



ROTOMAHANA LAKE, WITH THE PINK TERRACE ON THE LEFT AND MT. TARAWERA IN THE DISTANCE.

A NEW ZEALAND VESUVIUS.

BY G. R. FALCONER.

FOR many years no visitor touring through New Zealand ever thought of leaving that interesting section of the British Empire without first making a pilgrimage to the Terraces of the Hot Lake District, about 180 miles distant from the town of Auckland. Although the journey was arduous at parts, all trouble was adequately repaid when once the little village of Wairoa, on the shores of Lake Tarawera, was reached. As the tourist glided along this magnificent expanse of water, bounded on each side by majestic mountains thickly clad with trees, scrub, ferns, and a rich wealth of exotic plants of various kinds, with the Holy Mountain of Tarawera, from which the lake takes its name, rearing its mighty crest three thousand six hundred feet into the air on the south-eastern side, he could not fail to be impressed with the solemn grandeur of the scene, unsurpassed for natural beauty in any other part of the world.

At Kaiwaka creek, ten miles from Wairoa, the boat was left, and the visitor wended his way to the White Terrace of Rotomahana. Measuring about twenty-five feet from side to side, there rose up a series of twenty platforms in the form of a gigantic stairway. Each terrace was perfectly horizontal and of dazzling whiteness. The top step was vertically eighty feet above the base, and was set three hundred feet back. From every platform bubbled copious clouds of steam to the accompaniment of subdued rumblings from a great cauldron that

seethed and boiled below. Viewed from the front this colossal wonder of Nature was most impressive.

A remarkable regularity of formation gave a unique appearance to this great series of steps. A stream of boiling water continually flowed from the geyser, and as it fell slowly from tier to tier the silicates with which it was heavily charged became deposited, while on its exposure to the air the water crystallised into wonderful lacework designs of infinite variety and of such dazzling whiteness and purity that from a distance the terraces appeared as if constructed of snow,

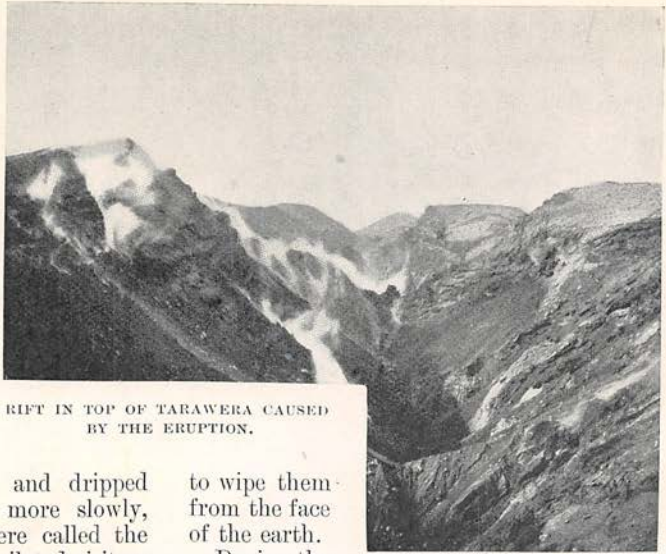


THE DESTRUCTION OF THE TERRACES.

and the exquisite tracery of their decoration seemed to be surely the handiwork of King Frost.

At Otukapuarangi, not very far from Rotomahana, was another terrace, constructed in precisely the same manner, only in this case, owing to the presence of some coloured substances in the silicious waters flowing from the geysers, the deposits were of a delicate pink hue—hence the name, "The Pink Terrace." The waters of this geyser, however, were much more highly charged with silicates and dripped down over the tiers much more slowly, forming huge basins which were called the "Coffee Cups." Maori women piloted visitors around these wonders of Nature and exacted a fee from every person for the privilege of exploring their beauties.

