

sequently, nothing is left of de Vries's mutation theory but the bare facts represented by his experiments, which, indeed, are valuable for the study of variation, but belong to a class that was already known to Darwin when he wrote his 'Origin of Species' and 'Variation under Domestication.' For the rest, I do not see that there is anything in the mutation theory which might advance our general knowledge of the factors cooperating in evolution.

A. E. ORTMANN.

CARNEGIE MUSEUM, PITTSBURG, PA.,

April 26, 1906.

MISREPRESENTATIONS OF NATURE IN POPULAR MAGAZINES.

FROM the numerous and conspicuous mistakes made by the popular magazines when treating of geographical and geological subjects it would appear that there is occasion for more careful editing by men conversant with scientific affairs.

Many of the mistakes are more than simply inaccuracies of statement or occasional exaggeration. They are often the most conspicuous thing in the magazine.

Take, for example, the finely colored full-page picture in the *Century* (Vol. XLVII., p. 553) entitled 'Sulphur Deposits at the Crater Vesuvius.' The fact is that there are no sulphur deposits at Vesuvius. Not only are there no deposits, but even a trace of sulphur is difficult to find. Unless the volcano changes its chemistry to accord with the *Century* there will be none from this last eruption. The artist evidently mistook the lava which had been bleached by chlorine to be sulphur; the editor allowed the mistake to pass; and all who gain their idea of Vesuvius from that source will have much to unlearn when they hear the facts.

The Outing Magazine, edited by men who have more than an indoor acquaintance with nature, begins this year with a frontispiece (January number) entitled 'Bridger was the first man to gaze on the Great Salt Lake' and represents Bridger standing on the shore while his horse, with nose deep in the lake, is eagerly drinking! We have seen many wonderful

bronchos, but never one that could drink the water of Salt Lake.

A well-written article in *McClure's* (Vol. XXV., p. 504) is illustrated by many pictures of the Grand Cañon of the Colorado. The coloring was evidently done by one who had never seen the region. It entirely misrepresents the cañon and must have annoyed the artist. But even the drawing gives a wrong impression of the greatest of cañons, just as would a picture of Broadway or of State Street which represented the high buildings sloping towards each other across the street. There are no narrow gorges in the cañon such as those pictured. This style of illustration is a recurrence of the type of picture furnished by Egloffstein in 1857 for the Ives Report published by the United States government. It was hoped that misrepresentations of that character would end with that century.

Nature is as interesting and impressive as are exaggeration and misrepresentation. A picture may have the educational value of many pages of sentences, since it so readily catches the eye. Many people will see a picture, while few read the text. Consequently it is important that pictures should represent facts and it behooves the popular magazines to have not only careful literary, but scientific editing as well.

A. R. CROOK.

ALLUVIAL SLOPES.

ONE of the commonest topographic features of the western part of the United States, particularly of the arid west, is the characteristic sloping plain which fringes the flanks of the mountain ranges and is formed by coalescent alluvial fans. Many terms have been used to denote this sloping plain, among which are: alluvial slope, alluvial apron, alluvial piedmont plain, compound alluvial fan, wash apron, débris apron, detrital slope, wash plain, out-wash plain, foot slope, aggradation plain, boulder wash plain and others. It seems desirable that such a typical feature should bear a more specific appellation. The consensus of opinion of the geologists of the United