give more attention to the hair, and do not wet the head so often. Of all these reasons, Dr. Jackson regards the preservation of the fat and connective tissue of the scalp, and the greater care of the scalp, as the most important. The treatment of this variety of baldness is mainly one of prophylaxis and hygiene. In families where it is hereditary, this should begin at birth, and continue through life. The scalp should be kept clean by an occasional shampoo of soap and water, borax and water, or some such simple means. This should not be repeated oftener than once in two or three weeks; and after the washing, the scalp should be carefully dried, and vaseline or sweet-almond oil applied. Women should dry the hair by the fire or in the sun, and not dress it until dry. The hair should be thoroughly brushed and combed daily, for five or ten minutes, with vigor sufficient to make the scalp glow. For this a brush should have long and moderately stiff bristles, set in groups widely separated from each other. Such a brush will reach the scalp, and brush out the dust. A comb with large, smooth teeth should be used with the brush, to open up the hair to the air. Pomades should not be used, and the daily sousing of the hair discontinued. Women should not use bandoline, nor pull or twist the hair, nor scorch it with curling-irons, nor smother it under false hair. Easy-fitting, light, and ventilated hats should be worn, and working under hot artificial light should be avoided. Mr. Goninlock, writing on baldness in the *Popular science monthly*, gives it as his opinion that it is due principally to the high hat and the hard felt hat, and to any other covering that constricts the blood-vessels which nourish the hair-bulbs. Few, he says, will escape the evil effects of twenty or thirty years of rigid tight-fitting hats, the destructive process being delayed only by the length and frequency of respites from this tourniquet of fashion.

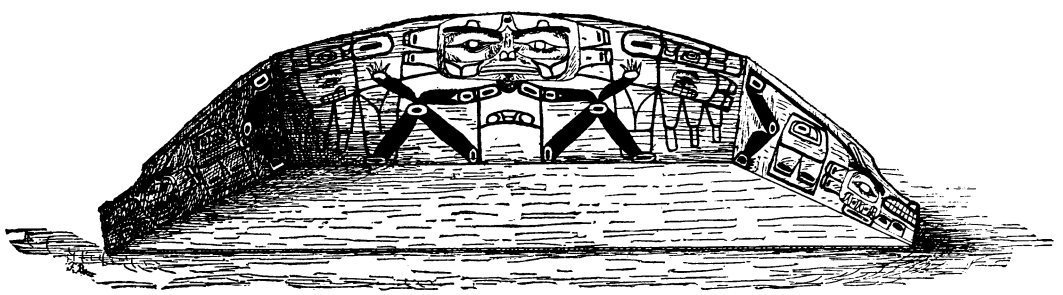


FIG 1. — INDIAN CHAIR, SHOWING THE SISIUTL AND THE RAVEN, THE CREST OF THE OWNER. (Length 7 feet.)

ETHNOLOGICAL NOTES.

The serpent among the north-west American Indians.

THE latest issue of the *American antiquarian* contains a long article on the serpent symbol, by the editor, the Rev. Stephen D. Peet. He traces the occurrence of the serpent symbol or serpent myths among many tribes of America. We shall add here several notes on a peculiar form of serpent which plays an important part in the traditions of the north-west American natives. A characteristic representation is fig. 2, a double-headed snake with a human face in the centre. It is known to the Selish tribes of the Gulf of Georgia, and to the numerous tribes of Kwakiutl lineage. According to Swan, a similar monstrous being, the Hahéktoak, is known to the Makah of Cape Flattery. It has the faculty of assuming any shape it desires, and appears most frequently in the form of a beautiful fish with sparkling scales. It moves with both heads turning for-

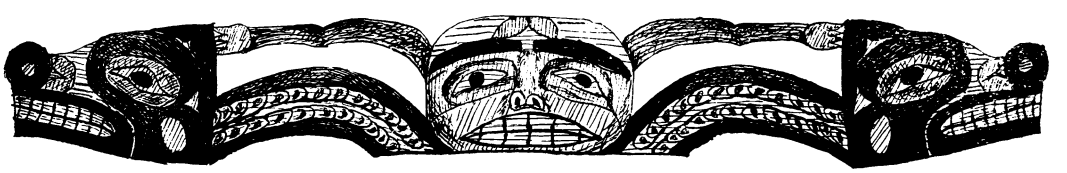
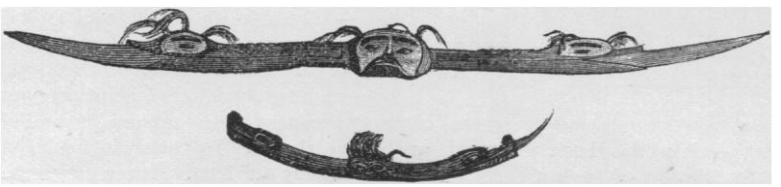