But, it may be asked, why is this brief description of these strange terraces written in the past tense? Unfortunately New Zealand no longer owns this unique spectacle. The Terraces are no more. As will be readily understood, the presence of hot springs and geysers in such profusion testifies to violent volcanic activity. The very agencies of Nature which originally built up such curious formations served, in turn,



RIFT IN TOP OF TARAWERA CAUSED BY THE ERUPTION.

to wipe them from the face of the earth.

During the early part of June, 1886, the Maoris residing in the Hot Lake District were thrown into a state of alarm by the appearance of a phantom canoe on the waters of Tarawera. To their unsophisticated minds such a mystery could only foretell disaster, but the native fears were ridiculed by the English people living in the neighbourhood. For once, however, the superstition of the Maoris was confirmed, though the phantom canoe cannot be regarded as an explanation of what shortly followed.

At the time I was residing at Tauranga, which is about forty miles distant from Tarawera. It was the 10th of June and the night was clear and calm, though not cold, in view of the fact that it was the New Zealand winter. Heavy rumbling sounds, like rolls of distant thunder, filled the air. The earth trembled, but not sufficiently to cause any great alarm, for not a single chimney in the district was thrown down, and as earthquakes were of frequent occurrence, no notice was taken of the disturbances.

The next day dawned dull and gloomy. About half-past seven the morning grew darker, and a light grey ash, very fine, began to fall. The fowls went to roost again and silence reigned supreme, the ominous rumblings having by this time entirely ceased. In another half-hour Cimmerian darkness hung over the land, and the inhabitants of Tauranga were stricken with panic. Although we surmised that an eruption was taking place in the Hot Lake District, there were



A CAULDRON OF STEAM.

no definite tidings to that effect, so we could only wait to see what would happen next.

Presently, by the aid of a lantern, I succeeded in groping my way to the telegraph office — no easy task, for the darkness was such that it could be felt—and learned that a serious disturbance was taking place at Tarawera and Rotomahana. All my anxieties were now allayed, for there was no danger of Tauranga being overwhelmed, situated, as it was, forty miles away from the centre of the upheaval.

About eleven o'clock the darkness lifted until we could see about us once more. All around the ground was covered with a thin, filmy pall of very fine ash to the depth of about half an inch, and we found afterwards that the intense darkness was caused by a thick cloud of dust blown out by the volcano to a height so tremendous that it passed above us and dispersed over the country some miles away. One of the most salient characteristics of the darkness was the extreme cold with which it was accompanied—the thermometer at Tauranga registered five



THE WHITE TERRACE.

Photo by Valentine & Sons, Dundee.

degrees of frost, and at Wairoa the cold was even much more intense. This is explained by the fact that the columns of steam, as they hissed out of the craters, expanded as they ascended, and absorbed their own heat, which became latent, so that the heat was abstracted from everything near.

A day or two later Dr. Hector, the Government geologist, arrived at Tauranga,



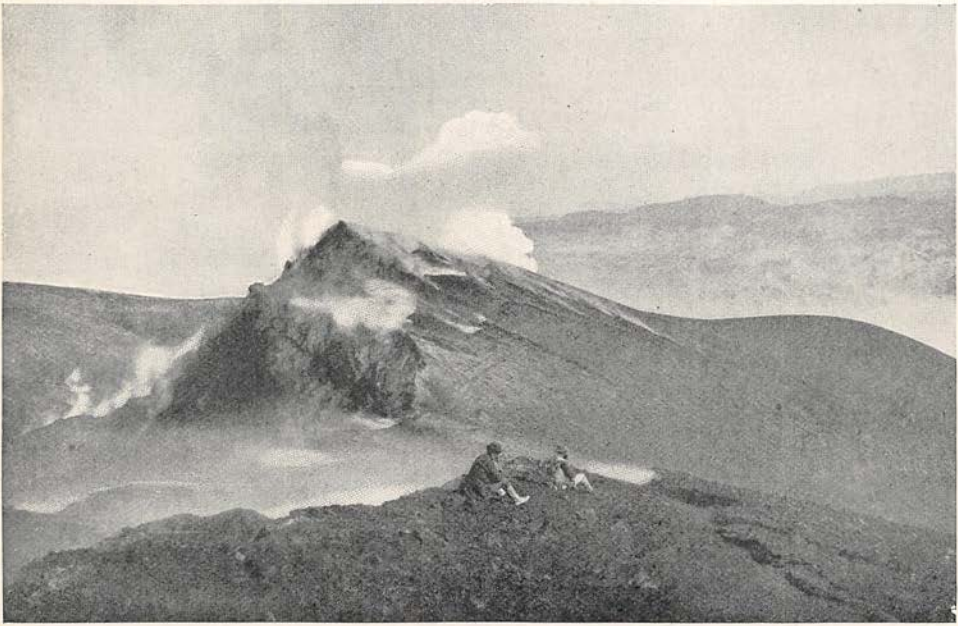
THE PINK TERRACE.

