



America's Cherubim

FROM bison to bodiless child-angels may seem a very far cry, yet there does seem to be a fairly continuous chain of descent. The majestic winged human-faced bulls that guarded the gates of palaces and temples in ancient Mesopotamia were known by the Semitic name from which our word "cherubim" is derived. Because of their

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bellowing voices, thunderclouds were imagined by the ancients as flying bulls, the steeds of the highest of the gods.

Originally, these winged bulls were the old-world species of bison, or wisent, now all but extinct. Known in the earliest times in the Tigris-Euphrates valley, they had disappeared long before Babylon grew great. Hence the conventional representations had bodies more like those of domestic cattle. Yet their origin is traceable in their curved horns, symbols of power, and in their heards.

How these fabulous cloud-bulls were transformed into the second-highest order in the angelic hierarchy might be a long story. Sufficient to suggest here that the "cherubims" (a false plural, by the way) described with meticulous detail in the twenty-fifth chapter of Genesis are believed by some archaeologists to have been images much like those surviving in the Mesopo-

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tamian ruins—proper seat for the God who was above all gods. And since images must not be made of Him, soon images were no longer attempted of them.

The puckish mischance by which the cherubim, after they had become very great angels, were further transmogrified by modern fancy into the littlest of angels—often consisting of head and wings only—is still another story. But from the mighty cherubim of antiquity to the "sweet little cherubs" of modern picture-cards (and sometimes tombstones) is surely a strange evolution!

Yet you can catch a far glimpse of how it all started, the next time you visit the Zoo, or better yet, ride through Yellowstone National Park. Just wait until one of the majestic old bison lifts his head and looks at you. Isn't there something hauntingly near-human in the look of that horncrowned, bearded face?

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Magnetic Survey for Ores

SURVEYING the crust of the earth for possible hidden metal ores and petroleum with magnetic instruments has proven its worth, the UNSCCUR will be told at its August meeting at Lake Success, N. Y., by J. R. Balsley, Jr., of the U. S. Geological Survey. He will base his statements on the experience of the Survey over years with the ground-based instrument and experience of the past five years with the airborne magnetometer.

The airborne magnetometer was used during the war floating through the air under and behind an airplane to detect submerged enemy U-boats in the Atlantic ocean. Its findings passed in electric signals to the plane by means of the trailer cable. During and since the war, this type of airborne instrument has been used to survey many thousands of square miles of territory in a search for hidden minerals, and particularly for geological formations in the crust of the earth favorable for petroleum.

UNSCCUR is an international organization promoting worldwide developments through the interchange of scientific knowledge. Its full name is the United Nations Scientific Conference on the Conservation and Utilization of Resources.

The airborne magnetometer is, according to Mr. Balsley, a high-speed, low-cost reconnaissance geophysical instrument which can be used to produce magnetic maps of the same order of accuracy as those produced by ground magnetic instruments.

It is not well suited for making small detailed surveys or for use in mountainous areas. It is particularly useful in areas which are difficult to traverse on foot, and in combination with radio and radar location systems can be used to conduct surveys over water or other unmapped areas.

The over-all accuracy of the results of the airborne magnetometer can be most easily discussed by comparison with that of the more familiar ground magnetometer of the Schmidt type, he will say. The results of the aeromagnetic survey are compiled into a magnetic contour map or a series of magnetic profiles of the same type as those obtained by ground methods.

Although geophysical ground magnetic surveys usually measure variations in either the vertical or horizontal components of the earth's magnetic field, aeromagnetic surveys measure variations of the total field. In practice the two methods do not compete but complement each other.

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Words in Science— BENZINE-BENZENE

➤ BENZINE and benzene are not alternate spellings for the same word; they are completely different chemicals.

The fluid you sometimes use to clean spots from your vest is benzine. Like benzene, it is colorless and inflammable. It is derived from crude petroleum by fractional distillation, and is a mixture of various hydrocarbons.

Benzene, which is the starting point in the manufacture of compounds of the benzene series, is not a mixture but a single compound, obtained chiefly from coal tar. It is used in the manufacture of organic chemicals. Benzene is another word for benzol.

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