

culture and would be obtaining a better literary education from hearing a good lecturer and being inspired by his enthusiasm than he would get by learning off one of Shakespeare's plays, and answering it at an examination. Those two aspects of education, the literary and scientific, were often put in opposition, just as the freedom of the individual and the power of the State to control the individual were very often set up in opposition to one another; but he did not think any one would believe that that opposition really arose, for the freest States were those in which the power of the State was the strongest. In conclusion, he would say that we must equip our youth for the battle of life physically and ethically. The present is a great crisis in Irish education. There is danger of science schools starting, and all the evils of dual education. There are a large body who like Latin and Greek, because they exclude literature and history. These are to be fought tooth and nail. There are those who would sacrifice the rising generation on an altar of so-called culture to starve and die, with their only comfort that they can describe their agony in well-expressed phrases. There are those who would grind all soul out of mankind in a mill of manual labour, constructed on scientific principles. All those are to be guarded against. We must have literature and history. We must have knowledge of the laws of the world in which we have to work. We can have both if we will but work out a reasonable system of education, instead of pretending that the lop-sided corpse that occupies our schools and Universities is a well-developed, symmetrical giant.

ABORIGINAL ART IN CALIFORNIA AND QUEEN CHARLOTTE'S ISLAND

IN the fourth volume, recently issued, of the Proceedings of the Davenport Academy of Natural Sciences there is a valuable article by Dr. W. J. Hoffman on "Aboriginal Art in California and Queen Charlotte's Island." In the summer of 1884 Dr. Hoffman visited the Pacific coast for the purpose of continuing his researches on primitive art, and he was fortunate enough to find a number of localities in which there are painted and "etched" records, of considerable interest, made by Indians belonging to tribes now unknown. These records occur in groups. One group, the first described by Dr. Hoffman, is in the neighbourhood of Santa Barbara. The best preserved paintings in this series are in a cavity which measures about twenty feet wide and eight feet high. The rock consists of gray sandstone, but the ceiling and back portion of the cave have a yellowish appearance. The colours employed were red ochre, white, and bluish black. Some of the paintings Dr. Hoffman takes to be representations of gaudily-coloured blankets. In several instances a grotesque human figure is drawn over or in front of what seems to be a blanket, as if the latter were intended as a body blanket or serape. In the Azusa cañon, about thirty miles north-east of Los Angeles, Dr. Hoffman examined a second series of painted records. Rudely sketched human figures are represented a pointing in certain directions, and the intention evidently was that they should serve as guides to travelling parties. For instance, the left arm of a figure on a white granitic boulder points towards the north-east. The precipitous walls of the cañon make egress in that direction impossible, but two hundred yards further on the cañon makes a sharp turn towards the north-east, and in rounding the point of land to the right the traveller comes to another boulder, on which are numerous faint drawings of various kinds. This boulder is on the line of an old trail leading from the country of the Chemehuevi, on the north of the mountains, down to the valley settlements of San Gabriel and Los Angeles. A third series of records was found in the southern part of Owens Valley, California, between the White Mountains on the east and the Benton Range on the west. They are "etched," not painted. The most common characters in this group are circles, either plain, nucleated, bisected, concentric, or spectacle-shaped, by pairs or threes, with various forms of interior ornamentation. This group resembles etchings in the Canary Islands so closely that the illustrations given by Dr. Hoffman serve for both localities. On one of his plates he presents a number of circles with ornamented interiors, from a simple bisection to the stellate and cruciform varieties. Similar circles bearing cross-lines occur at Grevinge, Zealand; and other forms resembling some at Owens Valley are found at Slieve-na-Calliagh, Grange, and Dowth, in Ireland. The spectacle-shaped variety resembles the mysterious symbol on

some Scottish monuments which has given rise to so much vague speculation. The reversed Z, however, is wanting in the Californian examples. Of the various outlines of the human form presented by Mr. Wallace from Brazil, and referred to more recently by Prof. Richard Andree in "Ethnographische Parallelen und Vergleiche," a considerable number are almost identical with etchings in the Owens Valley series. Many of the characters in these three Californian groups are similar to, and some are indistinguishable from, those made by the Moki and other tribes of the Shoshonian linguistic stock. Further research on the same lines may, therefore, enable anthropologists to determine the former geographical area of the Shoshonian family, as has already been done in the case of the Algonkian tribes.

In the neighbourhood of Los Angeles Dr. Hoffman obtained a portion of an old Indian gravestone. On this slab there are incised characters which seem to represent a whale-hunt, and no doubt they were intended to denote the occupation of the person to whose memory the tablet was erected. Honour is done to the dead in a similar manner by the Innuits of Alaska and by the Ojibwa. Among the Innuits, the posts erected for men usually bear rude drawings of weapons and animals; those for women have representations of household utensils and implements. On Ojibwa gravestones, as Mr. Schoolcraft has noted, the totem of the deceased is drawn in an inverted position.

Dr. Hoffman offers some interesting remarks on the subject of tattooing. In former times, in the vicinity of Los Angeles, every chief caused the tattooed marks upon his face to be reproduced upon trees or poles which indicated the boundaries of his land; and as these marks were well known to neighbouring chiefs, they were a sufficient warning that trespassers would be punished. A custom akin to this prevails in Australia, where the tattooed designs upon the face of a native are often engraved upon the bark of trees near his grave. Among many of the tribes west of the Mississippi there are still numbers of persons who bear tattoo marks upon the chin, the cheeks, and even upon other parts of the body, but the marks seldom occur in any forms other than narrow lines, except among the Haida Indians of Queen Charlotte's Island, where the art of tattooing has reached a higher degree of development than on the mainland. The Haidas tattoo upon the back, breast, fore-arms, thighs, and the legs below the knees; and women submit to the operation as well as men. The characters are totemic, and represent either animate or mythologic beings. They are usually drawn in outline, with interior decorative lines, red being sometimes introduced to form what is supposed to be a pleasant contrast. The ceremonies at which the tattooing is done are held in the autumn, and extend over a period of several weeks. Among the figures generally adopted are the thunder-bird, raven, bear, skulpin, and squid. A former Factor of the Hudson's Bay Company told Dr. Hoffman that when he first went to the country occupied by the Haida Indians he saw no tattooing upon the bodies of the older members of the tribe; and he contends that they have learned the art from natives of some of the South Pacific Islands, which they occasionally visit as traders.

The Haidas display considerable skill as carvers in wood and slate. Totem posts are often placed before the council-houses, and more frequently before private dwellings. When the posts are the property of some individual, the personal totemic sign is carved at the top. Other animate and grotesque figures follow in rapid succession down to the base, so that unless one is familiar with the mythology and folk-lore of the tribe the subject would be utterly unintelligible. On one post to which Dr. Hoffman refers there are only seven pronounced carvings, but they relate to three distinct myths. On household vessels, the handles of wooden spoons, and other objects, the Haidas often carve the head of a human being in the act of eating a toad. Sometimes the toad is placed at a short distance below the mouth. The idea is that in the wooded country there is an evil spirit who has great power of committing evil by means of poison extracted from the toad. The Indians are not willing to acknowledge the common belief in this mystic being, even when they are aware that the inquirer is in possession of the main facts.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE

OXFORD.—The long-expected reform of the examination system which makes it unnecessary for men reading mathematics and natural science to pass any examinations of a non-scientific