FIG 2. — DANCING-IMPLEMENT, REPRESENTING THE SISIUTL.

ward, the human face in the centre looking backward. It is the crest of one of the gentes of the Kwakiutl, who paint it on their house-fronts. The beam which supports the heavy rafters of their houses is carved so as to represent the 'Sisiutl,' as it is called by the Kwakiutl; and the drums,



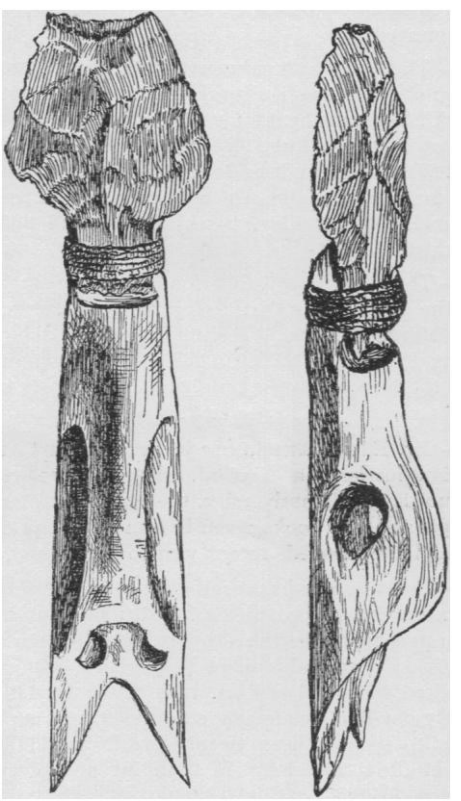
FIGS. 3 and 4. — KNIFE AND DANCING-IMPLEMENT, REPRESENTING THE SISIUTL.
(From Jacobsen's 'Nordwestküste Amerikas.')

chairs, and dancing-implements of the gens have it for their ornament. A beam of this kind is in the museum at Ottawa, Ont. We have seen a mask of this style in the museum of Berlin. Two knives of the same description, which are used in certain dances, are shown in figs. 3 and 4. Fig. 2 is used in the dances of several tribes, the dancer having a blanket tied round his loins, the upper part of his body being naked. He wears a head-ring and neck-ring of hemlock branches, and has the carved image of the Sisiutl tied to his stomach. Fig. 1 is a remarkable chair, representing the Sisiutl. It will be seen from our figure that here the central figure is winged, and that two additional legs appear on both sides. This is because the owner's father belongs to the raven gens, while his mother belonged to the Sisiutl gens. Therefore both crests are embodied in the design, which is very characteristic. It is engraved from a sketch made on the spot.

The traditions referring to the Sisiutl are very numerous. One of the most remarkable is that Qaniqilaq, the son of God, descended from heaven and met the Sisiutl. He killed it, skinned it, and took out its eyes. The latter he used as stones for his sling, the former as a belt, and both served him to accomplish many exploits.

Other tribes of the same region tell of the same being, but they believe that it lives somewhere at the bottom of the sea. They tell of a man who killed it, and thus acquired supernatural qualities. Among the Qauitchin this tradition is of great importance. They say that the first man of their race encountered the serpent and killed it. Whoever obtains a bone of the serpent becomes a formidable sorcerer, as the sight of it kills whomsoever sees it. The same is told of the Hahéktoak of the Makah, but the latter has a different shape, being single-headed.

