

gives a fuller history and more minute details of the results of the slip than were at that time accessible. It mainly consists of an elaborate report, written by Dr. A. Heim, the well-known Professor of Geology at Zürich, "Ober-ingenieur" R. Moser, and Dr. A. Burkli-Ziegler, to which are appended brief accounts of the incidents of the catastrophe, and of that which occurred in 1435, and lastly, a note on the disposal of the fund raised for the benefit of the sufferers. Plans and sections (extracted from the series which was attached to the above report) accompany the book, and indicate very clearly not only the amount of the mischief done, but also its cause, which, as already stated in these pages, is the existence of a deep deposit of silt beneath the superficial gravelly soil. The latter is but a very few feet thick, and suffices for the foundation of the less important buildings; the former constitutes the shelving bed of the lake to a depth of more than 100 feet. Borings made at various stations on the land, not far from the lake margin, have shown that this material remains incoherent to nearly the above depth, after which it becomes stronger. Hence there is always a danger of the underlying silt being squeezed outwards into and upon the bed of the lake, and the plans and sections furnished with the present volume show precisely how the accident occurred. There appear to have been some premonitory indications of the coming mishap, in addition to the subsidence in the new pier wall, which had already excited alarm. The inhabitants of certain houses, which afterwards fell, had observed sundry small displacements, which were especially shown by the jamming of doors and windows; cracking noises also had once or twice been heard. But the actual catastrophe was very sudden. About 3.20 p.m. the end of the quay wall, which had been completed up to a sort of little bastion, began to crack and sink. A quarter of an hour later came the first great slip, which caused the loss of seven lives. Except for some minor slips, there was then a pause for rather more than three hours, and then at 6.50 p.m. the second and greater slip occurred. A graphic account is given of the terror caused by this second catastrophe, which caused the loss of four more lives. A third, but comparatively unimportant, slip occurred at 10.15 p.m.

From the plan and sections it is evident that the second slip affected the larger area, both of the land and of the lake bed. Each slip forced the loose silt horizontally outwards, so as to form a delta-like deposit on the lake floor, thus diminishing the depth of the water sometimes by about 4 or 5 yards. At the first slip a triangular piece of ground, measuring about 80 yards along the shore, and some 40 yards to its apex inland, was destroyed, and the "delta" produced by this, which in outline resembles a rather stout pear, is about 250 yards across the wider part, and apparently extends to about 450 yards from the shore. By the second slip not only a much larger piece of the land (with a rudely oblong boundary) was removed, but the lake bed opposite to it, for a distance of 220 yards, appears to have slipped, so as to form a kind of broad trench, resulting in an interval of deeper water some 50 yards wide. The material thus removed was deposited over the deeper part of the lake bed, covering a space not quite so wide as that occupied by the former "delta," but much more than double the length, for its end is

placed 1020 metres from the shore, at a depth of 44 metres.

These elaborate maps and sections, with the results of investigations (by means of borings) into the nature of the lake bed, the level of the ground water, &c., give a high value to this publication, which may be commended to the notice of architects and engineers, as well as to those interested in the history of Switzerland.

OUR BOOK SHELF.

Tu'vans and Tails; or, Sketches in the Unromantic East.
By Alfred J. Bamford. (London: Sampson Low, 1888.)

THE author of this book does not claim to have anything very new or striking to tell his readers. He has seen a good deal of India and China, and is content with reproducing, in a popular way, the impressions made upon him during his not very exciting sojourn in those countries. He has little to say about "the mild Hindu" or "the man of Han" that tends to make us think more highly of either. Mr. Bamford, like many English travellers, is apt to be impressed by the bad rather than by the good aspects of unfamiliar types of character; and some of his sweeping judgments would no doubt have been considerably modified if, in estimating the intellectual and moral qualities of Orientals, he had remembered more frequently and vividly than he has actually done, that thought and conduct in the East and West cannot always be fairly or wisely measured by the same standards. The book, however, has the merit of being written in a lively style, and the author's judgments, whether sound or unsound, invariably result from his own observation and reflection. Here is one of a good many suggestive anecdotes which brighten his pages: "Of what caste are you?" asked an Englishman of a native of India. "Oh," replied the native, "I'm a Christian—I take brandy shrab, and get drunk like you."

The Photographer's Note-book. By Sir David Salomons, Bart., M.A. (London: Marion and Co., 1888.)

BOTH amateur and professional photographers, and especially those who travel and take a great number of photographs per day, will find this little book very handy and useful, as it is of a very convenient size and contains enough space for inserting the particulars, such as number of stop, rapidity of shutter, remarks on the light, &c., of each of fifty-one dozen plates.

Formulæ for enlargement and depth of focus and rules for exposure are added, followed by a table, calculated by Messrs. Marion, of the correct quantities to be taken from 10 per cent. solutions to make up developers for all the best known plates. The book concludes with various tables, such as area enlarging, enlarging by linear dimensions, and equivalent focal lengths of lenses of different sizes and makers.

LETTERS TO THE EDITOR.

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of NATURE. No notice is taken of anonymous communications.]

"Cloud Electric Potential."

I DESIRE to draw the attention, more particularly of your electrical readers, to the following paragraph on p. 651 of the eighth edition (1884) of Deschanel's "Natural Philosophy," part iii., which appears distinctly at variance with the theory of