and preparations to inspect the seat of the disaster were pushed rapidly forward. The survey party, in addition to Dr. Hector, included Mr. S. Percy Smith, surveyor-general, and Mr. Goldsmith, the Government surveyor. On the fourth day after the eruption we arrived at the Maori village of Wairoa, or, rather, what was left of it, for scarcely a vestige of the settlement was to be seen. From our explorations at this spot we could gauge fairly accurately the potency of the eruption.

Not a soul was to be seen, for the whole village had been crushed beneath the volcanic lava, though charred and battered remnants

further than Wairoa that day, but returned to Ohinemutu. The road was almost impassable. When we reached Tikipatu bush, through which our path lay, we found the track almost destroyed. To make matters worse, now that the volcanic disturbances had to a great extent ceased, the air rushed over the land with cyclonic fury, uprooting, tearing, and breaking the trees that had survived the hail of rocks, like reeds, leaving here and there a gnarled and jagged trunk, denuded of branches and stripped of its bark.

The next day we set off for Rotomahana. As we approached the Hot Lakes huge



THE TWO GOVERNMENT SURVEYORS AND THE PHOTOGRAPHER WERE THE FIRST PERSONS TO ASCEND THE BURNING MOUNTAIN.

of the little village church and other buildings protruded above the surface of the deposit, which at first measured about four feet in thickness, but afterwards settled down to half that depth. From subsequent calculations, based on the results of the survey, it was estimated that no less than three-quarters of a cubic mile of solid matter had been blown out into the air by the force of the volcanic explosion. One young Englishman who was staying at the hotel at Wairoa was killed, and the sole survivors of the Tuhourangis, a Maori tribe that dwelt in the district and exacted tolls from tourists to the Hot Lakes, were destroyed.

We did not pursue our surveying any

cracks, extending hundreds of yards in length and about twelve inches in width, dissected the ground in all directions. These, however, were nothing in comparison to the handiwork of some previous earth movements, in which huge crevasses, fifty feet from side to side, were common sights.

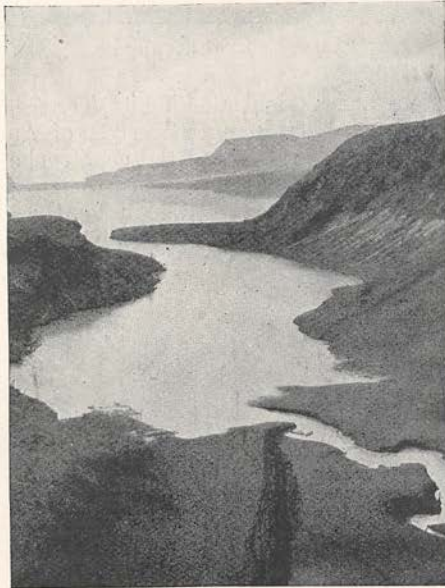
The scene at Rotomahana was one of strange grandeur and desolation. The mighty upheaval of Nature had blown the wondrous Terraces to atoms. Steam was rising in large dense clouds from one end of the area to the other, a distance of about nine miles. Rotomahana was a yawning cauldron, from which a majestic column of steam hissed into the air. The ground was



