treatment his eloquent efforts received at the reporter's hands sought redress to his wounded vanity by arraigning him before the House. The culprit of course had to report his own indictment, and in so doing took the utmost pains to print the hon. gentleman's remarks verbatim et literatim in all their beauty unadorned, instead of carefully doctoring them as aforetime. The opening sentence will serve as a specimen of the speech : "Mr. Speaker, I rise to a privilege of order." The rest may be found by curious readers in the official report. Thenceforth the reporter was allowed to pursue the even tenor of his way unchallenged. Much more modest, and safer withal, was the course taken by a fellow-member of the one just mentioned, who preserved unbroken silence whilst a matter affecting his own constituency was being discussed, and then at the close of the debate slipped some fragmentary notes into the reporter's hand with the request that he would try and make him up a little speech out of them, as he (the hon. member) though old in years, "was a young hand at the bellows, and had not had courage to get on his feet." The request was of course complied with, and the worthy man had half a column credited to him in the report of that day's proceedings.

This last incident well illustrates the principle of official reporting, and explains its necessity. The chief importance of a speech in Parliament now lies not in the fact that it is delivered, but in the fact that it is read in the report by thousands of people, and this being so, the reporters arc, and must continue to be, very important officials of the Houses of Parliament.

Ottawa, January, 1884. JAN

JAMES MACDONALD OXLEY.

ON THE LATE REMARKABLE SUNSETS.

THE peculiarly striking sunset effects which have been observed during the past few months, have given rise to a good deal of inquiry, and in the following I desire to draw attention to certain circumstances which seem to connect this phenomenal appearance with the remarkable outburst of volcanic activity on the island of Krakatowa in the Straits of Sunda, the data on which the connection is based being taken from many letters in *Nature*, and from *Symons' Monthly Meterological Magazine*.

The Island of Krakatowa lies nearly opposite the Straits of Sunda, which separate the islands of Sumatra and Java; it is about five miles long by three broad, and its mountains rise to a height of between 2,000 and 3,000 feet above the level of the sea, covered to the summit with luxurious tropical vegetation. On May 20th the mountain became an active volcano and the captain of a passing vessel reports passing through an "apparently illimitable cloud of drifting pumice" when ten miles off the island. This eruption was of itself sufficient to reduce the island to a desert, and a party from Batavia who subsequently visited the island and whose report is published in *Nature*, found "the front of the volcano all wrecked, nay completely buried under pumice dust, which, when the sun shone upon it, became of a yellowish grey colour, while thick masses of condensed vapour accompanied by incessant fulminations boiled up from behind the bare and gently sloping dunes * * * and from time to time immense funnels became visible, leaning outward, and into these many of the incessantly changing ravelled wreaths of smoke were sucked. The rest maintained their original form to a height of several thousand feet and then they slowly drifted eastward (*i. e.* were left behind by the rotating earth) and spreading out into mist discharged their ashes downwards in his black streaks like the dark fringes of rain cloud seen on the horizon." This was the state of affairs between the first outbreak and August 26th, the volcano continuing to discharge vertically incalculable quantities of the finest pumice dust, on this day an eruption took place the magnitude of which it lofty mountain has which the mind can hardly grasp. The island with its lofty mountain has been literally blown away, and a tidal wave estimated at ninety-eight feet in height swept over the low lands of the adjoining islands, causing the death death of thousands and ruining property to an enormous extent. Mr. Symons quotes as an instance of its power, "at Lelock Betony a Government steamer was swept three miles inland."

On September 2nd, just a week after the great eruption, at Trinidad, W. I., the sun is reported as looking like a blue globe, and after sunset the sky became of so bright a red that it was thought there must be a fire, from India and Ceylon, and Dr. Meldrum, F.R.S., writes of unusual chromatic effects and green suns having been observed at Mauritius, Rodigues and the Seychelles, and suggests that they are due to the presence of volcanic dust in the upper strata of the atmosphere.

There are reports from many other places, Australia and New Zealand included, of remarkable sunsets and all subsequent to the date of the final

eruption. The collection and examination of all these reports will doubtless be undertaken by some physicist.

