and the total available quantity of water percolating into the sandstone amounts to about 300 millions.

2. "Notes on the Raised Beaches of Taltal (Northern Chile)." By Oswald Hardey Evans, F.G.S.

The town of Taltal is situated partly on the dry bed of a broad river and partly on a gently inclined plain that fringes the bays of the coastal ranges far to the northward, and runs up the valleys to a considerable altitude and distance from the coast. The material of this plain consists of sands and well-rounded gravel derived from the rocks of the adjacent hills, mingled with shells and some isolated boulders of considerable size. The formation is impregnated with salt, and there protrude through it curiously weathered remnants of former stacks and islets. The plain rises in terraces, the highest of which are somewhat obscure, and sometimes portions of these higher terraces are preserved in the stacks and islets. A second coastal shelf also occurs, marked by a line of shallow caverns, some excavated in igneous rocks. Some, at least, of the shell-accumulations associated with the plain contain pottery, and are associated with Indian kitchen-middens, but the beds of shells in the gravel, containing occasionally whale-bones, give satisfactory evidence of the marine origin of the terraces. Some of these shells are replaced by crystallized brine, and calcium sulphate occurs in some sections. Profound ravines (*quebradas*) occur in the massive rocks bordering the plain, although the climate is now so dry that rain-erosion is practically non-existent.

CORRESPONDENCE.

THICKNESS OF LAND-ICE.

Sir,—I have not followed the discussion to which Mr. Lamplugh alludes in his letter of November 7th, but I should be thankful to be allowed to make a remark upon the final sentence, where he says that "the evidence for the past and present existence of ice of greater thickness than 1,600 feet is so strong that physicists who wish to apply this limitation may be advised, in their own interest, to revise their calculations."

I published a paper "On the Thermal Conditions and Stratification of the Antarctic Ice" in the Phil. Mag. for June, 1879, in which I arrived at the conclusion that supposing the surface at zero Fahr., after the ice had accumulated to the thickness of 740 feet (about), it would begin to melt at the bottom owing to the pressure; but I concluded (p. 385) that "No certain limit can be imposed upon the thickness to which the ice might accumulate, provided the snowfall be more than sufficient to counterbalance the melting at the bottom."

I do not know who the physicists may be to whom reference is made in Mr. Lamplugh's letter, but as I have corresponded with Professor Schwarz upon this subject I have thought it as well to show that for one *my* calculations do not require revision.

O. Fisher.

Graveley, Huntingdon.
December 3rd, 1906.