

land, has a striking resemblance to a human head and body. The hollowness of the lower jaw bone's socket holding the canine tooth of this ancient bear must have suggested and formed to the eyes of the early dwellers of the cave the neck and chin of man.

This strange chance resemblance undoubtedly caused the bone to be prized or even worshipped; in fact, the piece bears evidence of a considerable amount of wear as if it had been carried as a fetish.

Fortuitous resemblances in nature such as this must have stimulated early man's nascent artistic bent and probably made him try his own hand at being an artist.

Flint nodules resembling some animal form have been found associated with artifacts of the Old Stone Age. They have also been found in deposits of the New Stone Age. Once detected, natural effigies would be gathered and treasured by the superstitious dwellers of that ancient age and means would eventually be found to supplement and improve on nature's haphazard creations.

The Paleolithic hunter who treasured the bear jaw bone could have inhabited Wildenmannsloch only during an interglacial epoch - presumably the last one, known as the Riss-Wurm interglacial. The deposit can also be dated from the fact that it rests on a sterile glacial deposit, called Riss, and is covered by a sterile glacial deposit, called Wurm. The piece in question is probably 100,000 years old.

BARN SWALLOW AND BOBOELINK LONG DISTANCE FLIERS

When the barn swallow and the bobolink are numbered among the arrivals from winter quarters that are coming in almost daily now, they will have completed a journey of over 10,000 miles round trip, from northeastern United States to Argentina and back. A few individuals among the yellow-billed cuckoos, olive-backed thrushes, nighthawks and cliff swallows may have penetrated so far south but the barn swallows and bobolinks invade the region of pampas and the tango en masse.

Under the auspices of the United States Biological Survey, Dr. Alexander Wetmore of the Smithsonian Institution has been carrying on an investigation of the migratory habits of northern birds in their southernmost ranges. Most of the really long distance fliers are shore birds, he says, with notable exceptions mentioned above. The majority of the common birds with which most of us are familiar stop before they get very far south of the Equator, and sojourn in the north of South America.

The results of Dr. Wetmore's investigations in the southern part of South America are contained in a recently issued illustrated bulletin of the Smithsonian Institution. In it he claims that northern birds have three main routes of southward travel; They may go down the eastern coast of South America via the Brazilian coast, or along the Pacific taking in the mountain scenery of the Andes en route, or they may go straight south down through the central part of the continent.

From Dr. Wetmore's observations, it would seem as if the bulk of the migratory bird population contrived to pass south with the coming of fall to the northern hemisphere and to follow the advance of the southern spring south of the Equator, remaining in their winter location through the southern summer. With the coming of colder weather in February and March they withdraw northward to their breeding grounds in the United States and Canada, thus managing to live in a Palm Beach atmosphere of eternal spring and summer.

MOON VISIBLE DURING POLAR WINTERS

The six months night which residents near the north pole enjoy during the winter, and which will soon come to an end, is not as dark as it might seem, for they have the moon above the horizon for two weeks at a time. To an observer at the pole, it would be seen to rise at the first quarter, would wax to full and wane to last quarter again before it set below the horizon. This is because of the fact that when the moon is full, it is on the side of the earth directly opposite the sun. This can be verified by anyone, for when the moon is full, it rises as the sun sets, and is on the meridian, directly south, at midnight. At first quarter the moon is directly south as the sun sets, while it sets at midnight; and at last quarter, Luna appears above the eastern horizon at midnight.

During the autumn and winter months, while the sun is south of the equator, it is not visible at the north pole, but it is not dark all of the time, for the sun must be about 18 degrees below the horizon before the sky is actually dark. When it is less than 18 degrees, twilight occurs. During the past winter, the sun was below the twilight limit from November 14 to January 29, making a total of only about two and a half months of actual night. With a bright moon during half of this time, the pole has a total of only a little over a month of actual darkness during the year. However, there is less heat in the winter, and so arctic explorers find the summer most comfortable for their work. Perhaps the day will come, however, when the transpolar air route to Europe and Asia will be popular, since the light will make possible flying at all times of the year.

STUDIES "HEARING" OF UNSPOKEN WORDS

How we "hear" words that are never spoken is being studied by Prof. J. E. Coover, of the department of psychology at Stanford University, who for over ten years has been studying psychic phenomena. When fragmentary sentences are spoken the hearer, who has heard such sentences complete in the past, unconsciously supplies the missing words. Somewhat similar is the process when a person is heard over a telephone line with poor connections, or when at a great distance, for not all sounds carry with equal facility.

In Prof. Coover's experiments to determine just how many sounds unsaid may be heard, or rather how sounds emitted are not heard, but are "supplied" by the second conversationalist, he employs the English language, utilizing 200 consonant sounds, or "nonsense syllables". Half of these begin with a vowel, half with a