It would of course be premature to state positively that the phenomena observed here in Canada are due to the same cause, but it seems fairly probable that it is so and that the mass of dust spread itself first and most densely over the region of the Tropics, travelling (or rather seeming to travel, by being left behind by the earth in its rotation) eastwards, and finally being carried north and south in the atmospheric circulation until here in Canada it manifests its presence by the unusual brilliance of the sunsets and that peculiar afterglow which has been observed more than an hour after the sun was below the horizon. ANDREW R. GORDON.

Since writing the above I have seen in *Nature* a report of a paper by Mr. R. H. Scott, Secretary of the British Meteorological Service, in which he traces the atmospheric waves generated by the eruption; he finds that the wave travelled with a velocity nearly that of sound, the estimated velocity being rather over 700 miles per hour. A. R. G.

MOTHER-IN-LAW.

"TRUTH," the most read and most quoted of English periodicals is always on the track of "social sensation." It has a "puzzle department," as all its readers well know, which, for the most part, does not differ from similar features in other publications, but occasionally some popular idea is strikingly evoked by the nature of the puzzles propounded. In one of its November numbers a prize was offered for the best definition of a mother-in-law, which elicited a numerous competition. Hundreds sent in their definitions, all tinged more or less with the feeling which the puzzle suggested. The "puzzle editor" has printed over a page of the competitors' efforts, which he describes as "assorted specimens—good and otherwise."

Most of these are uncomplimentary. A mother-in-law is smartly defined by the different cynics as "the wet blanket of matrimony;" "the leader of the opposition ;" "the inspector of the union ;" "a checkmater ;" "the brimstone of the match ;" "the Government whip ;" "the home rule party;" "a discordant accompaniment to 'Home, sweet home;'" "a family jar;" "the policeman of the hearth --- being always ready to take one up in a disagreeable manner; "" a mentor or tormentor;" "dear to one that's dear to you, but dear at any price;" "a wedding present of a watch ;" "the ma(r) to matrimony," etc. These, of course, are only a few selected for their pungency. That many have very strong feellings in reference to the subject-matter and have felt the "iron heel" is manifest from an occasional definition which, ignoring every merit except brevity, hurls forth a malediction fresh from the heart. Of these are "a beastly nuisance;" "a thorn in the flesh ;" "domestic dynamite," etc. One observes, with questionable charity, of this much maligned relative that she is "not so bad as she might be, seeing she has no character to lose."

But she has her champions, too. One styles her feelingly, "one whose mission in life is to bear the blame of her daughter's shortcomings and the burden of her son-in-law's acerbities: to have a purse at his command and a cellar to his taste: to be fawned upon in his adversity and scorned in his prosperity." Others say she is "a great, but unappreciated blessing;" "oil on troubled waters;" "a help in sickness, an unfailing friend." And the depreciator who thinks her "an example of the proverb, 'distance lends enchantment to the view,'" is boldly contradicted by a gallant friend who calls her "an angel *in the house*."

"A goose that lays a golden egg" is an equivocal definition. So is "an unmitigated blessing—when well treated." For it is not every one that understands the treatment of a mother-in-law. We have heard of a man who kept two in perennial good-humour and attributed his success to his policy of making his successive wives jealous of their mothers' influence instead of making the mothers jealous for their daughters' portion. He generously credited the mothers with all the virtues inherited by their daughters, and their own virtues to boot—and, indeed, the old ladies seemed dearer, as well as *cheaper* than the young ladies to this highly endowed son-in-law. This man would be a hero to one of the competitors, "J. McGrigor Allan," who instead of adopting the epigrammatic diffuses this definition into an essay, and who exclaims:

this demittion into an essay, and who exclaims : "How great is he who governs wife and wife's mother. Greater than Milton—he could not govern his wife. I should like to know this mute, inglorious Cromwell. He who lives happily with a mother-in-law is philosopher, saint or slave. Zimmerman's mother-in-law—one in a thousand—" contributed not a little to increase his felicity." Too good a woman to exercise his patience, she failed in the mother-in-law's mission. Some men rise above this vulgar prejudice—even love their mother-in-law too well. One recently eloped with his wife's mother ! Congreve's "Lady Pliant," making love to her daughter's suitor, has her modern counterpart. Fine subject for female fiction ! —J. McGREGOR ALLAN."