MT. TARAWERA AND THE SOUTH-WEST ARM OF THE LAKE. THE VILLAGE OF TE ARIKI ON THE LEFT WAS BURIED UNDER THE LAVA.

completely stripped of vegetation and covered with lava from the mountain. Walking was a very laborious task. The lava was reduced to the consistency of flour, so that we sank in it nearly up to our knees.

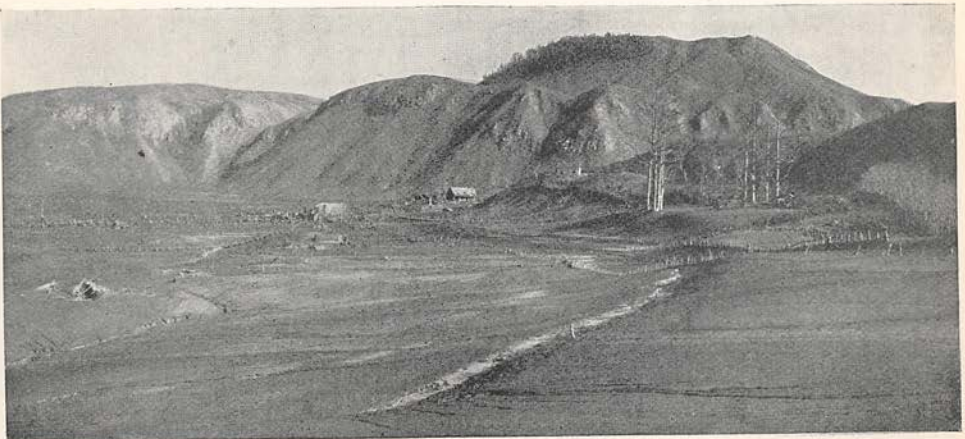
When the hitherto quiet Tarawera mountain suddenly awoke from its lethargy and belched forth flames, smoke, steam, streams of mud, red hot masses of rock, and *débris* of all kinds, a tremendous rift was torn open by the explosion, extending from one end of the mountain to the other. Our illustration conveys in a very im-



LAKE TARAWERA FOUR DAYS AFTER THE ERUPTION.

pressive manner the sight this gorge presented to us when we, the first persons to climb Tarawera after the eruption, reached the summit of the Holy Mountain. Only at one spot was there a narrow bridge, about a dozen yards in width, by which we could cross from one side of the yawning chasm to the other.

Thus was North Island suddenly shorn of its most peculiar feature. In six short hours the whole aspect of the country was changed. What had been one of the most beautiful spots in the world, not even sur-



THE DESTROYED VILLAGE OF WAIROA.

passed by the Yellowstone Cañon, became transformed into a barren country, carpeted with lava and furnished with *débris* shot out of the mountain's mouth. Geysers, however, still abound in profusion, and perhaps in the future, if Tarawera does not rise up again, another Pink Terrace may arise, step by step, to eclipse the memory of its famous original, for pink-coloured deposits

are gradually forming tiers or terraces similar to those so suddenly overwhelmed. How long the massive structure will take to grow to anything like so great a size remains to be seen.

The photographs illustrating this article, with the exception of the one showing the



SURVEY PARTY WALKING ROUND THE GREAT STEAM CLOUD AT ROTOMAHANA.

White Terrace, were taken by Mr. Charles Spencer, of Auckland, who at the time of the catastrophe was residing at Tauranga. When the survey party arrived at the township after the eruption, for the purpose of ascending the burning mountain, Mr. Spencer joined them in their interesting expedition.



LAKE TARAWERA AND DEVASTATED AREA AS IT APPEARS TO-DAY.