

PSYCHOLOGY

Trained Intellectuals Needed

Many capable men take orders instead of giving them because of lack of education. A solution: make higher education available to greater numbers.

► A REALLY bright truck-driver may be a more capable man than the executive who sits in the office and gives him orders.

About one boilermaker in every eleven is as able-minded as the average lawyer.

These sample findings from the Army General Classification Test, given to 10,000,000 young men during the war, are offered by Dr. Walter V. Bingham, chief psychologist of the Adjutant General's Office, to point a moral in a discussion of the general abilities of American adults. He presents his views in *Science* (Aug. 16).

His inference is that if you are inclined to be complacent about a truck-driver being better than his boss, or a boilermaker just as good as a lawyer, you are looking at things wrong-end-to. Rather,

you should be asking why the truck-driver isn't giving orders instead of taking them, or why the boilermaker isn't making briefs instead of boilers.

Of the group who scored highest in the Army General Classification Test, all of them capable of absorbing a college education, only one-fourth were college graduates, Dr. Bingham points out. In a world where there is an actual famine of trained intellectuals and skills, he considers this tragic.

As one partial remedy, he calls for a greatly increased number of scholarships available to really superior applicants for higher education. He also thinks that all universities and colleges should have staffs of specialists to pick out and encourage the most promising students.

Science News Letter, August 31, 1946

ARCHAEOLOGY

Fire-Worshippers Found

► CENTRAL hearth believed to be the oldest remains of fire-worship in Central Asia, perhaps in the whole of the East, has been excavated in the USSR near the Aral Sea.

Fire-worshippers continuously kept alive the flame in this hearth while meals were cooked in a series of surrounding fireplaces. Primitive hunters used these fires sometime between 4,000 and 3,000 B. C., states Prof. Sergei P. Tolstov, director of the Institute of Ethnography, Moscow, and member of the Soviet expedition that unearthed the dwelling with its many fireplaces buried deep beneath the sand dunes at the foot of the Janbas Kala hills.

Janbas Kala No. 4, as the place is officially called, was a large communal dwelling with clearly defined limits. It was shaped like a polygon, and covered about 347 square yards.

The community house was built on the ground. The walls consisted of a wooden framework of posts with cross-beams for the reed-thatched roof. The post-holes, all that remain, contained black ashy earth with fragments of charcoal, and were arranged roughly in three concentric circles.

No clay was used in the building. The rafters were placed radially on top of the posts, and the spaces between them filled with open wickerwork. The plan of the fallen roof could be seen in the ashy layer above the fragments of broken earthen pots, fish bones and flint flakes. Charred reeds, the remains of the roof, were found all over the area where the house had been.

In the middle of the building was a large round hearth, about four feet in diameter. This differed greatly from the cooking hearths, rows of which were found round the perimeter of the building.

A number of features marked this central hearth as different from the others. Household objects and kitchen refuse, found in large quantities round the other fireplaces, were completely absent from the central hearth or its vicinity. The ash there also was entirely different in character. Whereas that on the cooking-hearths was black and gray, with cinders, only pure white ash, indicating complete combustion of the fuel, was found in the central hearth.

A thick layer of sand under the hearth was burnt bright red. Similar layers of

sand only a fifth to four-fifths of an inch thick were found under all the cooking-hearths, but here the layer was around 20 inches thick.

The central hearth was undoubtedly of some religious significance rather than being used as a cooking-hearth, Prof. Tolstov states. Fire had evidently been burning there continuously for a long time.

Full details concerning the findings of the Soviet expedition in this important and little-known region are given in *Antiquity*, British Quarterly Review of Archaeology.

Science News Letter, August 31, 1946

GENERAL SCIENCE

Navy Invades Arctic With Planes, Ships

See Front Cover

► BASED AT Thule, Greenland, where Navy and Coast Guard vessels have penetrated the farthest north into the icefields that ships have ever sailed at this time of year, two Navy patrol planes have flown ice and weather reconnaissance missions over the Arctic within 450 nautical miles of the North Pole.

The picture on the front cover of this SCIENCE NEWS LETTER reveals an unusually long and "trailing" glacier from its mouth. It was taken from a Navy PBM as it flew west up Frederick Hyde Fjord, Peary Land, on the return leg of a 1400-mile hop.

The flights were a part of scientific studies being made of such varied subjects as cosmic rays and icebergs by the personnel on the ships at the Greenland port.

Only special equipment on the flights that reached the northernmost known land in the world was an electric compass that functioned well in the near-polar regions.

The expedition was "blacked out" by sunspots which cut off radio contacts the last week in July, but the difficulty aided the studies of scientific observers concerned with cosmic rays and radio communications problems.

In reaching the north Greenland port, the ships of the expedition sailed through iceberg-infested waters, using radar to keep clear of the North's most dangerous navigational hazards. It was reported that the southern limit of the ice pack lies farther north than usual, and this summer was described as unusually good for navigation.

Science News Letter, August 31, 1946