ESKIMO HARPOON. — The ethnological collection of Mr. A. Sturgis, on exhibition in the American museum of natural history in New York, contains a fine specimen of an Eskimo harpoon-head from Greenland, which we figure here by the kind permission of Mr. Sturgis. There are very few specimens of this kind in the ethnological collections of America and Europe, the flint head being nowadays replaced by iron. The present implement



ESKIMO HARPOON-HEAD. (From A. Sturgis's collection.)

is of special interest, as it shows the same form as those from the west coast of Davis Strait, and the way in which the Eskimo used to fasten the stone

head to the ivory part. It belongs to the large sealing and walrus harpoon. A similar specimen is in the collections of the British museum. Both these specimens show two perforations at the lower end of the harpoon-head which are not found in the modern ones. Probably these served for holding the harpoon-head to the shaft by means of a thin line, in order to prevent the head from coming off before the seal or walrus was struck.

NOTES AND NEWS.

A GEOLOGICAL society has been founded at Brussels. The foundation of such a society was planned in 1872, after the meeting of the archeological and prehistorical congress; the efforts, however, were unsuccessful, though this became the impulse for the foundation of the geological society at Liege. Mr. A. Houzeau de Letaie took up the old plan, and on April 17, 1887, the foundation of the society, under the name 'Société Belge de géologie de paléontologie et d'hydrologie,' was announced.

— The fourth annual convention of the Association of official agricultural chemists will meet at the U. S. department of agriculture in Washington on Tuesday, Aug. 16, at ten o'clock. Tuesday and Wednesday will be devoted to a discussion of the method of analysis of commercial fertilizers; Thursday and Friday, to cattle-food and dairy-products.

— The advance of education in India is marked by the post-office statistics for the ten years ending March 31, 1886. The number of letters increased from 119,000,000 to 238,000,000 per annum, and the increase in the number of newspapers sent was no less than 115 per cent.

— Mr. Edwin Arnold has just presented to the Indian institute at Oxford, through the vice-chancellor of the university, the Buddhist manuscripts and Pali books given to him by the priests of Ceylon during his recent visit to that island.

— Bates college has received an offer of thirty thousand dollars provided an additional hundred thousand dollars be raised by subscription among the friends and alumni of the college. Of this hundred thousand dollars, it is understood that nearly one-half is already subscribed. It is proposed to spend at least twenty-five thousand dollars of the total amount in founding an observatory.

— Harvard university announces a considerable expansion of its courses in English for next year. Professor Child will offer courses in the English Bible and in Spenser. Professor Briggs will lecture on English literature from Shakspeare to Dryden, excluding Milton. Professor Hill will add to his usual course on the prose writers of the seventeenth and eighteenth centuries a course on the prose writers of the nineteenth century. Mr. Wendell will take a class through the study of the English drama, excluding Shakspeare.

— The Students' aid society of Boston has aided over four hundred worthy students since its organization. Most of the beneficiaries have become teachers. President Freeman of Wellesley recently told what had become of the twenty-five girls aided by the society who graduated from Wellesley in 1886. Three of them are teaching in foreign countries, two among the colored population in the south, and two among the Mormons. Six are at the head of girls' schools in various portions of the country.

— The American public health association will hold its fifteenth annual meeting at Memphis, Tenn., on Nov. 8 to 11, 1887. The topics which have been selected for discussion are, 1°, the pollution of water-supplies; 2°, the disposal of refuse matter of cities; 3°, the disposal of refuse matter of villages, summer resorts, and isolated tenements; 4°, animal diseases dangerous to man.

— Bacteriologists are studying with great thoroughness and persistence the characteristics of the typhoid bacillus. M. Chautemesse, in the course of his researches, has found that this microbe forms spores at a temperature between 19° and 48° C. It develops even in sterilized water. At a temperature of 45° C. the cultivations live for several days, but are destroyed by boiling. The bacilli are destroyed by a solution of bichloride of mercury of the strength of 1 to 20,000, and by a solution of sulphate of quinine, 1 to 800. Carbolic acid, 1 to 400, has no effect upon them, and they are not affected by hydrochloric acid. This latter observation would seem to indicate that the germ would retain its vitality in the gastric juice.

— We learn from the London *Electrical review* (April 22) that Prof. E. Frankland, the well-known professor of chemistry, has recently patented some improvements which he has devised in storage-batteries, the object aimed at being the avoidance of both buckling and the gradual detachment of the active composition from the metallic portion of the plates, both these effects being brought about by the expansion of the active material during the use of the battery. This is effected, firstly, by so enclosing or embedding the active composition in the metallic portion of the plate as to prevent its falling out; and, secondly, by giving sufficient strength to the plate to enable it to resist bending or buckling. Professor Frankland em-