ABSTRACT.

The author exhibited a part of a roll of a Samaritan Pentateuch, brought by him from Nablous, the ancient Shechem. He then read a paper briefly narrating the history of the Kingdom of Israel or Samaria; discussing the question of the probable origin of the "Samaritans" who were in occupation of the country at the time of the return of the Jews from Babylon, tracing the history of the Samaritan nation under the Roman Empire and through the middle ages; and mentioning the accounts contained in the Samaritan chronicles. He then referred to the bringing of the Samaritan Pentateuch to Europe, and the controversy which raged as to its supposed superiority to the Jewish form; but stated that it is now all but universally believed that the latter represents the original text. After describing the great MS. at Nablous, which he had himself examined, he discussed the question of the way in which the Samaritans had become possessed of the Pentateuch, maintaining that the more probable view was that it had been brought to them by Manasseh, a Jewish Priest expelled from Jerusalem by Nehemiah. He then mentioned more in detail some of the points in which the Samaritan differs from the Jewish version, especially the shape of the letters, and the words added by the Samaritan to Exodus xx., 18. After speaking of the rolls now at St. Petersburg and Cambridge, he gave a full account of the Samaritan Passover, Nablous being the only place in the world where the Passover, as described in the Book of Exodus, is still celebrated.

The Rev. Mr. Van Staveren examined the fragment and expressed himself highly pleased with it and the author's remarks.

5. "The Law of Gavelkind," by Coleman Phillips. (*Transactions*, p. 518.)

6. Dr. Hector exhibited the original curve drawn by the large barograph at the Melbourne Observatory on the 27th and 28th of August last, which have very courteously been sent to him by Professor Ellery. This curve shows abnormal oscillations similar to those which he (Dr. Hector) had pointed out at previous meetings of the Society on 29th August and 26th September last as having been produced simultaneously by the barographs at Wellington and Dunedin. By expressing these curves in the same local time it was found that the oscillations occurred about 90 minutes earlier at Melbourne than in New Zealand. If, as was very probable, these remarkable oscillations were connected with the great eruption in Sunda Straits, by measuring the distance along great circles the actual difference in the time would be reduced to about 75 minutes, which would give for the velocity of the transmission of these curious atmospheric waves 600 miles an hour or 1,000 feet per second, or nearly the velocity of sound.

This seems to point to the dispersal of waves through a medium very different from anything we are acquainted with, and suggests the probability of the existence of a somewhat definite limit in altitude to the terrestrial atmosphere with which we are familiar, and in which all our winds and slow moving cyclonic impulses are transmitted. On the occasion of a great outburst of force from the earth's surface, such as the late Java eruption, it is probable that a volume of gaseous matter may be projected through this denser part of the atmospheric envelope, and being there condensed under very different conditions of temperature and pressure, gives rise to pulsations that traverse the upper and more attenuated medium.

Dr. Hector mentioned that the extraordinary coloured glow in the sky which has been visible every clear night and morning since the first week in September, seemed to support this view by proving the existence at an enormous altitude of some vapourous matter capable of refracting the sun's light into its prismatic components. He had observed, to

his surprise, on several evenings, that through rifts in the vapour masses, crimsoned in the ordinary manner by the sun after it had set, a back-ground of intense greenish blue was visible. After all the ordinary sun-set tints had faded, this blue changed to orange pink, and graduated off through the various prismatic tints to a magnificent crimson spanning over what appeared to be cloudless sky, considerably to the eastward of the meridian. This spectacle gradually faded with the advance of nightfall, but lasted about one hour and twenty minutes after the ordinary twilight tints had faded. This shows that the vapour causing the tints must have an enormous and very unusual altitude. A similar phenomenon in the evening sky was observed in New Zealand about sixteen years since, but the exact date has not been ascertained. The glow of September last still continues, but it is drawing now towards the pole, as if the unusual height of the refracting medium was extending the antarctic twilight tint even to our latitudes.

With the hint we get from the self-recording barometers it is very difficult to avoid connecting this curious phenomenon which has been seen all over Australia and New Zealand, with the Sunda eruption.*

Dr. Hector also read a letter from Major Scannell, Inspector A. C., stationed at Taupo, giving an account of marked oscillation in the level of Taupo Lake, amounting to a vertical rise and fall of 18 inches, which was repeated several times at intervals of 20 minutes at about noon on the same date that the tidal disturbance was felt on the coast, viz., on 28th August; affording clear evidence of the passing of waves through the lake, due to a motion of the land, probably produced by the unusual periods of the tidal inequalities of pressure on either coast.

Mr. Higginson, C.E., reminded the meeting that in a paper read before this Society on 2nd February, 1878,† he had described similar disturbances of Lake Wakatipu, which were observed by him on 17th November, 1877.

7. "Notes on the Colour of Tellerium," by W. Skey.

ANNUAL MEETING. 13*th February*, 1884.

Dr. Buller, President, in the chair.

New Members.—W. F. Wheeler, F. W. Pennefather, — Richmond, and Rev. H. van Staveren.

ABSTRACT OF REPORT FOR 1883.

During the past year ten general meetings and a conversazione were held. The attendance at the meetings was larger than usual. Six papers had been read on Geological subjects, 6 on Zoology, 13 on Botany, 2 on Chemistry, and 13 on Miscellaneous subjects. There were now 247 members on the roll, 15 having been added during the year. 75 volumes had been added to the library. Extensive alterations were being made in the library of the New Zealand Institute, and the Museum authorities had converted

*In "Nature," October 25th, No. 730, p. 627, received to-day, I find that a similar disturbance was traced by the barograph, at Mauritius, at the same Greenwich date as at Melbourne, and as these two stations are at the same distance from Sunda, in nearly opposite directions, there can be no doubt but that the disturbance was due to the propagation of a circular wave in the upper atmosphere having the velocity already stated. J. Hector, 20th December, 1883.

† Trans. N.Z. Inst., vol. x., p. 180.