

Mrs. Besant in the 'National Reformer,' says that Mr. Bradlaugh was a member of the Grand Lodge of Masons of England until the Prince of Wales was elected Grand Master, when he sent in his certificate and withdrew on the ground of the notoriously immoral character of the Prince. Yet Mr. Bradlaugh's atheistical opinions had been proclaimed openly throughout the kingdom for upwards of twenty years.

Frederic Harrison, the distinguished writer and Positivist, says that Henry George is trying to import into England the morals of a Californian bandit and mail robber. This is hardly correct, for Californian bandits do not, we suppose, justify their actions to their victims. If Mr. George is a bandit, he is one with a benevolent purpose, though we approve as little as Mr. Harrison does of some of his doctrines.

It is often announced from the pulpit how willingly the preacher is prepared to grant perfect freedom to all and sundry, but with just a little reservation that Freethinkers who are taking away their faith are not deserving of toleration. Cardinal Manning is prepared to grant civil rights to all but Atheists, who are to be excluded and held unto perdition. He might fortify himself with the famous proclamation of Marshal Soult, issued to his army in 1804:—"LIBERTY, EQUALITY, FRATERNITY!—To the Soldiers of the Army of the Rhine:—The citizen-soldiers will vote tomorrow whether Napoleon Bonaparte, Consul for life, shall be Emperor of France. It is not my intention to influence the opinion of any of my soldiers, but anyone voting "No" will be shot before the front of the regiment. *Vive la liberte!* SOULT, General." To the Cardinal, with the editor's compliments!

Sir William Fox, in a lecture on *Freethought versus Christianity* (New Zealand 'Times' May 16th), gave expression to a foul slander in the following words:—"Referring to the leaders of Freethought in the present day in England, he pointed out that the most popular was an advocate for that foul doctrine, destructive of all domestic happiness—free love. He and a female associate had published a book whose object was the spread of this doctrine, and for which they were eventually indicted, only escaping a long term of imprisonment by a technical flaw." He adds: "Men such as these could not come to an impartial consideration and investigation of the truth of the Scriptures, for every time they opened the Book they must receive a slap in the face." This is another illustration of the recklessness and untruthfulness of Christians in dealing with their opponents. Mr. Bradlaugh and Mrs. Besant are both the most determined opponents of everything savouring of free love. The Malthusian work for which they were indicted, so far from encouraging free love, is directed against it. Chief Justice Cockburn and the jury who tried the case, in express terms acquitted both publishers of impure or unworthy motive. But it suited Sir William Fox to utter a falsehood and keep back the truth. As for the Scriptures giving free love a slap in the face, the Book bristles with precious examples of "righteous" characters, whose loves were so licentious and gross and "free" that it is quite sufficient if we refer to the fact, without giving particulars, to excite the loathing and detestation of all pure minds.

Our contributor "Agnostic" thinks some notice is due from us of certain spiritualistic manifestations reported in the 'Liberal,' and vouched for by a long array of names. If "Agnostic" reflects however for a moment he will see that the data necessary to enable us to criticise the phenomena are wanting. Let us give an illustration. The heir to the Imperial throne of Austria lately attended a seance in his own house, the conditions resembling those of Sydney—that is, in both instances the "spirit" passed in through a door provided with curtains which met in the centre. The archduke applied a test in the shape of a door which, on a spring being touched, closed and fastened itself securely. The "spirit" came into the room, and after a display of its ethereal qualifications, made for the curtained door, but found an obstacle in the secret door of wood which barred the way. The "spirit" struggled to force the barrier, while the spectators roared with laughter, and at length the "spirit," finding its efforts to escape fruitless, changed itself into the medium who was supposed to be in a trance in another room. Now, the reply of the believer of course will be that one case of fraud proves nothing, and that the appearance of the Sydney spirit was genuine; while the sceptic may rejoin that there was no secret door to put the

matter to the proof. But the onus is not on us to explain the phenomena until a serious attempt be made to find a scientific basis for spiritualism. When this has been discovered, analysis, qualitative as well as quantitative, will determine the elementary facts. And finally, let us say that as we have never come across a disembodied spirit, we prefer to remain an agnostic in this respect until we have received either illumination or inspiration.

Science Notes.

Cold diminishes the conducting power of nerves for nerve force, whereas it increases the conducting power for electricity, of solids or fluids. The crushing of a nerve, or tying it tight, and afterwards relaxing it, will interfere with future passage of the nerve current, whereas bruising will have no effect upon the metal wire. Nerve force hence, it is clear, differs from electrical force, although it would appear to be correlated to it, in the same way that it may be said to be correlated to chemical force, with the heat developed in the muscle, and even with the peculiar molecular motions which produce muscular contraction and all its physical and mechanical consequences.—'Science Monthly.'

M. Miquel, who is one of the leading authorities on the subject of air germs, has recently conducted experiments at the Montsouris Laboratory which prove that all gaseous antiseptics are almost useless. Dr. Landur long ago maintained the inefficiency of the vapour from chloride of lime, phenol, or perfumes, to kill germs, and M. Miquel has demonstrated the correctness of his views. He finds that the vapours of chlorine, bromine, iodine, and chloroform take several weeks to kill the microbes, and that they do not act at all unless present in such quantity as to render the air irrespirable. Consequently, so long as the air is breathable it may contain living germs. M. Miquel considers mercury to be the most practically useful antiseptic known.

At a meeting of the Royal Society of Edinburgh, on January 21st, Mr John Atkin read notes on the recent red sunsets. There were two theories regarding them. One was that they were due to an overabundance of dust in the air—meteoric or volcanic. Mr. Proctor held that the dust was meteoric, and most other people that it was volcanic. He (Mr. Atkin) thought they had a ready means of determining whether the phenomenon was due to the watery vapour or dust. Watery vapour acted as an absorbent, and the light of the sun in passing through it had certain rays destroyed; but, if the colour was produced by dust, it would act as a sifting agent, and would not destroy the rays. If it were dust, then, they ought to have somewhere in the sky the complementary colours to the brilliant reds they found in sunsets. He thought they had those complementary colours. If they had examined the sky overhead, they would have found that the blues were very deep and the greens more brilliant than any of them had ever seen before. These blues and greens were complementary to the reds. The rays, therefore, had not been destroyed, but reflected by dust; and for that reason it appeared to him that dust in the air was the cause of the fine sunsets, and not watery vapour.

The Liverpool Post states that a discovery has recently been made in electric lighting which, it is hoped by the patentees, will solve the question how to bring the electric light into operation for domestic use. It has been found possible, it is said, to produce the light without the aid either of engines or dynamos. All that is required are merely the ordinary metals and carbons and a peculiar kind of acid. These are put into an ordinary cell, and immediately the acid is poured in and the continuity established the electric force begins to develop. Experiments have recently been made by Mr. E. H. Thompson, the well known electrical engineer, by which a 20-candle light has been kept continuously going by the electric current being generated in this way; and the experiments have been pronounced a decided success by all who have witnessed them. By this process no accumulators are required, and the batteries can be so made as to supply one or a hundred more lights, according to the number required. The new light (which is called the Aemo), it is asserted, will be admirably suited for country residences, yachts, &c., and can, it is estimated, be produced at a price about the same as that of gas, with very superior illuminating power, while the original expense of providing 20 lamps of 20-candle power each is calculated at about £50.