ARCHAEOLOGY

Rescue Viking Vessels

THE FIRST Viking trading vessels to be discovered may be hauled out of Danish waters this year where they have blocked trade to Beowulf's old haunts for a thousand years.

At least six ships, 40 to 60 feet in length, were filled with rocks and sunk between two small islands in the channel of the fiord leading from Kattegat Sea to Roskilde, Denmark, sometime during the 9th, 10th or 11th centuries. It is believed they were all sunk at one time as protection from invaders or pirates.

The wrecks obstructing the channel were earlier believed to be "Queen Margrethe's Ship," sunk by the queen (1387-1412) to protect Roskilde from pirates. Roskilde is the burial place of Danish kings, and at

Lejre west of Roskilde was Hrothgar's stronghold where Beowulf fought and rid the Danes of the monster Grendel, as told in the Old English epic.

When fragments of the wreck were determined to be of Viking origin, "frogmen" lessons were given to Danish archaeologists from the National Museum, Copenhagen, headed by Dr. Olaf Olsen.

The scientists used fire hoses to remove debris from the boats stuck in the mud three to ten feet under water.

The project of raising the ships has been stalled while the museum waits for funds to drain the area of the channel after surrounding it with steel pilings. The work so far has been financed by the museum and with private funds, but an additional \$100,-

000 are needed to complete the rescue. Dr. Olsen said that the discovery is very important because all but one seem to be sailing ships built for peaceful trading purposes. Earlier restored Viking ships have been rowing vessels for war or chieftains' sailing ships. The new find is expected to throw light on Viking trading habits, their life in general and their shipbuilding techniques.

"They are elegant ships, with beauty of line and excellence of craftsmanship. The Vikings were barbarians, but they were ingenious sailors and shipbuilders," it is reported in Expedition, 4:40, 1962, bulletin of the University Museum, University of Pennsylvania, Philadelphia.

• Science News Letter, 81:183 March 24, 1962

SOCIOLOGY

Rich and Poor Seek Help From Agencies

➤ CONTRARY to popular belief, persons from all social classes seek counsel from outside agencies to help with family and personal problems.

This was revealed in a nationwide study conducted by Dr. Dorothy Fahs Beck, Family Service Association of America research director. In interviews with 577 families, Dr. Beck found out that the proportion of family heads who had college and high school education was actually higher among family counsel agency applicants than in the general population.

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ZOOLOGY

Ancient Animals Reappear

➤ ANIMAL SPECIES extinct for hundreds of years have been duplicated in a German zoo.

While zoologists and animal lovers all over the world are fighting against the willful destruction of all types of wildlife, Dr. Heinz Heck of the Hellabrunn Zoo in Munich is working in the reverse direction. He is bringing back into existence through selective breeding types of animals that have been simply encyclopedia references for countless years.

countless years.

One of Dr. Heck's outstanding successes is the breeding of a herd of aurochs, the ancestor of all domestic cattle. The last known aurochs, before Dr. Heck re-created the species, died in Poland in 1627. With the aid of medieval drawings and descriptions, skeletons in museums, and cave drawings from prehistoric times, he was able to build up an accurate picture of what the aurochs had been like.

Dr. Heck traveled throughout Europe to select the types of existing cattle which he thought might help his breeding-inreverse. The types he picked were Scottish Highland cattle, Hungarian steppe cattle, primitive beasts from Corsica, and cattle from the Alps.

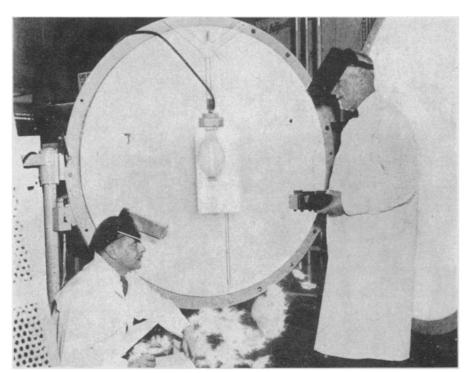
Following a carefully worked-out plan, this assorted collection was crossed. Some characteristics were eliminated through selective breeding and others accentuated until all the desirable points of the original aurochs were bred into a single stock. At last, a calf was born which Dr. Heck recognized as carrying all the essential characteristics of the aurochs of centuries ago.

In a few more years he had established a small foundation of what he regards as pure aurochs. Now he has a flourishing herd of these magnificent animals.

Dr. Heck has devoted 30 years of his life to this reconstruction of defunct species. Another success is the re-creation of the tarpan, the European wild horse which became extinct a hundred years ago. He now has a herd of these mouse-gray ponies, with short, stiff, erect manes, with hoofs so hard that they can travel unshod a thousand miles on modern roads without suffering.

Dr. Heck's herds do not produce any "throwbacks" to the modern types from which they have been produced.

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MEASURING MORE LIGHT—Scientists measure 150% more light in a new mercury lamp, developed by Westing! ouse Electric Corporation, Bloomfield, N. J. The new lamp produces 78 lumens per watt compared to 54 of other mercury vapor lamps and 17 for incandescent lamps, such as ordinary light bulbs. The improvement was made possible when the rare element thallium was added to the mercury.