lectures partake of the nature of a penny reading, or Music Hall entertainment.

In the current number of the Nineteenth Century, however, his article is torn to shreds by two writers, Mr. Michael E. Sadler (Secretary of the Oxford University Extension Movement), and Mrs. James Stuart, who has been intimately associated with the Movement ever since its first inception, now some 21 years ago. Mr. Sadler begins, "In written inscriptions, said Dr. Johnson, a man is not upon his oath; and his dictum is true of those who throw stones as of those who carve them." He then refers to the careful examination by the Gresham University Com-missioners, of both friends and foes of University Extension; and who arrived at a unanimous vote in force of it. A record of 21 wears' work is sufficient favour of it. A record of 21 years' work is sufficient to prove whether it is a cheap smattering masquerade. Further, the Education Department gives a high place to its certificates, and advises pupil teachers to attend the lectures. Foreign experts have critically examined its working, and recognise that its teaching is of the University type. The authorities of our ancient Universities realise its importance, and have given some of their best men to its aid: London has also taken it up vigorously; and many Continental Universities have learnt its advantages; so too have our Colonies, and also America. In short, it goes far to realise the ideal of a National University, which should be co-extensive with the nation.

should be co-extensive with the nation. In the article by Mrs. James Stuart, Mr. Charles Whibley gets *quid pro quo*. She is his match in the choice of literary weapons. "He erects," she says, "a supposititious popinjay, a disordered figure of the imagination; and proceeds to hurl literary brickbats at it." We have no space to refer more at length to these interesting articles; but Nurses and others could spend a very agreeable half-hour in reading the Farce (so-called) and Facts of University Extension, remembering that the age has gone by for ever when remembering that the age has gone by for ever when society could be divided into two classes-the ignorant and the learned. With the enormous strides knowledge has taken, no one can hope to probe the vast depths of any subject. In short, as Lord Dufferin remarked in his address before the Library Association in Belfast last week, the ignorance of each one of us is only a matter of degree-that's all.

— Science Motes. —

RIFT VALLEYS.

SINCE the observation at Nice, by M. Javalle, a month ago, of the luminous projections on the planet Mars, much speculation has been wasted, and many conjectures made, as to the probable cause. Naturally that which has most delighted the popular imagination has been the suggestion, that beacon fires have been lighted by the Martians, as signals to the inhabitants of the earth. It will of course be remembered, that a similar suggestion was made with regard to the double "canals" first observed by Schiaparelli on the surface of Mars many years ago. The artificial origin of these dark methods which artificial origin of these dark patches, which are certainly of very much greater length than width, is of course not proved, nor, having regard to the dimensions observed, can it be regarded as probable. It is equally unknown whether the dark

shade of the canals is due to the fact that they are filled with water, or is merely a sign that they are portions of the surface depressed below the general level of the ground. Any new theory of their origin and significance may therefore be welcomed, and the suggestion made by Dr. J. Walter Gregory at the Royal Geographical Society, and again at the recent meeting of the British Association, is of special interest, inasmuch as he points out the existence of a counterpart on our own globe. Assuming, therefore, that the Martians have appliances and powers of observation equal to our own, they may have often freely discussed the possibility, that our "canal" is part of an en-deavour to communicate with them.

It may be remembered that Dr. Gregory was attached to an ill-fated expedition, which started for the interior of Africa last year, and collapsed almost before the coast had been left behind. Left alone by the retirement of his European colleagues, Dr. Gregory fitted out a small force of his own, and succeeded in reaching and partially exploring the basin of Lake Rudolph, before being obliged to return. He has pointed out that the whole region forms a part of a great "rift valley." Starting from the cleft-like valley of the Jordan, the Sea of Galilee, and the Dead Sea, it passes in a south-westerly direction through the Red Sea, and under the Abyssinian highlands to Lake Rudolph, and, dividing into two parts, is prolonged southwards through Lake Tanganyika and other great lakes. Much of this enormous valley, which is approxi-mately straight, and over two thousand miles long, lies below the level of the sea, and if viewed from Mars, it would present many of the features which we observe in the canals of Schiaparelli.

The origin of this rift valley is strange ; it seems to be, in a measure, the converse of a mountain chain, and nothing analogous has yet been found except in the wonderful Yosemite valley, which is, however, on a much smaller scale. It is well known that mountain chains are lines of weakness where the contracting crust of the earth, forced to accommodate itself to the shrunken kernel beneath, is cracked across, and pushed up as a ridge, the oldest rocks occurring at the highest points owing to denudation. In rift valleys, two enormous more or less parallel cracks, developed in the crust, admit of the sinking of the isolated strip between them, the general surrounding level re-maining unaltered. As a result, thenewest beds are found at the lowest point in the centre of the collifound at the lowest point in the centre of the valley. The vertical throw of the faults, is thousands of feet in places, and, whether filled with water or not, the colossal rift must appear darker than the surrounding elevated plains.

Motes on Art.

THREE SURREY CHURCHES AND MODERN FRESCOES.

THE holiday wanderings are not yet over-a fact which is suggested by the heading of these notes. Very different is the subject selected for this week from the little hospital of S. Mary, Chichester, which formed the basis of the last paper. On the crown of the hill at Chilworth, near Guild-ford, well known to tourists, stands the little restored



