

CANADIAN INDIAN ART AT EXPO 70

Contemporary Canadian Indian handicrafts will be on display in the Discovery Room of the Canadian Pavilion at Expo 70 in Osaka, Japan. On exhibit with other Canadian artifacts will be two articles selected by consultants of the Department of Indian Affairs from scores of products of the growing Indian arts and crafts industry — a Sioux tapestry and a Mohawk tea-set.

WALL TAPESTRY

The hooked woolen tapestry was designed and created by Beatrice Bear, 22, a Sioux Indian from the Standing Buffalo Reserve 50 miles east of Regina, Saskatchewan. The tapestry, intended as a wall decoration, measures 44 by 36 inches and has a black, white and turquoise design on an ochre background.

Miss Bear's tapestry is a product of the Sioux Handicraft Co-operative on her reserve, which has attained an international reputation during its first two years in operation. Sioux designs, based on geometric and abstract forms, tell of the spiritual gifts conferred on man by the Great Spirit, and of the human qualities of courage, strength and wisdom.

Miss Bear's tapestries and rugs are included in displays of Indian craft in many museums and art galleries throughout North America.

MOHAWK TEA-SET

The tea-set consists of a pottery teapot with six cups hand-crafted by Mrs. Elda Smith of the Six Nations Reserve near Brantford, Ontario. Mrs. Smith, a grandmother, is a sister of Jay Silverheels, known to millions of film fans as Tonto, the friend and ally of the Lone Ranger. Both teapot and cups are finished with an amber glaze; they have turquoise ceramic interiors and are decorated with linear Iroquoian designs.

Mrs. Smith's wares were presented by Judy LaMarsh, Secretary of State in the Pearson Government, to heads of state visiting Expo 67 in Montreal. Mrs. Smith said, of a piece of pottery she presented to Queen Elizabeth during Expo; "I'd used motifs from old Iroquois wampum belts and has been wamed by an old chief never to sell it because of its significance. So I gave it away".

Tom Hill, a Seneca from the Six Nations Reserve who heads the Promotion Section for Business Services of the Department of Indian Affairs, was departmental consultant and a member of the committee responsible for the choice of the items of Indian arts and crafts to be displayed at Expo 70.

CRIME STATISTICS

According to the publication *Crime Statistics (Police) 1968*, released by the Dominion Bureau of Statistics early in November, 1,404,434 offences, excluding traffic violations, were reported or known to police forces in Canada under the criminal code, federal statutes, provincial statutes and municipal

by-laws, during 1968. Upon investigation by the police, 68,990 or 4.9 of reported or known offences proved unfounded. "Unfounded" means that investigation established the crime did not happen or was not attempted, or there was no crime.

COAL INTO COKE

Canadian industry is showing increasing interest in a process developed by the National Research Council of Canada for turning low-grade coal into coke for iron-ore blast furnaces. The process, developed by Dr. Ira E. Puddington, Director of NRC's Division of Chemistry, and his colleagues, provides a method for making rapid and efficient separations of solids from liquid suspensions. It is known as spherical agglomeration.

In his initial research, Dr. Puddington was struck by the fact that crystals of barium sulphate suspended in benzene spheres "agglomerated" when small quantities of water were added and the suspension shaken. Investigation showed that the crystals were coated with a layer of water that acted as a binding material to hold the particles together when they touched.

Later work showed that recovery of valuable particles in slurries (suspensions of insoluble particles in a liquid) could be greatly facilitated if the particles were coated and agglomerated. Wetting agents, including oils, were discovered that permitted the successive agglomeration and selective recovery of several different particles in a slurry.

Armed with a variety of patented processes, NRC has been trying for some ten years, with little success, to interest industry in spherical-agglomeration processes. Among other things, these processes can be used to upgrade low-grade coal for coking, for separation of bitumen from tar-sands, for the beneficiation of ores, for the preparation of dispersable pigments, for a modified method for making phosphoric acid and for a new method of preparing spherical shot for the firearms and ball-bearing industries.

Owing to mounting public pressure for legislation on pollution-control and decreasing supplies of low-sulphur, low-ash coals, the future now appears to be brightening for the process of turning low-grade coal into coke for ore blast furnaces.

Dr. Puddington estimates that agglomeration should become economically feasible if a large-scale operation could be evolved that would reduce the ash and water content of coals to an acceptably low value.

DOMESTIC EXPORTS

The value of domestic exports increased to \$1,258,418,000 in September 1969 from \$1,104,104,000 and \$823,530,000 in the same month of 1968 and 1967 respectively. For the cumulative period January-September, exports increased over the three years, with the totals being \$10,643,367,000 in 1969, \$9,644,754,000 last year and \$8,128,351,000 in 1967.