From his always ruddy appearance the soil would seem to consist of red sandstone. seas have a greenish tint, but owing to a preponderance of land we always see Mars a ruddy colour. When we walk abroad on a clear starlight night and direct our view to the aspect of the heavens, there are certain reflections which will present themselves. Are those resplendent globes the dwellings of intelligent beings? The telescope fails to tell us. But modern discovery has collected together a mass of facts connected with the positions and motion, the physical character and conditions forming a body of analogies the most convincing. All the planets roll in regulated periods round the sun; provisions in all respects similarsimilarly built, ventilated, warmed, illuminated and furnished, supplied with the same alternation of day and night, light and darkness, summer and winter; the same diversity of climates, the same agreeable distribution of land and water." The other stars being at such an immense distance from us, it is impossible to detect the worlds revolving round them, but as our sun differs little from the other stars the analogy or presumption is that all suns or stars have bodies revolving round them; that such bodies are provided with intelligent beings; and that such bodies extend to eternal space in every direction. Flammarion is the latest authority on this subject, but I have not seen his book.—An Agnostic. Greymouth, April, 1884.

eternal ice and snow on our high mountain tops,

although basking in the summer sun, he may not be the

burning body that we have been taught he is, but that

## Pealth Notes.

## TREATMENT OF BURNS.

What is wanted as a dressing for burns is something which will preserve the skin and hold it intact until the new one has formed; that is, usually less than one week. After experimenting with a largenumber of substances, I am convinced that there is nothing equal to what I have recommended several times, and which I here repeat—the covering of the burn with the mixture of equal parts of the white of egg and sweet oil thoroughly beaten together. If the skin is broken or displaced, it should be carefully brought to its original position, and if there is vesication, the scrum should be removed by puncturing with a fine needle and applying gentle pressure; then the parts should be freely covered with this mixture, which forms a kind of paste, and, to give greater security, strips of fine muslin or gauze may be laid over the wound. This should not be removed till the new cuticle has fully formed and become sufficiently firm to bear exposure to the air. If further vesication takes place under the dressing, the serum should again be removed, as also only pus, if it should form, and then more of the dressing should be applied. If, through motion or other cause, the wound becomes exposed and daily care is required to avoid this-more of the