## Scientific American

## REMARKABLE CEREMONIAL GARMENTS.

BY WALTER L. BEASLEY.

The explorers for the Jesup North Pacific Expedition, equipped under the auspices of the American Museum of Natural History, to investigate the relation of the natives of northeastern Asia to those of the extreme northwestern part of America, have obtained valuable ethnological data, and collected many utensils and dresses intended to illustrate the daily life of the isolated tribes, while a careful study and comparison of this material will definitely aid, it is thought, in clearing up this great and hitherto puzzling problem. Dr. Berthold Laufer spent two years in carrying on researches among the inhabitants of the Amur River. Two of the most interesting tribes visited were the Gold and Gilyak. One of the surprising and astonishing features met with was that the everyday life of the people was not in keeping with their art. The Gold tribe was found to be a highly artistic race of men and women, producing and executing the most varied and elaborate designs in the way of embroidery. These were lavishly displayed on their wearing apparel and household effects. In physical appearance the Amur tribes are short of stature, with long hair. Though Russian subjects, they are almost isolated from government influences. They are a primitive community, incapable of reading or writing, and subsisting by hunting and fishing. Their province of art seems to be limited to the decoration of surfaces. The sense for plastic representation is lacking. Animal and facial carvings are rarely met with, save a few rude images belonging to the outfit of the shamans, which are not classed as works of art. The materials used by the Amur tribes for displaying their ornamentation are wood, birch bark, fishskin, elk and reindeer skin, and silk. The silks, as well as the coloring matter, are traded from the Chinese. One of the most unique and remarkable specimens obtained was a fantastically decorated shaman's coat, and a number of his grotesque carved images associated with his calling. The garment is made of elkskin, and is adorned with a series of animal and human figures, intended to typify the supernatural powers of the shamans. The dragon and other borrowed Chinese symbols are prominently employed. Identical decorations appear on both sides of the upper section of the garment; the lower being supposed to represent the forests of the animal world, with which the shaman has a close connection in order to effect his magical cures. The back of the garment is likewise ornamented with different designs. The figures are painted in red, yellow, and black. The mythology of the Golds is crude and fetish. It includes good and evil spirits, with the shaman as mediator. He is considered a supernatural personage able to drive bad spirits out of the body and otherwise effect

cures in all diseases. When sent for by an afflicted tribesman, he appears dressed in his ceremonial coat. From his medicine chest he selects a rude figure of the animal typifying the wicked demon who has stolen the sick man's soul. If he has none in stock, one is hewn on the spot. This is placed by the bedside of the invalid. The shaman then commences (in spirit), accompanied by drum - beating and incantation, to take a long journey in search of the departed spirit

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of the sick man. After much imaginary resistance, he rescues the soul from the captor and restores the same again in the body of his patient. If by chance a recovery is effected, the shaman is usually highly rewarded for his services. The coat here figured is the first to be exhibited in America from this untraveled and remote region. Another extraordinary shaman's coat is considered of especial interest, from the fact that it is the only known specimen so far collected or known belonging to an Eskimo; besides, it comes from the most northern portion of land on the American con-

tinent. The coat is one of the principal features of a miscellaneous collection of Eskimo objects recently obtained by Capt. George Comer, an Arctic whaler, for the Museum. It was collected from tribes dwelling in and around Hudson's Bay, a territory difficult of access. These Eskimos have not come in contact with civilization or been visited by a white man for nearly a century, consequently they exist in the most primitive condition. The coat has an important ethnological significance, as it resembles in many details those worked by the shamans of the Chukchee and Koryak tribes of



The Symbolical Demons of a Shaman's Medicine Chest.

northeastern Siberia. This may indicate an early and long-forgotten connection between the tribes of this region with those on the opposite Asiatic coast. The coat is made of caribou skin, sewn with sinew and ornamented with figures cut out of the white skin of that animal's foot. The meaning of the symbolic design in figures on the coat is expained to Capt. Comer as follows: The two hands signify that no supernatural being can touch the shaman. On the back are two bears, which represent the guardian spirits of the owner, while the figure of a small boy, shown over the hands,

becoming pensive, and absenting himself from his fellow men, passing weeks, night and day, in the open air, far from home, suddenly the "new-inspired" receives a message from his spirits and he is at once transformed into a woman. He immediately dons woman's clothes, acquires a woman's voice, learns to perform woman's work, and forgets his former masculine knowledge. This fanaticism is carried to extremes, and in time the newly transformed is married to a man, and during the rest of his life performs the daties of a housewife.

## American Cars on English Railways.

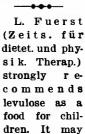
English railways are adopting, where they can do so to advantage, many of those points of American railroad practice adaptable to English systems, and they are also endeavoring to compete with electric street car systems which already exist in fields competitive to their own, and to forestall and prevent the building of other lines by establishing railroad stations and automobile services through country districts as feeders to their own lines. As illustrating the subject, a speech of the chairman of the Great Western Railway Company, reported in the Times, may be cited:

"Having regard to the fact that the company was suffering from the competition of tram cars and also of motor cars, it had been decided to make an experiment in two directions. In the first place, they were about to establish a motor-car service, by means of a combined engine and car, between Stonehouse and Chalford, in the Stroud Valley. The cars would run on the company's lines and arrangements had been made for stopping not only at existing stations, but at intermediate points, for picking up and setting down passengers. In this way a fairly quick service would be provided for local people. The cars would be worked by steam and carry 52 persons. He thought it was an experiment of a hopeful nature. At any rate they intended to see what could be done in that way on branch lines and in certain congested parts of the country. The board had had under consideration many applications in respect of light railways, but they were doubtful as to whether there was sufficient traffic to justify the construction of such lines, and there were also cases in which private persons were running a motor-car service along the company's route. There seemed to be no reason why they should not themselves take steps to feed their railway by running motor cars, and instructions had been given for five to be purchased capable of carrying 22 persons each.

"The cars, which would be driven by petrol, would be built to travel at a moderate speed, and it was hoped that they would prove a convenience to the public as well as feeders to the Great Western system. In any case they would show what amount of traffic

> district. One advantage of motor cars was that, if the traffic proved in sufficient. they could be moved elsewhere. The directors believed that it was an experiment which would have good results. In any event, the outlay involved was not heavy. The first service of the kind would be from Helston to the Lizard."

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be used instead of saccharose or lactose to sweeten infants' milk, to which it imparts a pleasant flavor, while it never occasions the digestive disturbances to which the use of other sugars often give rise. Slightly older children, who often lose weight when weaned, take levulose chocolate and syrup readily. Levulose is of marked benefit to badly nourished children and to those recovering from illnesses. When given to children suffering from glandular enlargements, tuberculous or non-tuberculous, the effect on the glands is equal to that of cod-liver oil.



Caribou-Skin Coat Obtained in Hudson's Bay.

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calls to mind a vision which the shaman had when he received the supernatural power. The alternating circles of black and white fur are intended as good-luck omens to the owner, which will bring him success in seal-hunting, and success in his efforts to dispel bad spirits from the body. Mr. Waldemar Bogoras, who carried on researches among the tribes of northeastern Siberia for the Jesup Expedition, informed the writer of a remarkable phase of shamanism among the Chukchee tribe. While undergoing the initiation necessary to acquire shamanistic powers, such as refusing food,



Elk-Skin Garment with Symbolical Decoration.