

2. "Contributions to a Flora of the Nelson Provincial District," by T. F. Cheeseman, F.L.S. (*Transactions*, p. 301).

3. "Revision of the New Zealand *Cossonida*, with Descriptions of new Species," by Captain T. Broun, M.E.S. (Reserved for separate publication).

4. "Recent Advances in Photography," by J. Martin, F.G.S."

ABSTRACT.

In this paper (which was fully illustrated with experiments) the author traced the progress of photography up to the present time, giving a full account of the new platinum process, by which pictures that are not affected by heat, acids, or light, can be readily produced, and which resemble mezzotint engravings rather than photographs.

SIXTH MEETING. 15th November, 1881.

T. Peacock, President, in the chair.

New Members.—Captain Filder, H. N. Garland, W. H. Grace, J. Haslett, W. C. Kensington, Rev. D. W. Runciman, G. W. Williams, H. S. Smith.

1. "New Species of *Cerambycidae*," by Captain T. Broun. (Reserved for separate publication).

2. "Notice of the Occurrence of the Australian Roller (*Eurystomus pacificus*) in New Zealand," by T. F. Cheeseman, F.L.S. (*Transactions*, p. 265).

3. "Notes on various Subjects," by James Baber, C.E.

Passiflora tetrandra.

On allotment 86, East Waiuku, the property of Mr. Marshall, three years ago, I was passing a specimen of this climber so singular that I stopped to sketch and measure it.

Attached to a branch of a small taua tree, about 18 inches diameter at its butt, and at a height which I guessed to be 35 feet, depended a vine which reached the ground, and had a diameter of $3\frac{1}{2}$ inches. On the ground, like a rope cable, was spread a coil and a half of the plant. The coil was circular and its diameter 12 feet. By multiplying the diameter by $3\frac{1}{7}$, the length of the plant was 56 feet 6 inches lying on the ground, while the distance from the ground to the branch of attachment was not more than 35 feet; in other words, nearly two-thirds of the round stem of the vine were on the ground.

How came the plant to grow in this singular shape? Probably the vine grew up the stem of the taua, formed a firm attachment to the branch from which it still hangs, the branch bore it out into the air, having little prehensile power its weight caused it to leave the stem by which it had climbed. Borne further out horizontally by the growth of the branch, but not higher, the growth of the stem of the vine, as formed by the crown of leaves above,

had to deposit itself on the ground, and the circle was the most easy shape it could assume. If this supposition be correct, this *Passiflora* affords an example of a plant availing itself of gravitation to accommodate its growth.

The Centipede.

Until I saw the contrary, I was not aware that this insect had any power of progression except by the use of its many legs.

One evening I found a centipede climbing the wall of an old room, it was of a yellowish-brown colour, about five inches long, and very thin. Brushing it down, I was about to crush it under my boot, when the creature clapt its head to its tail, formed a circle, and sprang a distance of 3 feet. In three bounds it cleared 10 feet, and escaped between floor and skirting before I could overtake it.

Artesian Wells inverted.

Water in an artesian well comes to the surface when an aperture is provided through a water-tight stratum which has kept it down.

At the request of two Highway Boards, I inverted this action, sunk through a water-tight stratum, and found below a porous one, which has provided drainage for the heaviest rainfalls. This has been done at Onehunga and Epsom, both volcanic districts. Depth of wells, 8 feet, 20 feet, and 34 feet, filled to the top with large stones.

The Weka.

It is refreshing to find that some of our indigenous birds thrive under the altered circumstances produced by civilization. The weka or Maori hen is an instance; twenty years ago, it was a very rare bird in the wooded districts north of Waikato. In the clearings of Waiuku and Pukekoke its evening cries show that though seldom seen the bird is plentiful. Twice I have lately heard one at Remuera. I do not know the habits of the bird, but it seems to follow settlement.

4. "On the Percentage of Citric Acid obtained from Limes grown in Auckland and Tahiti," by J. A. Pond. (*Transactions*, p. 405).

5. "Translation of the Maori Tradition of Maui," by F. E. Maning.

6. "On the Shore of the Unknown," by E. A. Mackechnie.

ANNUAL GENERAL MEETING. 21st February, 1882.

T. Peacock, President, in the chair.

The minutes of the last general meeting were read and confirmed.

ABSTRACT OF ANNUAL REPORT.

The number of members now on the the roll of the Society is 302, 48 new members having been elected, while 3 members have died, and 20 members have withdrawn;