

generated, but no sooner have the surfaces cooled than the water comes into close contact with them and a vast volume of steam is evolved explosively and blown off into the deep and cold water of the sea, where it is condensed and thus a blow of the most tremendous sort is given at the volcanic focus, and being transferred outwardly in all directions is transmitted as the earthquake shock.

Dr. Archibald Geikie presents his ideas in this shape: "Various conceivable causes may at different times, and under different conditions, communicate a shock to the subterranean regions. Such are the sudden flashing into steam of water in the spheroidal state, the sudden condensation of steam, the explosions of a volcanic orifice, the falling in of the roof of a subterranean cavity, or the sudden snap of deep-seated rocks subjected to prolonged and intense strain."

The old notion of a boiling ocean filling the interior of the earth and bursting through thinner portions of its crust now and then, is entirely given up as being inconsistent with the rigidity that astronomers have proved the earth to possess. But though the earth must be mainly solid it is yet believed to be of a honeycombed structure, and that the cavities contain in many places lakes of molten rock between which and the surface volcanoes are orifices of communication. Into these cavities water sinking down through crevices from the ocean or the land must be constantly finding its way; and the steam thus generated exerts such enormous pressure as to force the molten matter to the surface, itself mingling and escaping along with it. When a mass of water is suddenly precipitated into a hot cavern, the explosion of steam will cause an earthquake concussion, and where there is no vent may be sufficient to convulse and rend the superincumbent strata.

The Japanese have entered with great spirit into the study of these phenomena. Their neighbours the Chinese, however, seem to need a little enlightenment on this subject.

The Viceroy of Yunnan a short time since reported to the Empress of China the occurrence of a violent earthquake at the town of Puerh, and in doing so made the humble confession that the visitation was no doubt a penalty which had been inflicted by heaven in consequence of his own imperfections and the incompetency of his own staff.

The contrite official promised that the lesson should be taken to heart.

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## PERSONAL MENTION.

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We are sorry to be obliged to report an unusually long list of patients under the care of Dr. Ogden.

Mr. Robert Davy is yet suffering from fever and chills, and although able to be about, is far from well.

Mrs. M. Garvin has just past the turning point of a severe attack of typhoid fever, and we are glad to say, has passed it favorably.

Mrs. R. Harmer, too, has been very ill with some sort of malarial fever, but is now out of danger, and progressing very rapidly towards renewed health and strength.

Mrs. J. B. Harris is also under the doctor's care, the trouble being some form of fever.

Mr. W. E. H. Massey, who is on a visit to friends

in Boston, was taken seriously ill while at Worcester, but is better again and expected home in time for Thanksgiving.

The absence of our business manager, and press of work in the office, must be our apology for any deficiency in our November number.

We are expecting contributions from several writers for our December issue; among the rest, from Mrs. Livermore, the talented lecturer. We trust to make our Christmas number the best yet issued.

The band is regularly engaged at the Metropolitan rink for the winter. They have added several new pieces to their list, the Fairy Waltz, by Crowe, being one of the best.

Superintendent Johnston desires to intimate to the person who appropriated his bridle and reins the other night, that if he is willing to run the risk he had better come back for the remainder of the harness.

When a man, particularly a young man, is called upon to set out for "that bourne from whence no traveller returns," he is usually far from being blithe on the occasion. But then on the other hand when a man, particularly a young man, sets out in the direction of a bourne from which he never *wants* to return; a bourne which is to be to him the happiest he has ever known; the bourne of his life, he should certainly, when he is successful in attaining it, be blithe indeed. By perusing our "Marriage Column" it will be discovered that we are trying to be witty, and have got ourselves into a snarl as usual, when we attempt anything in that line. Our Matrimonial Editor being absent, however, we have been asked to throw ourselves into the hymeneal gap and this is the way we are projecting ourselves. We will now call on the band. Of course the band is always ready. They were more than ready the other evening when they called around at 62 Muter St. to serenade the happy couple who have lately erected there the altar of their home. They were ready because Mr. Blythe is one of the most popular men in the Works, and has won one of the most charming girls within the sound of Niagara. But they felt that one thing was wanting to complete their happiness, namely, the music of the band. And so the band went and were invited in and had a royal time, compliments and good wishes being the order of the evening. The TRIP HAMMER joins most heartily in both. Like the celebrated John Anderson (a countryman of Mr. Blythe's, by the way,) and his "guid auld wife," we trust they may "climb life's hill thegither," in the midst of comfort and prosperity and that they may "sleep thegither at the fit" at last after a long and happy companionship.

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## NOTICES.

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### BIRTH.

KELLY.—At 50 Mitchell Avenue, on Monday, Nov. 2nd, the wife of John Kelly, Bandmaster Massey Band, of a son.

### MARRIAGE.

BLYTHE-BOURNE.—On Oct. 1st, at the residence of the bridegroom, 62 Muter St., by Rev. Mr. Wallace, of Denison Avenue Presbyterian Church, Mr. John Blythe, Machinist, to Miss Annie Bourne, eldest daughter of Joseph Bourne, Esq., of Niagara Falls.